The Impact of Integrating Harm Reduction Strategies for Individuals Who Have Experienced Substance-Related Harms

By

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Paper submitted in partial fulfillment of the requirements for the degree of

Master of Counselling

in the

Division of Arts and Sciences

City University of Seattle

2024

This paper is accepted as conforming to the required standard.

November 10, 2024

Date

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Acknowledgements

I want to extend my profound appreciation to my supervisors, Dr. Michael Kariwo and Dr. Amanda De Guerre, for their support and guidance through this process. Their feedback and expertise was critical in the development of this study, and I am deeply grateful to them for the time and effort they committed in supervising me.

Thank you to my wonderful partner, Jade, for his unwavering love and support as I have pursued my degrees, and now my career. His encouragement and comfort through the adventures of graduate studies and this final project have been integral to my successes.

I would also like to thank my colleagues for their valuable support as we approached this endeavor together. They provided me with encouragement, and acted as sounding boards for my various ideas and revisions. My friends have my gratitude as well for supporting me through this undertaking. Their love and support helped me enormously through this process.

Thank you as well to the wonderful staff at Felice Cafe for providing me with a warm, welcoming environment in which to write. I spent more time there than I would like to admit as I completed this process.

Abstract

The intention in conducting this study was to understand the current relevance and pervasive nature of substance use and its related harms. Further it looked at support and treatment services which address these areas. Through a comprehensive review of current literature, guided by Harm Reduction Theory and Cognitive Behavioral Theory, this study explored the effect of harm reduction interventions on individuals who have experienced substance-related harm. Reviewed were 10 core articles, the findings of which indicated that implementing harm reduction can have an array of positive impacts for individuals who experience substance-related harm. These positive impacts include increased safety, reduced risk, destigmatization, improved service accessibility, and greater social support. Not only do individuals who use substances benefit from harm reduction interventions, individuals providing professional and/or peer support can also benefit. Additionally, the implications of applying the research findings within clinical practice are expansive and have the potential to influence therapeutic relationships and approaches. This study provides an integrated perspective on the impacts that implementing harm reduction can have on individuals experiencing substance-related harm which has been missing in previous research. Key recommendations include: utilizing alternative theories of addiction and substance use in clinical practice; and adapting and implementing harm reduction interventions for individuals experiencing different substance-related harms in clinical, counseling, and community settings. Implementing harm reduction more holistically may lead to destigmatization and a greater understanding of the intersectional experiences of those seeking support and treatment for substance-related harm.

Keywords: harm reduction, substance use, substance-related harm, counseling implications, literature review

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Chapter 1: Introduction

Substance-related harms are pervasive within society, affecting not only individuals who use substances, but also those around them, those providing support services, and the wider community (Chen & Stuart, 2021; Martini et al., 2022; Substance Abuse and Mental Health Services Administration [SAMHSA], 2016). Substance-related harms are often socio-structural and systemic in nature, involving experiences of stigmatization, discrimination, interpersonal and systemic violence, overdose, and mortality. It is important to develop better understandings of substance-related harms and how to reduce and mitigate them, due to their far-reaching effects. This study aimed to build upon the current understanding of harm reduction and how implementing it affects individuals who have experienced substance-related harms. This involved determining the harm reduction interventions being applied in the realm of substance use, perspectives around substance use, as well as capturing a better understanding of primary and secondary substance-related harms. In this study, experiences of primary and secondary harms as well as the impacts of integrating harm reduction are explored in relation to individuals who use substances, as well as those in both formal and informal supporting roles. This study will hopefully serve as a starting point for further research developing this topic.

Harm reduction has been a growing movement in response to increasing substance-related harms and mortality (SAMHSA, 2023b). Originally, harm reduction emerged in response to public health problems related to substance use (Heather et al., 1993). In Europe, it grew in places such as Amsterdam and Liverpool. In the United States, the war on drugs and the rise of the HIV/AIDS epidemic that occurred during the 1980s led to harm reduction arising as a response to the negative impacts experienced by people who use substances (SAMHSA, 2023b). Both healthcare and social service settings have seen the implementation of harm reduction

(Denis-Lalonde et al., 2019). Although harm reduction as a field and practice is quite young, harm reduction approaches have contributed to the emergence and development of many of the most impactful treatment interventions for people who use substances (Des Jarlais, 2017).

In European and primarily Western cultures, there has been a long history of moralistic condemnation and demonization of individuals who use substances, including those who, historically, have utilized psychoactive substances culturally and spiritually (Des Jarlais, 2017). Many negative stereotypes and biases remain prevalent in social discourses around individuals who use substances. Despite a growing body of literature that points to the effectiveness of harm reduction approaches, policy makers, the public, and care providers remain widely unsupportive of harm reduction (Vearrier, 2019). Denis-Lalonde et al. (2019) also noted that a universal understanding of harm reduction has been missing and indicated that this may have impacted its application and use. These perspectives have also influenced legislation opposing the implementation of harm reduction practices, resulting in widespread barriers to accessing services, and delays in developing effective intervention strategies. Evidently, a limited scope of understanding around harm reduction remains. In order to advance the field of harm reduction for substance use, it is crucial to address these gaps. Hopefully, by exploring how implementing harm reduction can impact not only individuals who use substances, but other individuals who also experience substance-related harms, more support and acceptance for harm reduction will arise.

Research Problem Statement

An opioid epidemic has been ongoing in Canada, the United States, and in other areas of the world for decades now (Belzak & Halverson, 2018; Cook, 2022). In Canada, there was a marked increase in opioid- and other substance-related mortality during the COVID-19

pandemic due to additional barriers to accessing health care and harm reduction supports, and these numbers remain high (Gomes et al., 2021; Hutchinson et al., 2023; Imtiaz et al., 2021). In Canada, in 2020 alone, substance-related overdose deaths increased by 58% during the COVID-19 pandemic (Imtiaz et al., 2021). Although opioids pose a significant risk of harm, other substances also contribute to mortality and other substance-related harms to a significant degree as well (Huỳnh et al., 2023). Of the 242 deaths of men in Québec in 2017, Huỳnh et al., (2023) stated that coroner's reports indicated that many of the deaths involved various substances, including depressants (69%), stimulants (66%), opioids (57%), benzodiazepines (34%), and hallucinogens (27%). The cases of women's deaths in Québec in the same year showed similar findings. Evidently, substance-related mortality goes beyond opioid poisoning deaths. Therefore, other substance-related harms also likely extend beyond those resulting only from opioid use. Despite these findings that numerous substances result in harm and mortality, most research focuses only on opioid-related harms and mortality. Although it is important to explore and study opioid-related harms, it is also crucial to examine the harms that result from other substances and how those harms may be mitigated. Therefore, this study will focus on answering the question: "What effect do harm reduction interventions have on individuals who have experienced substance-related harms?"

Justification for Research

Many individuals experience substance-related harms, including individuals who use substances, their friends and family, professional care providers, and the general community (Bardwell et al., 2021; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; Madah-Amiri et al., 2019). There is a distinct lack of research focused on integrating harm reduction and the impacts these approaches have on individuals experiencing substance-related harm (McNeil

et al., 2016). By developing an understanding of how implementing harm reduction interventions can affect each of these groups, the reduction and mitigation of substance-related harms may result.

Although harm reduction as a movement has grown, the efficacy and effectiveness of harm reduction modalities has not been prominent in research or counseling discourses. Due to this, and the widespread bias and misinformation regarding harm reduction and its effects, harm reduction continues to receive little governmental and public support (MacCoun, 1998; McNeil et al., 2016). As a result, many people face barriers in accessing harm reduction services in the realms of health care, mental health care, and social services (McNeil et al., 2016; Reid & Palomar, 2022). It is crucial to develop understandings of harm reduction and study its effectiveness and the impacts it has, otherwise many people will not receive the support that they need as a result of this lack of advancement.

Some research has developed general understandings of harm reduction and the effectiveness of specific interventions; however, most of this research focused on individuals who use substances, and typically only substances such as opioids (Del Villano et al., 2019; Hanson et al., 2020; Levengood et al., 2021; Shorter et al., 2023; see also Belzak & Halverson, 2018; Carrière et al., 2021; Cook, 2022; Dow-Fleisner et al., 2022; Giliauskas & Gogolishvili, 2021; Marshall et al., 2011; Milloy et al., 2008; Vearrier, 2019). Additionally, some research has explored substance-related harm in relation to specific populations, such as those who use substances (Bardwell et al., 2021; Kahn et al., 2020; Kesich et al., 2023; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020), friends and family members who take on supporting roles (Kesich et al., 2023; F. Khan et al., 2022; Slocum et al., 2023), or health care professionals (Kapadia et al., 2021); however, almost no research exists that integrates these

groups and provides a broader perspective of substance-related harm. While some research has focused beyond the experiences of those who use substances, little remains known about experiences of secondary substance-related harms, affecting individuals in formal and informal supporting roles, and the wider community (Dow-Fleisner et al., 2022; Gomes et al., 2021; F. Khan et al., 2022; Slocum et al., 2023; Sterling et al., 2022). Exploring substance-related harms and the effects of implementing harm reduction beyond just those individuals who use substances could result in a more extensive understanding of the effectiveness of harm reduction.

If research continues to only focus on small components of this larger topic—rather than integrating these various aspects and developing a comprehensive understanding of the effects of harm reduction on different types of substance-related harms—then the complete understanding of harm reduction and its implementation may continue to be barred. Therefore, crucial supports may remain limited or nonexistent for all individuals affected by substance-related harm.

Significance

This study contributes to the existing literature on the topic of harm reduction implementation for individuals who have experienced substance-related harms by providing an integrated understanding that is currently lacking. While both primary and secondary substance-related harms result from substance use, the impacts of implementing harm reduction in relation to these different experiences of substance-related harm remain insufficiently explored. While the existing research is not extensive, there are numerous studies focused on exploring different aspects of implementing harm reduction for substance use and the various types of substance-related harm reduced or mitigated by doing so. These existing studies provide a basis for the current research, which is focused on integrating these various findings to develop a more comprehensive understanding of the impact implementing harm reduction can have on

individuals who have experienced substance-related harm of any kind.

Developing a greater understanding of the impacts that implementing harm reduction interventions can have on clients could also be highly beneficial for mental health professionals in the world of counseling psychology (Cramer, 2024). Issues of addiction have long been topics clients seek counseling to address, and with the ongoing opioid epidemic, there is a desperate need for these services (SAMHSA, 2018). Additionally, harm reduction is an important concept to understand as a mental health professional as it has the ability to improve mental health care and interventions for individuals who use substances or engage in other behaviors that carry risk. By practicing from a harm reduction lens, mental health professionals can also ensure they are working in a client-centered way and adhering to the ethical standards of the field (Denis-Lalonde, 2019; Vearrier, 2019).

Hopefully, many people will benefit from the results of this study. Not only individuals experiencing substance-related harms, but also those who work with and support them. By exploring the impacts of implementing harm reduction on individuals who have experienced substance-related harms, the development and improvement of approaches to address the different types of substance-related harm that are experienced may arise. The results of this study might also be useful for health care and mental health professionals providing services to individuals who use substances, as well as their friends and family members. The findings of the current study may also be helpful to these professional care providers in promoting their own self-care.

Theoretical Framework

This study integrates two theories in exploring the research question. These theoretical frameworks, consisting of harm reduction theory and cognitive behavioral theory, serve as the

basis for this research. Aspects of each of these theories complement each other and provide a foundational understanding of how this research conceptualizes harm reduction. These theories also provide an understanding of the motivations behind behavior and how various aspects of human experience integrate to inform behavior.

Harm Reduction Theory

Harm reduction theory is based on a set of beliefs around people who engage in harmful behaviors, such as substance use (MacCoun, 1998). The most central belief held is that the behavior of those who use substances, and the conditions and environments within which they use substances, are modifiable. Therefore, the mitigation or reduction of health and safety risks that arise from such use is achievable. Although harm reduction in its most basic form consists primarily of working to reduce harmful consequences to behaviors, MacCoun (1998) proposed an integrative framework of harm reduction instead. This integrative framework incorporated not only reducing the consequences, but also reducing the prevalence of engagement in harmful behaviors and the frequency with which the behaviors are engaged in. Rather than focusing solely on whatever the ultimate goal related to engaging in harmful behaviors may be, harm reduction, as a theory and practice, focuses on the process of taking steps toward greater safety and away from harm (Logan & Marlatt, 2010). As such, harm reduction consists of various techniques including preventative approaches, intervention, and maintenance work.

Cognitive Behavioral Theory

Cognitive behavioral theory provides a basis for addressing psychosocial challenges, such as mood disorders, trauma, interpersonal relationships, as well as substance use (Nurius & Macy, 2008). It is quite adaptable and has been well-researched as the basis for numerous evidence-based approaches. Cognitive behavioral theory stems from the integration of both

cognitive and behavioral theories, and the assumption that cognition and behavior are innately distinct (Hupp et al., 2008). It assumes that covert behavior (the cognitive components, such as thoughts and emotions), overt behavior (the behavioral components), and the environment influence each other, resulting in a learning process guided by emotional experiencing, mediating and information processing styles, and from observing models within the social environment. From this perspective, human functioning is a result of the reciprocative interaction between variables of both personal and environmental origins (Regehr, 2001). Although the actual processes of these interactions between cognition, affective experience, and behavior are common across human experience, the content of these processes is individual (Nurius & Macy, 2008). When the process works well, information processed from personal and environmental experiences helps in the management of emotional and behavioral responses in ways that promote the needs and goals of the individual adaptively, efficiently, and functionally. However, negative, unhelpful, or maladaptive ways of thinking, feeling, and behaving can interfere with the process, resulting in a cyclical effect and leading to increased difficulties in all aspects. Nurius and Macy (2008) highlighted that in cognitive behavioral theory, practitioners can support clients in addressing the cognitive, affective, and behavioral components contributing to the breakdown of the process and modify the components and interactions to make the process work well again and allow the clients to move toward meeting their needs and goals.

Definition of Terms

This section provides an overview of key terms and their definitions. The existing literature informed these definitions; however, some adaptations to the definitions helped tailor them to the current study when necessary. In discussing these topics, using respectful, destigmatizing language is crucial since language can have large impacts on attitudes and beliefs

around information (Canadian Public Health Association, 2019).

Addiction

The definition of addiction is a dependence, whether physical or psychological, on substances or behaviors (APA, 2023a). It is an overarching term that can describe the misuse of various things, including substances such as alcohol or opioids, and behaviors or activities, including gambling, exercise, sex, and more.

Substance Use Disorder (SUD). Substance Use Disorder is a type of addiction. The *Diagnostic and Statistical Manual for Mental Disorders* (5th ed., text rev.; DSM-5-TR; American Psychiatric Association, 2022) defines it as the problematic use of substances leading to significant distress and/or impairment in daily life. As noted by the APA Dictionary of Psychology (2023c), the diagnosis of SUD in the DSM-5-TR (American Psychiatric Association, 2022) consolidates the diagnoses of substance dependence and substance abuse present in the previous versions of the manual.

Opioid Use Disorder (OUD). Similar to Substance Use Disorder, Opioid Use Disorder describes a diagnosable type of addiction, specifically to opioids. Just as with SUD, OUD provides a consolidated diagnosis combining previous diagnoses of opioid abuse and opioid dependence (APA, 2023b). There are many types of opioids, including ones that are synthetic, prescription, or illegal (National Institute on Drug Abuse [NIDA], 2024). Prescription opioids function as pain relievers, and include oxycodone, codeine, hydrocodone, and morphine. Illegal opioids are substances such as heroin. Fentanyl, a synthetic opioid available by prescription, can help surgical patients or patients dealing with severe chronic pain (Drug Enforcement Administration [DEA], n.d.). However, heroin and other illegal drugs are often mixed with other substances (also referred to as being cut with), including fentanyl. Fentanyl is a highly potent

substance, and even a small amount can result in overdose and death.

Substance-Related Harm(s)

For the purposes of this study, substance-related harm refers to harm experienced as a result of substance use, whether directly or indirectly. These harms can range from more mild harms to severe ones.

Substance Overdose/Poisoning. Overdose or poisoning as a result of substance use is defined as the consumption of a toxic amount of a substance or substances which interferes with the ability of the brain and body to function properly (Miller, 2024). It is possible to experience a substance overdose/poisoning as a result of consuming many different substances, including alcohol, opioids, stimulants, and more. Substance overdose/poisoning constitutes a serious substance-related harm. There has recently been a movement toward the use of the term substance poisoning rather than overdose, in an effort to use more destigmatizing language (Penington Institute, n.d.; Xie et al., 2017). Overdose as a term often carries connotations of blame for the person experiencing it due to their perceived decision to use substances. In the current study, these terms are interchangeable, though the term overdose is more prevalent within the literature and is a more well-known and well-understood term currently compared to poisoning. Overdose/poisoning can occur for many reasons, including exceeding substance tolerance, using multiple substances concurrently (also known as polysubstance use), other substances mixed into a substance (for example, fentanyl mixed into heroin), comorbid health issues, and substance consumption method (Miller, 2024). Substance overdose/poisoning can also occur as the result of suicide attempts made using substances. Substance overdose/poisoning is not always fatal.

Overdose/Poisoning Reversal. A substance overdose/poisoning reversal involves the use

of specific medications, like naloxone or nalmefene, to interfere with the effects of substances like opioids (NIDA, 2023). These medications block the receptors and inhibit the further uptake of the substance within the body. Overdose/poisoning reversals can be temporary, and individuals can go back into an overdose/poisoning state once the medications wear off (NIDA, 2022). Harm reduction interventions such as naloxone or Narcan, and medical care including opioid overdose reversal medications and basic life support, can act to reverse substance overdose/poisoning and save lives.

Substance-Related Mortality. Substance-related mortality, in the current study, refers to death caused by a substance overdose/poisoning, whether intentional or unintentional. This is also sometimes referred to as drug-related death/mortality. Some deaths due to substance overdose/poisoning are the result of completed suicide, while others are accidental. There are many definitions of substance-related mortality, some of which also include deaths resulting from health issues associated with substance use, and violence or accidents resulting in death involving an individual under the influence of substances (International Society of Substance Use Professionals, n.d.).

Primary Harms. For the purposes of this study, primary harms are substance-related harms that affect individuals who use substances. These can include substance-related mortality, substance overdose/poisoning, health and mental health conditions associated with substance use, as well as socio-structural harms such as isolation, stigmatization, discrimination, violence, and more.

Secondary Harms. In this study, secondary harms are substance-related harms that affect individuals who do not use substances themselves, but act in supporting or caregiving roles to individuals who do use substances. Secondary harms can affect the friends and family of

individuals who use substances, professional care providers such as healthcare staff and mental health professionals, and the wider community through socio-economic costs associated with substance use and its related harms.

Harm Reduction

Conceptualizations of harm reduction include it being a philosophy, framework, approach, intervention, and movement (Denis-Lalonde et al., 2019). It can address any behaviors that carry a risk of harm. Primarily, the use of harm reduction has focused on preventing harm in response to the use of illegal substances; however, harm reduction has many uses. The use of other substances, behavioral addictions, engagement in sex work or self-injury and more can all benefit from the application of harm reduction. It also focuses on reducing harm, rather than solely on reducing or eliminating engagement in the behaviors that carry risk.

Harm Reduction Interventions/Strategies. Harm reduction interventions involve knowledge-based, client-centered approaches to reducing harm by changing risk environments, risk behaviors, and types of risk associated with substance use (Canadian Mental Health Association, n.d.; Hedrich & Hartnoll, 2021). These interventions involve nonjudgmental and non-coercive strategies that work to enhance individuals' knowledge and skills around how to promote health and safety in their lives and give them the power to decide how they want to do so (Canadian Mental Health Association, n.d.). There are many types of harm reduction interventions and strategies, many of which are highly effective (Hedrich & Hartnoll, 2021). Provided in some detail below are a few examples that are closely related to this study.

Community-Based Harm Reduction. For the current study, community-based harm reduction refers to organizations and initiatives providing harm reduction interventions to individuals within the local community. This can include educational programs aimed toward

friends and family of individuals who use substances, as well as members of the wider community. Community-based harm reduction can span from medical to non-medical supports provided within the community, as opposed to clinical or hospital-based harm reduction, where the supports are more medical in nature and are available only within the clinical setting (G. K. Khan et al., 2022).

Naloxone/Narcan. Naloxone, also referred to as Narcan, is a medication that can temporarily reverse opioid overdoses/poisonings (Health Canada, 2024). It does this because it acts as an opioid antagonist, blocking the receptors in the brain that are affected by opioids. Administration of this medication via a nasal spray or intramuscular injection is most common. Naloxone/Narcan rarely requires a prescription and is accessible through pharmacies or from community-based organizations. In Canada, some provinces provide free naloxone kits.

Safe Consumption Site. Safe consumption sites, also known as supervised consumption sites, refer to designated spaces where individuals can use substances more privately while under the supervision of trained health workers (Yoon et al., 2022). These sites help to reduce instances of overdose/poisoning, spread of disease due to unsafe use practices, public usage and visibility, as well as unnecessary intervention by police (Government of Canada, 2024; Yoon et al., 2022).

Safe Injection Site/Facility. Safe injection sites/facilities are also often referred to as supervised injection facilities. Like safe consumption sites, these sites provide safe and private spaces for individuals who specifically inject substances to use under the supervision of trained health workers (Levengood et al., 2021). These sites can help reduce the risk of overdose/poisoning, criminalization, and public nuisance.

Syringe Exchange Services. Syringe Exchange Services are also frequently called syringe services programs or needle exchange programs/services (Canadian Centre on Substance

Abuse, n.d.; Centers for Disease Control and Prevention [CDC], n.d.). They are community-based programs that provide clean needles to individuals who use substances. These services aim to reduce health and safety risks associated with injection-based substance use, and also have public health benefits, including providing proper disposal of used needles, reducing the spread of disease, and reducing the need for costly hospital services to address health concerns.

Medications for Opioid Use Disorder (MOUD). Medications can be used to help individuals who want to either stop or reduce their opioid use (National Harm Reduction Coalition, n.d.). MOUDs are an evidence-based harm reduction approach. There are two primary MOUDs: methadone, a synthetic opioid agonist which helps to relieve cravings and eliminate symptoms of withdrawal; and buprenorphine, a partial opioid agonist which reduces both cravings and withdrawal symptoms. The key difference between them is that buprenorphine does not activate the opioid receptors, and therefore does not produce feelings of euphoria. Other MOUDs exist, including naltrexone, but have not been well-researched and therefore have not received wide support or use. Naltrexone acts as an opioid antagonist, blocking the opioid receptors, and preventing opioids from producing euphoria and other rewarding effects.

Opioid Agonist Therapy (OAT). Opioid agonist therapy is another term for MOUDs, specifically referring to the use of methadone or buprenorphine to reduce cravings and prevent symptoms of withdrawal (Centre for Addiction and Mental Health, 2016).

Researcher Positionality Statement

In approaching this research topic, it is important to reflect upon and acknowledge any potential biases resulting from my personal and professional experiences. Throughout my life, numerous experiences developed my interest in such topics, and I felt drawn to explore them further for many years. These experiences have, of course, shaped me and my perspectives on

related topics. Therefore, I will briefly outline some of the key experiences in my personal and professional life, as well as highlight some potential biases that result from my positionality.

In my personal life, mental health challenges and addiction have been present within both my personal experiences and among other people in my life. It has become a passion of mine to foster understanding, empathy, and compassion for the challenges people face in these regards as a result of my own close experiences. This passion led me to work in a non-profit organization focusing on providing services to individuals in both active addiction and treatment, who also navigate various other mental health challenges. The work I have done requires understanding and integrating harm reduction approaches in a myriad of ways. As a result, I have become a huge proponent and advocate for creating and improving harm reduction services. These personal and professional experiences motivated me to pursue a degree in counseling, wherein I could support individuals through their own mental health journeys. As I have worked through this degree, these values have played an important role in the approaches I use in counseling, and the ways in which I work with others. As I move into a career in the psychological field, I hope to create a psychological practice that aligns with those values. Evidently, these values I hold, as they relate to the topic of study, will have some influence on my approach to research.

One of the biases I recognize I hold is that I am acutely aware of how impactful harm reduction approaches can be based on my lived experience. Not only is it something I perceive as critical in working with individuals experiencing addiction, it is also something that I feel is crucial in other capacities related to mental health. For example, I believe harm reduction can be hugely important in supporting people experiencing suicidal ideation and self-injurious behaviors, including self-injury, disordered eating, and various other risk-related behaviors. Additionally, my own experiences utilizing harm reduction approaches to manage the challenges

I have faced have shaped my perspectives. I also recognize that I have worked closely with individuals who have experienced addiction, substance-related mortality and other harms and know their perspectives and experiences of harm reduction.

I am also cognizant that aspects of my identity likely influence and inform my perspectives and inherent biases in approaching this topic. Understanding the power and privilege I hold and the impacts it has, alongside the impacts of not holding power and privilege, will be important to consider and reflect on throughout the research process. Addressing the intersectionality that often accompanies experiences of substance use and related harms and the implementation of harm reduction will be critical. Additionally, I must remain aware of the subjectivity of experience and acknowledge that my perceptions and experiences may not be true for others. In research, as in life, I do not believe that true objectivity is attainable, and so I will simply do my best to recognize and present the inherent subjectivities as they arise.

Overview of the Paper

The goal of this research was to fill the substantial gap that still exists around the application of harm reduction interventions and their importance. Additionally, this research aimed to provide insights pertaining to counseling psychology and how harm reduction approaches can integrate into talk therapy. The following chapters include Chapter Two: Methods of Literature Search, Chapter Three: Review of the Literature, Chapter Four: Application to Clinical Practice, and Chapter Five: Recommendations and Conclusion.

Chapter 2: Methods of Literature Search

This chapter outlines and describes the literature search process. Provided within this chapter is an account of the various search methods, a discussion of specific decisions made related to refining the literature search as well as a description of any challenges encountered during the search process. This chapter also includes a discussion of some limitations related to the current study's methodology.

The Literature Search Process

The literature review began with a broad search of the existing literature utilizing the Google Scholar search engine (https://scholar.google.ca/), alongside the digital library databases from City University of Seattle (https://library.cityu.edu/home), Concordia University of Edmonton (https://concordia.ab.ca/library/), and the University of Alberta (https://www.library.ualberta.ca/). See Table A1 for a short list of some of the search engines and databases accessed, and their descriptions. Rather than search individual databases, these search engines and library databases were used to perform searches of multiple databases simultaneously. While many of the articles found during the literature search were part of specific databases, many of these databases were accessible through the institutional libraries. Searching in this manner allowed for research outside of the field of psychology to be found, including other social sciences and humanities research such as that found in the field of social work. This was important since social work research often focuses on issues such as addiction, substance use, and harm reduction in a broad manner, compared to psychology research which is often more specialized or focused on clinical counseling settings. From this general search, the specific topic of research and research question were developed and refined based on gaps within the literature and recommendations for future work made by other researchers. Identified during

this stage were a few core articles, as well as some grey literature to supplement the core studies.

Refining the Search

The process of refining the search parameters occurred after the completion of the preliminary search and the review and analysis of its results. By refining the search, the focus was primarily on collecting suitable core articles for analysis, however, also found at this point was additional grey literature. Refinement of the search parameters occurred in several ways, including by publication date, type of literature, accessibility of the literature, and based on the subjects studied. Prioritized was recent literature, published within the last five years (between 2020 and 2024), though some exceptions exist for literature published within the past 10 years. The focus for analysis was on primary sources, including research articles and reports by governmental agencies. Preferences were for peer-reviewed studies and articles. The literature selected for inclusion was also either open access or available through the institutional library databases mentioned previously. Refined of the literature was also based on its focus on the realm of harm reduction centered around substance use. The chosen literature focused on the impact of applying harm reduction strategies, regardless of whether it was from a qualitative, quantitative, or mixed methods approach. The literature included for review also focused specifically on the study of adult populations, including people of all genders, ethnicities, and socio-economic statuses. Inclusion criteria involved both clinical and community-based studies, which provided important contexts for the current study. Search terms related to these specific topics and characteristics helped refine the literature to a few core studies addressing these subjects. Key search terms, tried in various combinations, resulted in as thorough a search of the literature as possible. See Table A2 for examples of key search terms and phrases used.

Evaluating the Literature

The various literature collected was evaluated primarily for its relevance to the research topic, as well as its quality. While impact factors hold some significance, they were not always available, and do not always provide a definitive measure of the value of specific articles or journals (Sharma et al., 2014). Impact factors indicate the frequency of citations of the average articles within a journal over the course of a few years, providing an approximate measure of the importance of a specific journal. For newer journals, impact factors may not be able to be calculated, and therefore would not be available. Impact factors, where they were available, provided some measure of the relevancy and value of sources for consideration. However, exclusion from review did not rest on impact factor alone, especially as journals that publish articles in niche subjects or areas that are not highly researched will have a low impact factor but may provide quality, relevant literature (Jarry, 2024).

Out of the existing literature, 10 core articles met the criteria outlined (Bardwell et al., 2021; Hendy et al., 2018; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023), as well as supplementary grey literature. These chosen articles related to the current topic of study, and consisted of individual studies rather than meta-analyses or reviews. Since meta-analyses and reviews often include a large number of studies published over many years, it is harder to ensure their relevance to the topic of study. Additionally, they often do not include reports of the information needed to carry out a comprehensive literature review. Investigation of some individual studies included within meta-analyses and reviews for inclusion in the current study occurred. Further, the variety of approaches used by these studies helped to provide both qualitative findings and quantitative support. These studies provided information relating to the experiences of individuals who use substances, their friends and family who act as support

systems, and professional care providers. Taken together, these studies provided a comprehensive picture of who substance-related harms affect, their experiences of those harms, and how the implementation of harm reduction approaches may impact them.

Challenges in the Literature Search Process

A few challenges arose during the literature search process. Throughout the literature search process, the research topic and question of the current study had to be adapted based on the available literature. This was to be expected, and therefore did not present a serious challenge, however, it did require additional work. The primary difficulties encountered were finding relevant, peer-reviewed, quality research articles from within the past five years, which were accessible. Many articles were behind paywalls or were unavailable online at all. There were also limitations related to the recency of articles, which appeared to result from a lack of studies and publications during the COVID-19 pandemic. To address and overcome these obstacles, adaptations to the refining process helped with the careful selection of a few articles from within 10 years for review. Another challenge arose in separating some of the core articles from grey literature. Classification of a few articles could go either way, depending on how the current study developed. A running document of the articles, alongside a review based on the criteria outlined above, helped determine where each article fit best. This helped narrow down the articles. After analyzing the remaining articles, and deciding based upon whether the information needed for the current study was present, some articles were determined to better fit into other chapters of this paper.

Limitations on the Methodology

While the current study aimed to capture and develop a greater understanding of the impacts of various harm reduction interventions being implemented, a much larger study is

necessary to fully address such a topic. This work purports to be a starting point for similar future studies. There are many harm reduction interventions to study, and the impacts of them should be considered with regard to individuals using substances and accessing such interventions, but also with the friends and family supporting those individuals' using substances, and various professional care providers. Therefore, the limited scope of the current study presents a limitation on the methodology and may have impacted the interpretation of findings from the studies reviewed.

Chapter 3: Review of the Literature and Findings

This chapter presents a review of current literature, findings, and ethical considerations. It serves to connect the research question to the body of existing literature and provide a critical analysis of the foundational literature. Appendix B provides a list of the core studies reviewed. There are seven qualitative, two quantitative, and one mixed method study serving as core literature for this review.

Methodological Analysis

This methodological analysis will look at individual articles as well as the collective literature. Discussion of each of the core articles will center on their methodology, with numerous aspects critically analyzed and compared between articles. Outlined and discussed are components such as the research paradigm, methods for participant recruitment and sampling, as well as data collection and analysis.

In regard to the research paradigm, many of the researchers did not explicitly indicate the paradigm guiding their work, though it is often easy to infer. Qualitative research is primarily based in interpretivism; however, it can also utilize specific variations of the interpretivist paradigm including constructivism, transformative, and pragmatism (Creswell & Creswell, 2018; Creswell & Poth, 2018). In comparison, positivism is the paradigm most used in quantitative research.

Qualitative Articles

The majority of the literature focused on harm reduction and its implementation takes a qualitative methodological approach. Despite sharing a methodology, each of the studies carried out were quite distinct in their focus. Several studies took place within clinical settings, while others took place within specific communities. Some sought client narratives, while others

focused on the narratives of professional or peer care providers.

Paradigms. F. Khan et al. (2022) stated that they had taken a critical post-positivist approach. Based on the methodology and approach to research taken by F. Khan et al. (2022), it appears that their study falls under the constructivist paradigm, not post-positivism (Creswell & Creswell, 2018; Creswell & Poth, 2018; Guba & Lincoln, 1994; Panhwar et al., 2017). F. Khan et al. (2022) concerned themselves with understanding the experiences of the participants, actively engaging with participants throughout the study to better develop their understanding through qualitative methods that do not align with the post-positivist paradigm (Guba & Lincoln, 1994).

The studies by Kapadia et al. (2021), Kesich et al. (2023), and Shirley-Beavan et al. (2020) each appear to have utilized interpretivism as their research paradigm, though none of them specified this. Interpretivism focuses on understanding the subjective experiences of individuals within their social contexts and the meanings individuals assign to those experiences (Creswell & Poth, 2018; Rehman & Alharthi, 2016). This approach aligns with these studies due to their focus on the meaning that participants' experiences held for them.

In comparison, both Kahn et al. (2020) and McNeil et al. (2016) applied a constructivist paradigm approach in their studies. Each of the studies focused on understanding the subjective experiences of their participants within the specific social contexts in which they exist (Creswell & Creswell, 2018; Creswell & Poth, 2018; Kahn et al., 2020; McNeil et al., 2016). Neither Kahn et al. (2020) nor McNeil et al. (2016) explicitly indicated the paradigm used in their research, however, constructivism appears to be the best fit compared to other paradigms.

Bardwell et al. (2021) utilized a slightly different paradigm in their approach, going beyond the major paradigms of constructivism and interpretivism, and more specifically choosing to take a transformative paradigm approach. This paradigm aligns with their study as

they focused on the experiences of marginalized women and aimed to address social inequalities and advocate for change in services (Creswell & Creswell, 2018; Creswell & Poth, 2018; Thambinathan & Kinsella, 2021). Although Bardwell et al. (2021) did not specify that this was the paradigm they used, it is the one that best fits their research study.

Participant Recruitment. In many of the studies, participant recruitment occurred through organizations providing healthcare or harm reduction services. This was the chosen recruitment method of Bardwell et al. (2021) who recruited participants from a women-only transitional housing and drop-in site located in Surrey, BC, Canada, Kapadia et al. (2021) who recruited participants through their connection to REACH medical facility in Ithaca, NY, USA, and Shirley-Beavan et al. (2020) who recruited participants from the Metzineres Centre in Barcelona, Spain. Other studies, such as Kahn et al.'s (2020), which took place in Erie County, NY, USA, recruited participants from the wider community. Some recruited participants through larger studies previously completed, or which were ongoing and closely related. This was the method used by F. Khan et al. (2022) wherein they recruited participants through a similar project spanning the provinces of Alberta, Saskatchewan, and Manitoba in Canada. Kesich et al. (2023) also utilized a larger, connected study being carried out in Kentucky, USA, as a means of recruiting their participants. Similarly, McNeil et al. (2016) recruited their participants through two cohort studies being carried out as larger projects in Vancouver, BC, Canada.

It is important to consider the methods used to recruit participants as they can affect the outcome of research studies (Creswell & Creswell, 2018; Bonisteel et al., 2021). If careful consideration and application of the recruitment methods does not occur, then the availability of participants may not be sufficient, or researcher and participant bias would need to be acknowledged. Additionally, when conducting research with vulnerable individuals and those

experiencing marginalization and socio-structural harms, it is crucial to tailor recruitment methods to be accessible and appropriate for those populations (Creswell & Poth, 2018; Perez et al., 2022). Each of the seven qualitative studies appear to have considered these factors carefully in determining their recruitment methods. By recruiting participants from specific organizations where individuals are likely to access support with substance use and harm reduction services, Bardwell et al. (2021), Kapadia et al. (2021), and Shirley-Beavan et al. (2020) ensured that the populations they wanted to study could access their research studies. By engaging potential participants in an environment already familiar to them, these researchers may have also garnered a level of trust and willingness to engage that might not have been present otherwise (Negrin et al., 2022). Similarly, by utilizing other, larger studies being carried out, Kesich et al. (2023), F. Khan et al. (2022) and McNeil et al. (2016) were able to target their recruitment to a specific population previously connected with by researchers, and who would likely be willing to engage in research based on previous engagement. In comparison, Kahn et al. (2020) did not have prior connections to utilize, nor did they specifically access organizations providing support to the population they wanted to study. This required them to advertise their study in a variety of locations, including community bulletin boards, in multiple harm reduction and methadone clinics, and over social media in an attempt to reach individuals for their research. Although this recruitment method likely required greater time and effort, it may have resulted in a group of participants with more varied experiences and views compared to drawing participants from specific organizations or related studies.

Sampling Methods. The two most utilized sampling methods among the seven qualitative studies were convenience sampling and purposive sampling. Convenience sampling focuses on recruiting individuals who are available and is a highly practical approach, while

purposive sampling involves selecting participants intentionally based on specific characteristics, experiences, or some other shared criteria (Creswell & Poth, 2018; Muzari et al., 2022). These methods are both appropriate for the types of studies conducted, where the availability of, and ability to access, participants played a role, and where the research focus depended on participants sharing specific experiences, characteristics, or utilizing the same types of services.

Purposive Sampling. Bardwell et al. (2021), Kapadia et al. (2021), and Kesich et al. (2023) all specified that they utilized purposive sampling methods, though only Kapadia et al. (2021) and Kesich et al. (2023) noted that they continued sampling until thematic saturation had occurred. Since these research teams were interested in the experiences of specific individuals accessing specific services and resources, it is appropriate that they chose to utilize purposive sampling. This method allowed Bardwell et al. (2021) to recruit their participants from a women-only transitional housing and drop-in site in Surrey, BC, Canada, aiding in focusing their study on overdose prevention among women and gaps in available support services. Similarly, Kapadia et al. (2021) were able to purposively draw their participants from the REACH medical facility located in Ithaca, NY, USA, thus allowing them to focus on the specific model of care utilized there. Kesich et al. (2023) were also able to specifically target the population for their study, utilizing connections to CARE2HOPE (a related study conducted on a larger level). This sampling method allowed them to recruit participants located in rural Kentucky, USA, who were involved in the criminal-legal system and had lived experience of substance use. In comparison, McNeil et al. (2016) did not name their sampling method, however, based on their description it appears they also primarily utilized purposive sampling. They described accessing information from two other cohort studies conducted previously in Vancouver, BC, Canada: the Vancouver Injection Drug Users Study (HIV-negative), and the AIDS Care Cohort to Evaluate Exposure to

Survival Services (HIV-positive) studies. Based on the information obtained, McNeil et al. (2016) contacted eligible participants including those who had reported being discharged from hospitals against medical advice, and who reported leaving hospitals prior to completing treatment. Although this may also constitute convenience sampling, overall, it appears that McNeil et al.'s (2016) primary approach was purposive sampling. By conducting their sampling in this method, McNeil et al. (2016) were able to narrow the focus of their study and obtain the perspectives and experiences of individuals who were likely to be able to identify shortcomings in patient care at hospitals. Like McNeil et al. (2016), Shirley-Beavan et al. (2020) did not specify their sampling methods, though it appears primarily to be purposive sampling as well. Much like Bardwell et al. (2021) and Kapadia et al. (2021), Shirley-Beavan et al. (2020) drew their participants from the women and gender-nonconforming individuals accessing services at the Metzineres Centre in Barcelona, Spain. Additionally, Shirley-Beavan et al. (2020) sought out specific professionals for inclusion in their participant pool, including a staff member from Metzineres, as well as harm reduction and prison health workers. Although it could be argued that Shirley-Beavan et al. (2020) utilized convenience sampling, it appears, like in the case of McNeil et al.'s (2016) study, that the primary sampling method was purposive sampling.

Convenience Sampling. Both Kahn et al. (2020) and F. Khan et al. (2022) indicated that their chosen sampling method was convenience sampling. While both research teams utilized the same sampling method, their approaches to it were quite distinct. Kahn et al. (2020) sampled volunteer participants from the wider community in Erie County, NY, USA, who had experience with opioid overdose and naloxone rescue, whereas F. Khan et al. (2022) drew their participants from a larger project being carried out in Alberta, Saskatchewan, and Manitoba, Canada, by the Canadian Research Initiative on Substance Misuse (CRISM) in order to reach friends and family

members with experience supporting others using substances. F. Khan et al. (2022) also noted that although their primary method was convenience sampling, they also utilized snowball sampling. This would have allowed the researchers to access more potential participants for their study by having individuals they recruited through convenience sampling recruit more participants from among their own acquaintances (Naderifar et al., 2017). Interestingly, although both McNeil et al. (2016) and F. Khan et al. (2022) utilized connections with other research studies, they conducted their sampling according to slightly different methods.

Sample Characteristics. Qualitative research typically involves much smaller sample sizes than quantitative research (Creswell & Creswell, 2018; Creswell & Poth, 2018; Boddy, 2016). Therefore, considerations for what constitutes an appropriate or sufficient sample size are important, and components such as data saturation and generalizability of findings are crucial to discuss (Creswell & Creswell, 2018; Creswell & Poth, 2018; Bekele & Ago, 2022).

Bardwell et al., (2021) reported that their study included 32 participants. They indicated that all participants identified as cisgender women and ranged in age from 22 to 55 years old. Among the participants, one identified as South Asian, three as Black, 14 as Indigenous, and 15 as White. Bardwell et al. (2021) noted that some of the participants self-identified as belonging to more than one ethnicity. Twenty-nine of the 32 participants smoked drugs, and nine had experienced at least one overdose during the past year. Also included in their report was demographic information related to the participants' housing status, methods of generating income within the past month, substances used, methods of substance consumption, frequency or use, and number of overdoses in the past year.

With the largest sample size out of the seven studies, Kahn et al. (2020) included 35 participants in their study, all of whom were adults ranging in age from 22 to 50. Their

participants had all experienced an overdose reversal involving the use of naloxone in the previous year. They also collected demographic information related to the substances used by participants throughout their lifetime, and their drug of choice at the time of the study. Unlike the study conducted by Bardwell et al., (2021), Kahn et al.'s (2020) study was less ethnically diverse, with 30 of the 35 participants identifying as White, one as African American, three as Latinx, and one as Other. However, Kahn et al. (2020) did include both men and women in their study, with 22 of their participants identifying as men, and 13 as women.

Kapadia et al. (2021) had a significantly smaller sample size with only 17 participants, compared to Bardwell et al. (2021) and Kahn et al. (2020). Since they were conducting their research at a single medical facility, it makes sense that their sample would be on the smaller size (Kapadia et al., 2021). Of the 17 participants, four constituted the leadership group, six were staff members, and seven were external stakeholders. Within these three groupings, the participants were further defined based on whether they were part of the clinical or non-clinical team, or in the case of the stakeholders, which program or department they were associated with. Ultimately, two participants were clinical leadership, two were non-clinical leadership, one was non-clinical staff, five were clinical staff, four were external stakeholders in the syringe services program, two in the county health department, and one in the county justice system. Unlike Bardwell et al. (2021) and Kahn et al. (2020), Kapadia et al. (2021) did not report any other demographic information related to their participants.

With 29 participants, Kesich et al. (2023), had a similar sample size to Bardwell et al. (2021). All their participants were adults over the age of 18 located in rural Kentucky, USA, who used substances and were involved with the criminal-legal system (Kesich et al., 2023). Like Kahn et al.'s (2020) study, Kesich et al.'s (2023) sample included both male and female

participants—11 and 18 respectively—and was not very ethnically diverse, with 28 of their 29 participants identifying as White. They also collected additional demographic information, like Bardwell et al. (2021) and Kahn et al. (2020), including participants' level of education, drug of choice, use of naloxone on others, and whether they carried or kept naloxone which was measured over a 90-day period, with a follow-up conducted three months after the study (Kesich et al., 2023).

F. Khan et al. (2022) had a smaller sample size, with 17 participants, like Kapadia et al.'s (2021) study, all of whom were women, much like Bardwell et al.'s (2021) study. The participants were all adult family members, between 20 and 60 years old, who had experience supporting a youth or young adult aged 14 to 30 who had used opioids (F. Khan et al., 2022). Twelve of the 17 participants were mothers and the rest were other family members or close relationships. Of the 17 participants, 12 were 41 years of age or older. Thirteen of the participants were Albertan residents, while the other four were living in either Saskatchewan or Manitoba. Although participants' exact locations remained unspecified, 11 participants reported living in urban areas, while six were from rural communities. Like in Kahn et al.'s (2020) and Kesich et al.'s (2023) studies, F. Khan et al.'s (2022) participants were not very ethnically diverse, with 13 identifying as White, and four as Indigenous or Métis. They stated they refrained from collecting other demographic information and reporting details to protect the participants' privacy and confidentiality.

McNeil et al. (2016) had a sample size of 30 participants, much closer to that of Bardwell et al. (2021) and Kesich et al. (2023). Their sample was comprised of individuals who had reported leaving hospitals against medical advice or before completing treatment (McNeil et al., 2016). The participants were all adults, ranging from 29 to 59 years of age. One participant

identified as transgender, 16 as male, and 13 as female—a much more even split than the other studies. Of the studies that reported ethnicity among their demographic information, Bardwell et al.'s (2021) study was most similar to McNeil et al.'s (2016), who had 17 participants who identified as Indigenous, 12 as White, and one as African-Canadian. Like Bardwell et al. (2021), Kahn et al. (2020), and Kesich et al. (2023), McNeil et al. (2016) reported additional demographic information, including participants' health status, housing status, drug use, reason for recent hospitalization, and number of hospitalizations in the previous five years.

Shirley-Beavan et al.'s (2020) study had the smallest sample size, with only 15 participants. Among them, 12 were women accessing the Metzineres Centre who engaged in two focus groups, with 11 further engaging in individual interviews. The other three participants included a Metzineres staff member, a former prison health worker, and a harm reduction worker, all of whom engaged only in individual interviews. Of the 12 participants who were accessing the Metzineres Centre, nine identified as people who injected drugs, and 11 indicated that they had experience with incarceration. Similar to F. Khan et al. (2022), Shirley-Beavan et al. (2020) did not report any other demographic data. Although their study was small, their research also included a narrative literature review, in which they reviewed 102 academic articles, supplemented by additional grey literature. This literature review focused on the barriers women who use substances face in accessing harm reduction, and helped inform their study.

Data Collection. Each of the studies utilized semi-structured interviews as part of their data collection procedure. Four reported only conducting semi-structured interviews (Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; McNeil et al., 2016), while the other three applied additional data collection methods (Bardwell et al., 2021; Kahn et al., 2020; Shirley-Beavan et al., 2020). While Bardwell et al. (2021) conducted ethnographic observations

alongside the qualitative interviews, Kahn et al. (2020) had their participants complete a brief demographic questionnaire, and Shirley-Beavan et al. (2020) began their study by engaging participants in focus groups before moving on to individual interviews with key participants. Alongside this, Shirley-Beavan et al. (2020) engaged in ethnographic observation of participants while on-site and used their literature review to inform their approach and data collection.

Many of the researchers chose to conduct in-person interviews (Bardwell et al., 2021; Kahn et al., 2020; McNeil et al., 2016; Shirley-Beavan et al., 2020), while others chose to hold phone or video call interviews (F. Khan et al., 2022) or allowed the participants to choose (Kapadia et al., 2021). Kesich et al. (2023) chose to utilize Zoom (https://www.zoom.com) for their interviews, noting its compliance with HIPAA requirements. Where participants did not have access to Zoom-enabled technology or a private space, interviews took place at an office at CARE2HOPE instead. Regardless of the method of interview conduction, they reported similar interview lengths. Thirty to 90 minutes per interview was most common (Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022), however, Bardwell et al. (2021) reported their interviews lasted 45 to 60 minutes, and McNeil et al. (2016) indicated that their interviews averaged 45 minutes. Shirley-Beavan et al. (2020) did not report the length of their interviews.

The locations for the interviews varied between the studies, where some occurred on-site (Bardwell et al., 2021; Kapadia et al., 2021; Shirley-Beavan et al., 2020), and another at the research office of another cohort study (McNeil et al., 2016). Having conducted solely virtual interviews, F. Khan et al. (2022) did not indicate where either the researchers or participants were during the interview calls. For Kesich et al.'s (2023) virtual interviews, they did not report the locations of the researchers and participants. In comparison, Kahn et al. (2020) were the only

researchers who noted that they allowed the participants to choose both the time and location of the interview. Kahn et al. (2020) also appear to be the only ones to offer participants choice in whether digital recordings of their interviews occurred or only hand-written notes instead. Alternatively, Bardwell et al. (2021), Kapadia et al. (2021), Kesich et al. (2023), F. Khan et al. (2022), and McNeil et al. (2016) indicated that all interviews were audio-recorded. Shirley-Beavan et al. (2020) were the only researchers who did not provide information as to whether digital recordings of the interviews were made.

Each of the researchers approached the creation of their qualitative interview guides differently as well. No information regarding how Kahn et al. (2020), Kapadia et al. (2021), McNeil et al. (2016), and Shirley-Beavan et al. (2020) created their interview guides or whether anything informed their questions appeared in their reports. Their reviews of other literature or the researchers' personal and professional experiences may have informed the interview questions, however, this is only an assumption. Contrastingly, Bardwell et al. (2021) and F. Khan et al. (2022) both outlined the creation of their interview guides in consultation with community members with first-hand experience related to their focus of study. Bardwell et al. (2021) indicated they consulted a community advisory board made up of women who had lived experience with either substance use or houselessness. Similarly, F. Khan et al. (2022) utilized insights from a youth engagement summit event held by the larger research project they connected with. They also held pilot consultation groups with both youth and their parents, with whom the researchers became affiliated with through a local youth advisory council. Between these two sources, F. Khan et al. (2022) generated their interview guide. Kesich et al. (2023) specified that their interview guide was informed by the literature, and by theory and input from the CARE2HOPE project staff (referred to as Rural Health Navigators or REHNs).

Data Analysis. While thematic analysis was a widely shared method of analyzing data, each research team conducted their data analysis differently. Bardwell et al. (2021) simply reported using thematic analysis for their study. Both Kahn et al. (2020) and Kapadia et al. (2021) chose to use thematic content analysis. While Kahn et al. (2020) specified that theirs was an inductive approach, Kapadia et al. (2021) highlighted that they conducted their analysis iteratively while data collection was ongoing and indicated that their initial coding structure derived from the Centers for Disease Control and Prevention (CDC) Evaluation framework (Milstein & Wetterhall, 1999). Kesich et al. (2023) and F. Khan et al. (2022) also shared an approach, having utilized reflexive thematic analysis informed by Braun and Clarke's (2006, 2019) approach. Though Kesich et al. (2023) highlighted that their approach was more theoretical and also guided by Rhodes' Rural Risk Environment Framework (Rhodes, 2002, 2009), F. Khan et al. (2022) deductively developed their framework based on the larger project with which their study was associated. Like Kesich et al. (2023), McNeil et al. (2016) also utilized Rhodes' Risk Environment Framework (Rhodes, 2009). In contrast to the other studies, McNeil et al. (2016) did not specify a thematic analysis approach, instead stating they had interpreted themes from their data based on the Rhodes' framework (Rhodes, 2009) and by drawing on principles of patient-centered care. Shirley-Beavan et al. (2020) only noted that their analysis and interpretation of data was guided by their literature review.

Some researchers chose to approach data analysis and coding both independently and collaboratively (Bardwell et al., 2021; Kahn et al., 2020; Kesich et al., 2023). While Bardwell et al. (2021) individually reviewed interview transcripts and fieldnotes to develop lists of themes and subthemes before collaboratively developing a coding framework from both the identified themes and a priori themes, Kahn et al. (2020) had two members of their team independently

review the data, create lists of themes, and then compare their lists and reach consensus for the finalized themes. Kesich et al.'s (2023) approach was a combination of both, with two researchers coding several transcripts collaboratively before working independently. While working separately, they compared every fourth transcript. Once they completed the initial coding, they discussed any discrepancies among the research team, and then one researcher constructed themes, eliciting feedback from the rest of the research team throughout the process (Kesich et al., 2023). They also inductively and deductively developed a codebook which was reflexively updated as their data collection and analysis progressed. In comparison, Kapadia et al. (2021), F. Khan et al. (2022), McNeil et al. (2016), and Shirley-Beavan et al. (2020) did not provide specific information as to their coding processes, although F. Khan et al. (2022) and McNeil et al. (2016) reported that their analyses were both inductive and deductive. Unlike the other research teams, F. Khan et al. (2022) indicated their data analysis was reviewed by a co-author as well as a parent with lived experience of overdose-related mortality before finalizing their analysis. This helped to ensure that participant perspectives were not misrepresented, that the language used was non-stigmatizing, and that considerations for any additional possible interpretations of the data were made.

The use of software in data organization and analysis also varied between studies. NVivo software (https://www.lumivero.com/products/nvivo/) helped Bardwell et al. (2021) in organizing and coding their data, Kapadia et al. (2021) in refining their coding structure, Kesich et al. (2023) with data storage, analysis, and theme construction, and McNeil et al. (2016) in data analysis. In comparison, Kahn et al. (2020) utilized Atlas.ti software (https://www.atlasti.com/) to help with coding, and IBM SPSS Statistics 23 software (https://www.ibm.com/spss) to run descriptive statistics on the demographic data they collected. Neither F. Khan et al. (2022) nor

Shirley-Beavan et al. (2020) indicated whether they used any software in organizing or analyzing their data.

Quantitative Articles

Fewer quantitative articles were available focused on substance use and implementation of harm reduction approaches. In this review, one study examined the use of opioids as a means of maladaptively coping with specific life stressors (Hendy et al., 2018), while the other looked at opioid overdose locations and the role of safe injection sites (SIFs; Madah-Amiri et al., 2019).

Paradigms. Positivism is the typical approach used in quantitative research, and both Hendy et al. (2018) and Madah-Amiri et al. (2019) appear to have used it (Creswell & Creswell, 2018; Rehman & Alharthi, 2016). While Madah-Amiri et al. (2019) focused more on objective data collection and measurable outcomes, Hendy et al. (2018) went further and also focused (at least partially) on testing and refining an existing theoretical framework known as Threat Appraisal and Coping Theory (Lazarus & Folkman, 1984).

Participant Recruitment. Neither research team recruited participants directly. Hendy et al. (2018) utilized SurveyMonkey (https://www.surveymonkey.com), a survey software platform with its own pool of individuals across the United States that it will send surveys to. Alternatively, Madah-Amiri et al. (2019), had ambulance staff from the central ambulance station in Oslo, Norway set aside patient records from opioid overdoses they attended. This study chose to focus on the central ambulance station due to the higher rate of naloxone used by this station compared to the other ambulance stations in the city.

Sampling Methods. Hendy et al. (2018) indicated they used quota sampling through SurveyMonkey (https://www.surveymonkey.com) to obtain a sample of 1047 American adults. Their sampling was determined by factors such as gender, age, ethnicity, income, and opioid use.

Madah-Amiri et al. (2019) did not specify their sampling method, though it appears to be purposive. They indicated ambulance station staff provided records of 1054 overdose response calls, involving 465 different individuals. Quantitative research typically requires larger sample sizes than qualitative research, and statistical formulas can be used to determine the minimum sample size needed (Jones, n.d.). It appears Hendy et al. (2018) and Madah-Amiri et al. (2019) likely had sufficient sample sizes for their studies based on their target populations (Martínez-Mesa et al., 2014).

Sample Characteristics. Hendy et al. (2018) had the largest sample size of all the studies reviewed when looking at the number of individual participants. Since they used SurveyMonkey (https://www.surveymonkey.com), their sample is likely at least somewhat representative of the general population in the USA (Hendy et al., 2018). They reported that the platform utilizes random sampling to draw from a pool of three million Americans and attempts to match the sample to national demographics (Hendy et al., 2018). However, guaranteeing a representative sample is not possible, as noted by Hendy et al. (2018) in reference to the work done by Heen et al. (2014) which suggested that the samples often skewed toward higher ages, urban areas, less ethnic diversity, and higher incomes. The sample surveyed by Hendy et al. (2018) included 569 female and 478 male participants, a fairly even split compared to many of the other studies reviewed. Like the other studies, adults, between the ages of 18 and 60+ comprised Hendy et al.'s (2018) sample, though most were over the age of 30. Their sample included 803 White participants, 81 Latinx, 74 African American, 27 Asian American, and 62 who identified only as Other. This was similar to the other studies reviewed in terms of ethnic diversity. Hendy et al. (2018) also collected demographic data related to participants' income and the region in which they lived. In comparison, Madah-Amiri et al.'s (2019) sample included 368 male and only 96

female participants, with one participant's data missing. Their participants ranged in age from 18 to 96. Madah-Amiri et al. (2019) did not indicate the ethnicities of their sample participants, and it appears they did not collect this information at all. However, they did collect and report on additional demographic information including the locations of the overdoses, clinical symptoms observed and their severity, and whether participants received transportation to hospitals for further treatment.

Data Collection. Each of these studies collected data through different means. Hendy et al. (2018) used digital surveys to collect data on participants' demographics, experiences with life stressors (including family, romance, health, work, and money), self-esteem, and use of opioids. Due to limitations in the survey software, Hendy et al. (2018) utilized items from psychometrically tested published scales. They also determined the internal reliability for each measure to evaluate the psychometric properties of their scale items. In contrast, Madah-Amiri et al. (2019) collected their data directly from the patient charts and records provided by the ambulance station, which provided information on patient demographics, overdose data, clinical data, and information regarding patients' dispositions following their overdose. To organize and manage the collected data, they used VieDoc (V4) software (https://www.viedoc.com/).

Data Analysis. Both research teams utilized multiple data analysis methods in their studies. Hendy et al. (2018) conducted their data analysis through IBM SPSS (V24) (https://www.ibm.com/spss) while Madah-Amiri et al. (2019) used IBM SPSS (V22) software (https://www.ibm.com/spss) to run their data analyses. Since their study focused on examining the correlational relationships between life stressors and opioid use, Hendy et al. (2018) included the PROMIS Questionnaire (Pilkonis et al., 2011) in their survey to measure participants' opioid use. They then conducted correlational analysis, as well as multiple regression analyses and

bootstrapping mediational analysis (Hendy et al., 2018). This allowed the researchers to determine any correlational relationships between variables, as well as test for mediational effects of other variables (Alfons et al., 2022; Siegel & Wagner, 2022). Madah-Amiri et al. (2019) completed descriptive statistics on the demographic data they extracted from the patient records. Additionally, they utilized chi-square tests, Fisher's exact text, the Mann-Whitney U test, and the Kruskal-Wallis test for data analysis. These various tests helped them to determine independence between variables, and better understand the relationships between multiple variables and compare them (Kim, 2017; Statistics Solutions, n.d.; Xia, 2020). Madah-Amiri et al. (2019) also conducted a logistic regression analysis, excluding any data from overdoses that occurred within a SIF, to determine an estimation of the probability of overdoses occurring in other locations (IBM, n.d.).

Mixed Method Article

There was a lack of relevant mixed method studies available, similar to the lack of quantitative studies. Of the core literature reviewed, only one utilized a mixed methods approach. Slocum et al. (2023) conducted a sequential exploratory mixed method study focused on the drug treatment perspectives and experiences of the close friends and family members of individuals using illicit opioids.

Paradigm. Although Slocum et al. (2023) did not specify their paradigm approach, it is most likely pragmatism. Pragmatism emphasizes the use of multiple methods to best understand complex issues and address questions practically (Creswell & Creswell, 2018; Creswell & Poth, 2018; Kaushik & Walsh, 2019).

Participant Recruitment. Slocum et al. (2023) recruited participants primarily through a non-profit support network specifically serving the friends and family of individuals with

Substance Use Disorder (SUD; DSM-5-TR; American Psychiatric Association, 2022). They recruited participants for their qualitative interviews from the North and South Shore areas of Massachusetts, USA, expanding this to the greater Massachusetts region for their quantitative survey. While they still utilized the non-profit support network for recruiting participants for their quantitative survey, they also used various other similar community support groups, as well as social media posts made to the accounts of other support groups in Massachusetts. All their participants, whether for the interviews or survey, had to be over the age of 18, residing in Massachusetts, with a close relationship to someone who uses illicit opioids. The participants were also required to have not used illicit opioids within 30 days prior to taking part in the study.

Sampling Methods. For the qualitative component of their study, Slocum et al. (2023) utilized purposive sampling, and for the quantitative component they applied convenience sampling. By using these two different sampling methods, Slocum et al. (2023) were able to obtain a more specific sample for their qualitative interviews, and a larger sample for their quantitative survey measure.

Sample Characteristics. Although on the smaller size, Slocum et al.'s (2023) sample size for their qualitative interviews (22 participants) was similar to some of the qualitative studies (Kapadia et al., 2021; F. Khan et al., 2022). Their quantitative survey included 260 participants (Slocum et al., 2023), which is quite small compared to the quantitative studies by Madah-Amiri et al. (2019) who had 465 individuals but 1054 cases, and Hendy et al. (2018) whose study included 1047 participants. However, since they limited their study to a target population within the state of Massachusetts, rather than across the country, their sample size is likely adequate for their study (Slocum et al., 2023). Slocum et al. (2023) did not provide specific demographic information for their participants; however, they did provide some information for their

qualitative interview participants and quantitative survey participants. Of the 22 individuals interviewed, 14 were female, and 21 were White, with the rest of the participant demographics not reported. They reported an interquartile range for the participants' ages rather than an exact age range. The interquartile range reported included ages ranging from 46 to 61 years. In comparison, their survey participants included 172 females, 87 males, and one transgender/genderqueer participant. The survey participants also ranged in age, with an interquartile range of 37 to 61, and identified as White (240 people), Black/African American (12 people), Latinx (nine people), Indigenous (three people), Asian (one person), and Other (10 people). Although they did not obtain any other demographic information from the interview participants, those who participated in the survey filled out information regarding their educational level, employment status, housing status, whether they lived with minor dependents, and whether they had health insurance.

Data Collection. Slocum et al. (2023) outlined a preliminary phase of data collection that preceded their study and was used to help inform it. This phase involved a novel purchase trial at local pharmacies to determine the level of naloxone access both by individuals using opioids and their friends and family members. Then the pharmacists completed a survey measuring their attitudes and experiences related to naloxone. In what Slocum et al. (2023) called the second phase of their data collection, the data from their qualitative semi-structured interviews and quantitative survey was collected. The qualitative interviews occurred in 2018, the findings of which informed the creation of the subsequent survey conducted in 2020. The interview locations were determined collaboratively by the researchers and participants. They included local cafes, participants' private homes, and a private office at a syringe service program. They recorded the interviews, and Slocum et al. (2023) reported they lasted between 60 and 90

minutes. The interview participants also completed a brief demographic questionnaire. They administered the quantitative survey measure via phone to participants in a multiple-choice format. The surveys took approximately 30 minutes to complete. Slocum et al. (2023) utilized REDCap software (https://www.projectredcap.org/software/) to organize the survey data.

Data Analysis. Once they had collected the interview data, Slocum et al. (2023) transcribed the recordings, verified the transcription accuracy, and removed all identifying information. Throughout the interview stage, Slocum et al. (2023) identified emergent themes and updated them as more interviews took place. They created a preliminary coding scheme based on the interview guide and emergent themes using both deductive and inductive approaches. From this coding scheme, Slocum et al. (2023) developed a codebook, which they revised and updated as additional themes emerged in the interviews. The researchers worked both collaboratively and independently to code the transcripts. Slocum et al. (2023) utilized Stata Statistical software (Release 16; https://www.stata.com/) to perform descriptive statistical analyses. They contextualized the quantitative data through the identified themes and excerpts from interview transcripts.

Findings

Presented below are the findings from the core articles analyzed. Discussion of them occurs first in relation to the other articles sharing in their methodological approach. Then, a discussion provides an overview critically analyzing the findings from all articles.

Qualitative Articles

Across the seven qualitative articles, several similar and related themes emerged. Each research team had their own coding process and names for themes that arose during their studies. Grouping of themes across the articles occurred and resulted in renaming to best represent the

overarching subjects. A discussion of the specific findings of each article as they fit within these five overarching themes then transpires.

Theme One: Harms Associated with Substance Use. Each of the studies highlighted various harms associated with substance use. These harms encompassed primary harms, affecting those using substances, and secondary harms, affecting those in supporting roles. To best understand the harms associated with substance use, a broad view of these different, yet related, types of harm is crucial to developing a comprehensive conception of substance-related harm.

The most commonly considered substance-related harms tend to be health risks related to substance use, including transmission of diseases and mortality (McLellan, 2017). Beyond these relatively well-known harms, substance-related harm can include physical, mental/psychological, and social harms (Bardwell et al., 2021; Kahn et al., 2020; McNeil et al., 2016; Shirley-Beavan et al., 2020). Experiences of stigmatization, discrimination, isolation, violence, trauma, loss of stable and safe housing, barriers to education and safe and stable work, and lack of accessible and appropriate health and mental health care services are all common experiences of substance-related harm (Bardwell et al., 2021; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; McNeil et al., 2016; Shirley-Beavan et al., 2020).

While not the only harms to consider, health concerns, such as the contraction and transmission of diseases related to unsafe substance use practices, comorbid health problems, overdose and death are important to address (NIDA, 2011). Frequently, substance use is associated with various health and mental health conditions. Some of these health problems can also spread to individuals who do not use substances, either through bodily transmission, or through experiencing things like secondhand smoke. Additionally, substance use, and associated

health and mental health conditions, can place individuals at higher risk of injury and death. From deaths resulting from overdose or other health conditions leading to death, to death and injury related to actions undertaken while a person is under the influence of substances including physical fights and vehicle collisions. These harms may also affect other individuals, becoming secondary substance-related harms. Another harm to consider is death by suicide, as Kahn et al. (2020) noted, individuals will sometimes attempt suicide by intentionally overdosing. Individuals with histories of mental and physical health problems, and experiences of substance use, trauma, financial issues, and legal issues are all at greater risk of suicide (CDC, 2024).

Experiences of socio-structural violence, including gender- and race-based violence, are also extremely prevalent substance-related harms affecting individuals who use substances (Bardwell et al., 2021; Shirley-Beavan et al., 2020). Not only do many individuals who use substances experience violence from family, partners, peers, and other members of the community, they are also frequently victims of police violence and profiling, and discrimination and poor treatment by medical professionals (Bardwell et al., 2021; Kahn et al., 2020; Kesich et al., 2023; F. Khan et al., 2022; McNeil et al., 2016; Shirley-Beavan et al., 2020). Not only does socio-structural violence directly harm individuals who use substances, it can also lead to additional harms by forcing individuals to use in unsafe environments (Bardwell et al., 2021; McNeil et al., 2016; Shirley-Beavan et al., 2020). Experiences of socio-structural violence can also act as deterrents to accessing harm reduction services and other health care (Bardwell et al., 2021; Kesich et al., 2023; McNeil et al., 2016; Shirley-Beavan et al., 2020).

Not only are stigmatization, discrimination, isolation, violence, trauma, and lack of access to support services primary substance-related harms, they also affect the friends and family of individuals who use substances and can affect professionals in supporting roles (Kahn

et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022). F. Khan et al. (2022) provided insights into friends' and family members' experiences of these secondary harms while supporting individuals using substances. They found that stigma and discrimination can have severe negative effects on friends and family members in supporting roles, especially as such experiences often lead to self-blame and guilt either for not doing enough or for doing too much and being labelled an enabler (F. Khan et al., 2022). Additionally, many of their participants discussed experiences of grief and distress over losing someone to substance-related poisoning. In sharing these experiences, the participants cited a distinct lack of support services and empathy from others while struggling with their loss (F. Khan et al., 2022). Similarly, in Kapadia et al.'s (2021) study, professionals providing care to individuals using substances indicated that they experienced vicarious trauma, and often found themselves feeling burned out due to the high demand for services. Participants in Kahn et al.'s (2020) and McNeil et al.'s (2016) studies also indicated that the treatment they often received from medical professionals reflected potential symptoms related to burnout, including staff being irritable and expressing feelings of resentment toward the patients, neglectful treatment, staff offloading patients from their caseload, and lack of empathy (Singh et al., 2023).

Theme Two: Effective Harm Reduction Interventions. There are many different harm reduction interventions that have been found to be effective (Logan & Marlatt, 2010; SAMHSA, 2023c). Some interventions focus on providing support within communities, while others specifically target clinical settings like hospitals, or other environments such as prisons (Bardwell et al., 2021; Kapadia et al., 2021; Kesich et al., 2023; McNeil et al., 2016; Shirley-Beavan et al., 2020). Additionally, harm reduction interventions can aim to reduce harm for individuals who use substances, but also for those in supporting roles such as family members or

professional care providers (Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022).

Services such as opioid agonist therapy, syringe exchange programs, community naloxone programs, and safe consumption sites have shown to be effective in reducing substance-related harm in multiple ways (Bardwell et al., 2021; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; McNeil et al., 2016; Shirley-Beavan et al., 2020). These interventions increase access to care and improve relationships between individuals accessing services and the service providers. McNeil et al. (2016) highlighted that applying these harm reduction interventions could enhance patient centered care and improve client outcomes, especially in hospital settings. The review Levengood et al. (2021) conducted corroborated these findings, noting that studies have reported decreased risk of overdose, overdose-related mortality, and improvements in health and public order outcomes associated with safe consumption facilities.

Another effective approach involves community-based harm reduction initiatives. For example, community naloxone programs and the greater accessibility of naloxone have had positive impacts (Kahn et al., 2020; Kesich et al., 2023). Not only do such initiatives involve the individuals engaging in substance use, they involve the wider community, bringing awareness, empathy, and a greater willingness to help those experiencing substance-related harms (Bardwell et al., 2021; Kahn et al., 2020; Kesich et al., 2023; Shirley-Beavan et al., 2020). Similarly, the implementation of support groups for individuals using substances, their friends and family members, and other care providers can be effective in reducing both primary and secondary substance-related harms (Bardwell et al., 2021; Kahn et al., 2020; Kapadia et al., 2021; F. Khan et al., 2022; Shirley-Beavan et al., 2020). Creating spaces where people can come together, share their experiences and support one another is important in dismantling stigma and addressing isolation related to substance use (Bardwell et al., 2021; Kahn et al., 2020; Kapadia et al., 2021;

Kesich et al., 2023; F. Khan et al., 2022; McNeil et al., 2016; Shirley-Beavan et al., 2020).

Other harm reduction interventions, focusing on the source rather than the individual consumer, can also be highly effective in prevention and minimization of substance-related harms. For example, the World Health Organization (2023) posited that addressing problematic prescription and over-the-counter sales of addictive substances may significantly reduce instances of addiction and overdose. McNeil et al. (2016) and Kapadia et al. (2021) both indicated policy issues preventing individuals using substances from receiving the care they need. Participant narratives in McNeil et al.'s (2016) study highlighted that hospital staff often refused to provide medications to help them manage pain, and frequently ignored or minimized patients' pain and withdrawal symptoms. From another perspective, the staff at REACH medical facility noted many providers refuse to provide patients with dosages of medications like buprenorphine that are needed to successfully help the patients (Kapadia et al., 2021). They reported that changes in treatment norms and understanding of the dosages of such medication-assisted treatments are necessary to provide proper care to individuals who use substances. Alongside the need to address clinical and community prescription issues, Shirley-Beavan et al. (2020) discussed the misuse and over-prescription of medication-assisted treatments within the prison system and noted that these issues need to be addressed as well.

Theme Three: Barriers to Accessing Harm Reduction. There are numerous social, economic, and structural barriers that prevent individuals from accessing harm reduction services. Some of these barriers are systemic or political in nature. Levengood et al., (2021) reported that in the United States, critics of safe injection facilities argued that such sites enable the use of substances, receive funding from taxes and government subsidies, and contribute to issues such as addiction, local crime, and other public order issues. These views result in less

support for harm reduction interventions, especially for substance use, and greater stigmatization and reduced safety for those who seek to access such supports.

Although harm reduction services are not widely accessible to begin with, women and gender non-conforming individuals experience greater barriers to accessing services and face higher levels of stigma and socio-structural violence (Bardwell et al., 2021; Shirley-Beavan et al., 2020). Worldwide, women who use substances experience key barriers to accessing harm reduction and effective treatment intervention. These barriers include stigma, discrimination, structural violence, gender-based violence, lack of service integration and holistic care, criminalization, absence of female-specific or safe space services, and an overall ignorance of intersectional experiences. Shirley-Beavan et al. (2020) also highlighted gender disparities that are pervasive in society and throughout various social service settings. They stated that health services and harm reduction services, especially within prisons, prioritize men, often to the point of completely excluding women from accessing safe services. These socio-structural barriers can impact any individuals who use substances in their ability to access harm reduction, and can also affect access for individuals in supporting roles (Kahn et al., 2020; Kesich et al., 2023; F. Khan et al., 2022). Participants in Kesich et al.'s (2023) study indicated that socio-structural barriers and fear of criminalization had sometimes prevented them from carrying and administering naloxone, regardless of whether they themselves used substances or not.

Economic barriers are also major factors preventing individuals from accessing harm reduction services. Treatment costs can be steep, as noted by care providers (Kapadia et al., 2021) and others in supporting roles (F. Khan et al., 2022). Not only can treatment costs constitute a significant barrier, consideration of the barriers caused by other factors related to individuals' economic statuses are important to understand. If individuals using substances do

not have stable housing, and reliable access to technology for communication and transportation, they often will be unable to access services as most treatment programs have strict requirements for applying to and entering into the program (Krug et al., 2015; R. Lingnau, personal communication, October 15, 2024).

Theme Four: Impacts of Integrating Harm Reduction. The impacts of integrating harm reduction can be felt by individuals who use substances, and by those in supporting roles, such as friends, family, and professional care providers (Bardwell et al., 2021; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; McNeil et al., 2016; Shirley-Beavan et al., 2020). Integration of harm reduction can also have wider impacts on communities by reducing costs and risks that may increase due to substance use and related harms (HealthLink BC, 2023).

Key narratives that arose during the studies conducted by Bardwell et al. (2021), Kahn et al. (2020), Kesich et al. (2023), F. Khan et al. (2022), McNeil et al. (2016), and Shirley-Beavan et al. (2020) highlighted some of the impacts of integrating harm reduction based on participants' lived experiences and insights. Participants indicated that community-based supports provided safety, social support, education around harm reduction, and greater access to services (Bardwell et al., 2021; Kahn et al., 2020; Kesich et al., 2023; F. Khan et al., 2022; Shirley-Beavan et al., 2020). Bardwell et al. (2021) and Shirley-Beavan et al. (2020), emphasized that safe consumption sites specifically providing supervised inhalation services help protect service users from harms including violence, stigma, and policing. They also highlighted participants’ views that integrating harm reduction and creating more private sanctioned spaces for use would help decrease risks like overdosing or unsafe use, as well as gender- and racially based violence. Additionally, by moving to embrace harm reduction strategies and interventions, intersectional

impacts are more readily recognized and addressed, resulting in greater equity, social justice, and improved health outcomes.

Kesich et al. (2023) and F. Khan et al. (2022) also discussed the impacts of integrating harm reduction on friends and family members acting in supportive roles for individuals who use substances. Their findings indicated that some of the secondary substance-related harms experienced by these supporting individuals could be mitigated by the implementation of harm reduction services. By integrating harm reduction, more services may become accessible and work to address the needs of individuals using substances, which may reduce the need for extensive support from friends and family members. Similarly, increased integration of harm reduction can mitigate the stigma and discrimination faced by individuals who use substances and those who support them.

McNeil et al. (2016) noted that integrating harm reduction approaches in a clinical setting resulted in more realistic expectations of patients, more patients feeling like their needs were being listened to, and improved care retention. The participants indicated that integrating harm reduction strategies allows for greater access to supports and increased providers' understanding of the subjective health needs of individuals who use substances. Many of the narratives found by O'Connor (2019) echoed this, where the integration of harm reduction approaches allowed physicians and other professionals to better understand the experiences of individuals using substances. Specifically, it was noted that such approaches resulted in physicians being more able to see the individual as a person, rather than only as the consequence to their engagement in harmful behavior. This improved communication and elicited a willingness in patients to hear about treatment options available. Kapadia et al.'s (2021) study elicited similar perspectives from medical staff. In addition, the staff at the REACH facility indicated that the workplace

community, developed through their shared values and advocacy for integrating harm reduction into their work, provided them with support not experienced in other workplaces.

Theme Five: Creating Safety Through Harm Reduction. Safety in relation to substance use includes a variety of components to consider such as physical, social, and cultural safety. Although many harms can arise in relation to substance use, there are many ways in which harm reduction can create safety.

Bardwell et al. (2021) and Shirley-Beavan et al. (2020) highlighted that integration of harm reduction can help to reduce experiences of socio-structural violence by providing safe spaces for individuals to use substances and access support. By developing spaces where individuals can be physically safe, it allows greater opportunities for socialization, resulting in the creation of social networks. Similarly, spaces where individuals can use safely and access harm reduction services protect individuals from having to engage in unsafe use practices and can help to prevent severe overdose experiences. Where individuals may not be able to access such spaces, community-based naloxone programs can act to create safety for individuals using substances in public and private settings. Kahn et al. (2020) and Kesich et al. (2023) indicated that increasing awareness and acceptance of naloxone, and how to administer it, can be lifesaving. In clinical settings, McNeil et al. (2016), highlighted that harm reduction interventions act to emphasize patient centered care which creates cultural safety, reduces power differentials, and acts to protect vulnerable populations from discrimination and social inequities. The presence of both social and structural disparities results in disproportionate impacts and negative outcomes for vulnerable individuals—especially those experiencing intersectionality.

Velez et al. (2016) found that among hospitalized adults with a substance use disorder, many highlighted the importance of having care providers who understood their complex,

intersectional experiences, their substance use, and the cruciality of choice regarding treatment. Participant narratives indicated that interventions often utilized in harm reduction approaches were effective and helped to create safety for them in pursuing care. They also noted that various internal and external factors impacted individuals' motivation for change, and these factors were addressed by harm reduction interventions. McNeil et al.'s (2016) study reflected these findings which corroborated various narratives from individuals who use substances and care providers in both clinical and community-based settings (Bardwell et al., 2021; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; Shirley-Beavan et al., 2020).

Harm reduction approaches also create safety due to the lens of destigmatization and efforts to increase social supports for individuals engaging in substance use. Velez et al. (2016) highlighted that the presence of peers, and peer supports, within clinical settings are extremely important to adult patients experiencing substance use disorders. This echoes the perspectives found in McNeil et al.'s (2016) study, where participants indicated they would like to see peer supports and specialized harm reduction services within hospital settings. The safety created by destigmatizing engagement in substance use and increasing social supports can also benefit those who do not engage in such behaviors themselves but whose loved ones do (F. Khan et al., 2022). As revealed by F. Khan et al.'s (2022) study, friends and family members of individuals who use substances often face challenges related to stigma themselves, including social isolation, discrimination, and their own mental health challenges. Sterling et al. (2022), studied the experiences of grief and loss in parents whose adult children had died from opioid poisoning. Their participants indicated that social support was important, and that stigmatization often negatively impacted them during their grieving process. These studies highlight the need for greater social supports and destigmatization, and indicated that harm reduction services and

supports play important roles in reducing and mitigating secondary substance-related harms (F. Khan et al., 2022; Sterling et al., 2022).

By fostering open dialogue around harm reduction interventions and educating not only individuals who use substances, but also people in supporting roles and community members, safety can develop and increase (Bardwell et al., 2021; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; McNeil et al., 2016; Shirley-Beavan et al., 2020). Similarly, increasing access to harm reduction knowledge and tools for intervention can have positive impacts, enhancing safety, saving lives and even reducing costs and burdens on health care services.

Quantitative Articles

Each of the quantitative studies focused on different aspects of substance use. Hendy et al. (2018) hypothesized that specific life stressors resulted in the use of opioids as a means of coping maladaptively. In comparison, Madah-Amiri et al. (2019) hypothesized that safe injection facilities (SIFs) may play a mediating role in opioid overdoses. Despite their very different topics of focus, each study examined factors impacting opioid use and outlined the effects of the factors on use and associated harms. While Hendy et al. (2018) were primarily interested in understanding some of the factors contributing to individuals' use of opioids, Madah-Amiri et al. (2019) were interested in how a specific harm reduction intervention (SIFs) might act to mitigate harms related to opioid use, specifically overdose.

Quantitative Findings. Of the five life stressors Hendy et al. (2018) examined (health, money, work, family, romance) only romance, family, and health stressors were statistically significant ($p<.01$) predictors of higher opioid use. Additionally, they determined that life stressors explained 8.9% of the variance in opioid use scores ($R2=.089$). While examining the

mediational effects of self-esteem, Hendy et al. (2018) found four of the stressors (romance, family, health, money) were significantly associated with lower self-esteem, and that life stressors explained 28.3% of the variance in self-esteem (R2=.283). Their analysis also indicated that poor self-esteem significantly mediated each of the three life stressors associated with higher opioid use (romance, family, health), leading to even higher opioid use. They reported that their findings provided support for the cognitive appraisal sequence related to engagement in maladaptive coping behaviors as posited by the Threat Appraisal and Coping Theory (Lazarus & Folkman, 1984).

While Hendy et al. (2018) did not specifically report any analyses carried out on their demographic data, Madah-Amiri et al. (2019) reported statistics related to the overdose locations examined, as well as the demographics of participants who experienced an overdose in those locations. They indicated that 50.3% of the overdose cases occurred in public locations, 33.5% at the SIF, 7.9% in private homes, and 8.3% in various other locations. The participants whose overdoses occurred at the SIF were older than those in public locations. Additionally, Madah-Amiri et al. (2019) reported that each location had a similar ratio of male to female participants who experienced an overdose, with approximately 80% being male and 20% female. Individuals who overdosed in the SIF ($p<.05$) or in their private home ($p<.01$) had significantly lower scores on the Glasgow Coma Scale (GCS; Teasdale & Jennett, 1974) indicating more severe overdose symptoms, and the SIF reported the lowest respiratory rates at initial clinical observation ($p<.01$; Madah-Amiri et al., 2019). There was also a statistically significant difference reported regarding pupil size of individuals who overdosed at the SIF compared to other locations ($p<.05$). Madah-Amiri et al. (2019) reported a statistically significant difference regarding whether patients received transportation for additional care at a hospital depending on whether they overdosed at

the SIF ($p<.01$), compared to public locations where 52.5% of the patients required transportation for further treatment. Madah-Amiri et al. (2019) also examined patterns of overdoses based on the time, day of the week, and season. They found that overdoses occurred most frequently on Tuesdays (17.4%), and Sundays were the least frequent (10.4%). There was also a significant difference ($p<.01$) in the number of overdoses occurring on Saturdays at the SIF (21.8%) compared to public locations (59.9%). In the summer, overdoses occurred most frequently compared to the rest of the year, especially in public locations. Whereas at the SIF, it was during the summer that the lowest rates of overdose occurred. Additionally, they found that overdosing in public locations and when the SIF was closed was significantly associated with patients requiring further treatment ($p<.05$). Madah-Amiri et al. (2019) calculated that when the SIF was closed, patients were 40% more likely to receive transport to a hospital for further treatment, and those in public locations were 66% more likely to receive transport than those in private homes. Overall, Madah-Amiri et al.'s (2019) findings indicate a relative safety provided by the SIF in regard to overdose treatment and monitoring. They reported that the presence of SIFs may reduce social costs associated with other resources, such as emergency services and hospitals, and reduce substance-related mortality.

Mixed Method Article

Slocum et al. (2023) found that the experience of supporting a loved one using illicit opioids affected participants' understanding of Opioid Use Disorder (OUD; DSM-5-TR; American Psychiatric Association, 2022). As participants' understanding of OUD developed, their knowledge, beliefs, and attitudes related to the treatment of OUD changed. Support groups were highly influential, not only in the development of participants' understanding of OUD, but also in navigating entry into treatment and approaches to intervention. Slocum et al. (2023)

found that support groups were more influential than scientific evidence and the opinions of participants' loved ones, and helped to mitigate secondary stigma related to substance use. They also identified various barriers and challenges encountered in navigating the treatment system.

Theme One: Participants' Evolving Perceptions of Opioid Use Disorder. Within this theme, Slocum et al. (2023) indicated that supporting a loved one through their substance use led to a greater understanding of OUD as a disorder requiring intensive treatment and long-term support. Participants disclosed that initially, they felt they lacked knowledge around OUD and treatment interventions. Many participants also reported they held misconceptions and negative perceptions regarding substance use and the effectiveness of treatment interventions. Slocum et al. (2023) highlighted that many participants did not realize the extent of treatment and support required for their loved ones. Participants also reported experiencing social-emotional harms such as anxiety, trauma, self-blame, and secondary stigma related to supporting their loved ones.

Theme Two: Participant Views on How to Best Facilitate the Process of Treatment. Participants described motivational methods in terms of a spectrum from more forceful approaches to more gentle ones (Slocum et al., 2023). Those who preferred more forceful approaches tended to employ force and use of coercive tactics to get their loved ones to enter treatment. They would also base their provision of practical support on whether their loved one was engaged in treatment or practicing abstinence. On the other hand, those who took a gentler approach would utilize their connection with their loved one to motivate them to seek treatment by providing more practical support and avoiding forceful or coercive tactics. The participants likened this approach to being in their loved ones' corner rather than trying to fight them. Overall, participants primarily regarded legal coercion as a last resort; however, participants held divisive perspectives around having their loved ones incarcerated in jails or prisons as part of a

civil commitment. Some felt the punitive consequences would be beneficial in motivating the individual toward treatment, while others felt it might interfere with the treatment process. Some participants used a combination of forceful and gentle approaches, shifting it depending on the level of danger they felt their loved one was in, hardships they experienced due to supporting their loved one, and a need to protect themselves and other family members. Slocum et al. (2023) indicated several participants felt that although the more forceful approaches seemed to be predominant within support groups, they advocated for evidence-based treatments that focused on holistic care, and compassionate, patient-centered approaches. This often involved setting boundaries, while maintaining and appreciating connection to the loved one they were supporting. Despite these varied approaches, most participants indicated that they felt they had limited influence over whether their loved one engaged in treatment or the recovery process.

Theme Three: Participant Views on Treatment Modalities. The preferences participants held for specific treatment approaches were largely reflective of the approaches they felt best facilitated engagement in treatment. Those who felt more forceful approaches worked best showed a preference for abstinence-based treatment modalities, whereas those who advocated for gentler approaches preferred harm reduction-based treatment modalities. Slocum et al. (2023) highlighted that support groups were highly influential in shaping participants' views on treatment modalities. Due to specific requirements present in many of the abstinence-based treatment programs, participants' loved ones would share their recovery stories in support groups, thus influencing other families and friends to encourage their loved ones toward such programs. On the other hand, some participants indicated that the deindividualized approach these programs take does not work for everyone. They highlighted that such approaches could create additional barriers to entry into and maintained engagement in treatment, potentially

leading to overdose-related mortality.

Theme Four: Participants' Experiences Navigating the Drug Treatment System. A number of participants expressed trouble accessing treatment programs for their loved ones, citing limited spots and their loved ones' lack of motivation to attend treatment as barriers. Participants likened the process of navigating the treatment system to that of a full-time job, requiring extensive time and energy commitments from participants to obtain treatment entry for their loved ones. Some participants also indicated that withdrawal posed a serious risk to their loved ones and considered it a barrier to maintaining motivation to engage in treatment. A few highlighted that they had gone so far as to help obtain their loved ones' substance of choice just to prevent them from going into withdrawal while waiting to access treatment. Another barrier participants faced involved inadequate insurance coverage and subsequent financial barriers. Participants indicated that they and their loved ones experienced stigmatization and discrimination while dealing with insurance companies and providers. Once their loved ones were engaged in treatment programs, some participants faced insurance coverage denials, and incurred the costs of treatment personally, suffering significant financial hardships as a result.

Quantitative Findings. Slocum et al. (2023) found that support groups were an important part of participants' experiences of supporting loved ones using substances, with 99% of survey participants endorsing their importance. They reported that 94% of their survey participants had attended at least one support group that addressed topics related to SUD. Eighty-seven percent and 95%, respectively, felt well prepared to support a loved one using opioids, and felt confident in their knowledge of addiction as a disease. Statements made by participants in relation to Theme One, wherein their knowledge and confidence grew over time, corroborated these numbers. In relation to Theme Two, Slocum et al. (2023) found that 57% of survey

participants believed involuntary treatment options were effective. In fact, 42% of their respondents indicated they had petitioned for the involuntary admittance of their loved one to treatment through the civil system. Ninety-three percent had sought out information about available treatment options for a loved one, which corroborated findings that participants who had previously navigated and explored treatment options felt their knowledge of treatment was well-developed (89%). Additionally, 88% reported experience securing entry into treatment programs for their loved ones. The survey results reflected the divide in participants' views of treatment modalities, finding that around half preferred abstinence-based treatment, and about half preferred harm reduction focused treatment. Residential community treatment programs were favored by 45% of participants, noting that they felt it would be the best option for their loved one. Residential programs were also described by participants during interviews as places where their loved ones would be safer from possible overdose risks. Detox programs were widely regarded as effective for OUD treatment by survey respondents, with 64% of participants endorsing this perspective. This finding was not corroborated by the participants who were interviewed, who predominantly expressed frustration with such programs due to a lack of continued care after the discharge of their loved ones from the program. Participants viewed Medications for Opioid Use Disorder (MOUD) treatments as quite effective, with 76% of participants endorsing their effectiveness; however, few participants (38%) felt that medications were more effective than non-medication-based treatments, and almost none of the participants (2%) indicated wanting medication-based treatment for their loved ones. In the qualitative interviews, several participants expressed that MOUD treatments actually delayed recovery, as they replaced one substance with another and their loved ones would misuse them. This perspective was also held by 24% of the survey participants. In relation to Theme Four, 22% of

survey participants experienced a lot of difficulty in accessing treatment programs, and an additional 35% indicated they encountered some difficulty. This aligns with the finding that only 44% of participants felt treatment programs were easily accessed by those in need of them. Additionally, 78% of survey participants expressed that cost posed a significant barrier to treatment.

Discussion of Findings

Each of these studies individually contributes to the literature on substance use and the implementation of harm reduction in some way. Whether from the perspective of those with lived experience of substance use and its primary harms (Bardwell et al., 2021; Hendy et al., 2018; Kahn et al., 2020; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020), or those who experience secondary harms, including friends and family in support roles (Kesich et al., 2023; F. Khan et al., 2022; Slocum et al., 2023), and professional care providers (Kapadia et al., 2021).

Like F. Khan et al. (2022), Slocum et al. (2023) highlighted the experiences of friends and family members in relation to secondary substance-related harms. Their findings corroborated the negative effects of stigma and discrimination on those supporting individuals who use substances. Slocum et al. (2023) also indicated that participants had struggled to access support services for themselves and the individuals they were supporting. These findings underscore a need for support groups not only for individuals experiencing primary substance-related harms, but also those in supporting roles who experience secondary harms. Like the findings presented by Kapadia et al. (2021) and McNeil et al. (2016), Slocum et al. (2023) call attention to the importance of care providers who understand the complex and intersectional experiences of individuals experiencing substance-related harm. Additionally, promoting agency

regarding treatment and increasing the accessibility of harm reduction and treatment services is important in pursuing care and understanding individuals' motivations for change. As Hendy et al. (2018) found, numerous internal and external factors can impact an individual's substance use and their motivations for change when it comes to seeking treatment and harm reduction services. For example, in Slocum et al.'s (2023) study, they discussed the role that loved ones can play in initially motivating individuals to change and within the treatment process. Their work highlighted why a focus on the underlying reasons for substance use is crucial to creating safety and effective treatment approaches (Hendy et al., 2018). They indicated that life stressors and self-esteem play a significant role in substance use among American adults. The concept of utilizing substances as a means of coping—albeit maladaptively—is not a new concept, however, it is one that continues to receive little attention in relation to the integration and implementation of harm reduction for substance use. By further exploring maladaptive coping techniques and understanding the underlying motivations for substance use, a better understanding of motivations for change can be developed alongside more effective implementation of interventions to prevent and reduce harm. Additionally, Madah-Amiri et al. (2019) and Slocum et al. (2023) highlighted positive impacts implementing harm reduction can have on individuals through fostering support and safety, and on the wider community by reducing costs and burdens on health care services. These findings highlight various steps taken toward greater safety for individuals experiencing substance-related harms, aligning with the foundations of harm reduction theory—one of the guiding frameworks for this study (Logan & Marlatt, 2010; MacCoun, 1998). Similarly, the studies reviewed, and especially the work by Hendy et al. (2018), speak to the need to look at the cognitive, behavioral, and affective components of human experience, as well as the environments in which individuals operate to deepen

understandings of substance use and related harm. This draws on the primary aspects of cognitive behavioral theory, which acts as the other theoretical framework guiding this study (Hupp et al., 2008; Nurius & Macy, 2008; Regehr, 2001).

Not only are these various perspectives explored, the studies reviewed also provide crucial information regarding further implementation and advancement of harm reduction intervention and treatment services. This includes recommendations and strategies that can be used by individuals using substances, friends and family, and by professional and peer care providers. For example, Slocum et al.'s (2023) study highlighted that there are many paths to intervention and treatment. They found that many factors impacted the strategies utilized by individuals using substances and the friends and family supporting them, including the presence of SUD/OUD, individuals' readiness for change, specific facilitators and barriers encountered, and the modality that was most effective for the individual. Additionally, they found the provision of harm reduction education and tools such as naloxone effective and felt it warranted further research (Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023). Similarly, findings indicated that dedicated spaces for individuals using substances, and for those experiencing substance-related harms, whether primary or secondary, were important and warranted further investigation (Bardwell et al., 2021; F. Khan et al., 2022; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023). Other literature also reflected many of the findings from the core studies, indicating patterns and corroborating the findings of the core studies reviewed (HealthLink BC, 2023; Krug et al., 2015; Levengood et al., 2021; Logan & Marlatt, 2010; McLellan, 2017; NIDA, 2011; O'Connor, 2019; Sterling et al., 2022; SAMHSA, 2023c; Velez et al., 2016; WHO, 2023).

Taken together, the studies seem to speak to an overarching idea of shifting perspectives related to the integration of harm reduction strategies for substance use (Bardwell et al., 2021; Hendy et al., 2018; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023). Each study makes recommendations and suggestions for future research to continue focusing on building knowledge and understanding of harm reduction in order to create impactful change. Based on the cumulative findings, not only is it important to focus this building of knowledge and understanding around harm reduction on individuals who use substances, but also on individuals in supporting roles, including friends, family, community members, and professional care providers. By fostering change and creating communities of support, a more holistic approach to care and harm reduction implementation can arise. This could result in many positive impacts for individuals experiencing any substance-related harm.

Ethical Considerations

There are many ethical considerations to be made regarding the studies reviewed. Each of them approached their research differently, leading to different factors to consider as they relate to ethics. Additionally, research ethics and ethics guiding clinical practice are important to consider in relation to each article and within this study itself.

Researcher biases, beliefs, and attitudes can affect research, influencing their topics and questions, methods and approaches, and interpretation of findings (Creswell & Creswell, 2018; Creswell & Poth, 2018; Roulston & Shelton, 2015). This can be both beneficial and detrimental, depending on the researchers' self-awareness and reflexivity. While research inherently includes bias, which is not always controllable, holding awareness of various sources of bias and their potential effects on research is important. In the study by Kapadia et al. (2021), the researchers

reported their own biases, highlighting their beliefs supporting medication-assisted treatment and harm reduction services. Similarly, Kesich et al. (2023) provided a statement regarding their positionality and highlighting potential biases.

Considering funding in the ethical conduct of research is important (Khamis et al., 2018; Thelwall et al., 2023). Just as researchers can affect studies through their own biases, beliefs, and attitudes, sources of funding can also affect research methodologies and reports of findings. Many of the researchers reported receiving funding for their studies (Bardwell et al., 2021; Hendy et al., 2018; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; Shirley-Beavan et al., 2020; Slocum et al., 2023). This funding varied from academic and institutional research grants to funding provided by charities and international organizations. Some studies reported multiple sources of funding (Bardwell et al., 2021; Kapadia et al., 2021; F. Khan et al., 2022; Shirley-Beavan et al., 2020). Each of the research teams indicated that their funding bore no influence on their methodology or reporting of findings.

Some researchers specifically noted they carried out their studies in accordance with the *Declaration of Helsinki* (Madah-Amiri et al., 2019; Slocum et al., 2023; World Medical Association [WMA], 2013). The *Declaration of Helsinki* (WMA, 2013) provides ethical standards relating to medical research involving human participants. It outlines specific requirements for the treatment of human participants, upholding of human rights, and special consideration for potential risks involved. Additionally, it requires studies receive approval granted by a research ethics committee. The document also outlines specific requirements, such as those regarding privacy, confidentiality, informed consent, use of placebos, post-trial provisions, and the registration, publication, and dissemination of research.

Tri-Council Policy Statement

In research involving humans, it is crucial to ensure adherence to the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (TCPS 2; Canadian Institutes of Health Research [CIHR] et al., 2022). This requires approval by a Research Ethics Board (REB) or an Institutional Review Board (IRB), which function to protect human research participants and ensure researchers uphold the ethical standards required of them. These standards protect participants' rights, especially to privacy and respectful treatment, and are also concerned with participants' welfare and social justice. Similarly, Creswell and Creswell (2018) and Creswell and Poth (2018) highlight the importance of seeking approval from IRBs when conducting research. Each of the research teams indicated they received approval for their studies (Bardwell et al., 2021; Hendy et al., 2018; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023). A variety of institutions granted approval for the studies, some linked to universities, others linked to medical institutions. Some of the studies received ethics approval from multiple IRBs/REBs (Bardwell et al., 2021; Kahn et al., 2020).

Ethical Code and Practice Standards

While the *TCPS 2* (CIHR et al., 2022) and the *Declaration of Helsinki* (WMA, 2013) provide specific guidelines regarding the treatment of human participants. The ethical code and practice standards for psychologists reinforce and add to these guidelines (American Psychological Association [APA], 2017; Canadian Psychological Association [CPA], 2017; College of Alberta Psychologists [CAP], 2023). Since most of the studies took place in the United States (Hendy et al., 2018; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; Slocum et al., 2023) and Canada (Bardwell et al., 2021; F. Khan et al., 2022; McNeil et al., 2016), the ethical codes and practice standards discussed align with those regions. While any

ethical codes and standards of practice would likely be similar, there may be notable differences in documents governing practice in Spain and Norway, which are not discussed here.

Informed consent and freedom of consent are crucial components of ethical practice and research (APA, 2017; CIHR et al., 2022; CPA, 2017; CAP, 2023; WMA, 2013). While some authors only mentioned obtaining consent from participants (McNeil et al., 2016; Slocum et al., 2023), others specified they obtained written consent (Bardwell et al., 2021; Shirley-Beavan et al., 2020) or verbal (Kahn et al., 2020; Kapadia et al., 2021). Kahn et al. (2020) explained their choice to use verbal informed consent procedures as a way of further protecting participants' privacy. They also noted that if potential participants were unable to provide informed consent due to language barriers or other capacity limitations, then they could not participate in the study. Similarly, Shirley-Beavan et al. (2020) reported that alongside their informed consent forms, confidentiality agreements were also signed by all facilitators and participants to further protect participants' privacy and confidentiality. In contrast, Madah-Amiri et al. (2019) indicated that the ambulance staff informed participants of the study; however, they did not detail this procedure, so it is difficult to determine if they obtained appropriate informed consent. F. Khan et al. (2022) also did not provide details but did report that they carried out consent procedures for their study, although they did not mention informed consent specifically. Since Hendy et al. (2018) conducted their study through SurveyMonkey (https://www.surveymonkey.com), informed consent may not be required due to the anonymity of participants and their active choice to participate (National Research Council, 2010). Though they did not mention doing so (Hendy et al., 2018), SurveyMonkey's software (https://www.surveymonkey.com) does allow the inclusion of a consent statement or form.

Many of the researchers showed regard for participants' rights to privacy and

confidentiality (Bardwell et al., 2021; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023). Some explicitly stated that information was either not collected or not included in their published report to maintain privacy and confidentiality and protect participants' information (Kahn et al., 2020; Kapadia et al., 2021; F. Khan et al., 2022; Shirley-Beavan et al., 2020). Others indicated that they removed all identifying information from their collected data (Bardwell et al., 2021; Kesich et al., 2023; McNeil et al., 2016; Slocum et al., 2023). These actions uphold the standards of privacy and confidentiality under *Principle I: Respect for the Dignity of Persons and Peoples* of the Canadian ethical code (CPA, 2017) and the fourth ethical standard of the American code (APA, 2017). It also reflects an adherence to the practice standards in Alberta, Canada (CAP, 2023). Similarly, researchers should indicate whether they appropriately stored collected data securely to protect participants' information in accordance with the rights to privacy and confidentiality (APA, 2017; CIHR et al., 2022; CPA, 2017; CAP, 2023; Creswell & Creswell, 2018; Creswell & Poth, 2018). Kesich et al. (2023) were the only researchers to explicitly state that they stored the study materials and data securely.

As mentioned previously, researchers should engage in self-reflection and acknowledge their biases while conducting research. This practice aligns with standards under *Principle II: Responsible Caring* (CPA, 2017), and *Principle D: Justice* (APA, 2017). This can help researchers minimize risks and maximize benefits for participants (CPA, 2017). Being aware of potential harms and ensuring participants fully understand any risks is an important part of conducting ethical research (CIHR et al., 2022). The American code also reflects these standards as standards of beneficence and nonmaleficence (APA, 2017). By pairing informed consent procedures with an active acknowledgement of any risks and benefits to participants, researchers

show greater respect for participants' autonomy and agency, simultaneously upholding ethical *Principles I* and *II* (CPA, 2017).

Each of the researchers also upheld the standards within *Principle III: Integrity in Relationships* by ensuring they informed participants regarding any expectations of them as participants (Bardwell et al., 2021; CPA, 2017; Hendy et al., 2018; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023). They avoided utilizing deception and fully disclosed the expectations of participants in conducting their studies. Additionally, the researchers showed consideration for any potential conflicts of interest, reporting funding sources, researcher positionality, and any affiliations that could pose a conflict. Through this information, the researchers indicated potential biases and showed an awareness of the subjectivities of their studies.

Since the studies focused on topics that are highly stigmatized, and often involved working with individuals from vulnerable and/or marginalized populations it was crucial that the researchers conduct themselves and their studies in respectful, nonjudgmental ways. Not only is this a key standard within *Principle I* (CPA, 2017), the other guiding documents emphasize it as well (APA, 2017; CIHR et al., 2022; CAP, 2023; WMA, 2013). The methods of each study are important to consider in terms of their appropriateness for working with stigmatized, marginalized, and vulnerable populations (Sinacore et al., 2019). For example, by allowing participants to choose the time and location of their interview, Kahn et al. (2020) emphasized participants' agency and prioritized accessibility for them. Kahn et al. (2020) also used a recruiting method meant to access participants who were part of stigmatized and hidden populations. The ways the researchers presented themselves and the language they used

contributed to creating safety and accessibility for these populations. Kapadia et al. (2021) showed care in presenting their findings by having some participants review it and then incorporating any feedback into the finalized version of findings. F. Khan et al. (2022) conducted a similar review, having a co-author and a person with lived experience related to their study review their findings. Similarly, showing respect and gratitude for the participants' sharing of lived experiences through honoraria can be important, especially in legitimizing their knowledge and its worth (McLean, 2021). Many of the researchers provided their participants with honoraria (Bardwell et al., 2021; Kahn et al., 2020; Kesich et al., 2023; F. Khan et al., 2022; McNeil et al., 2016; Slocum et al., 2023). They provided various formats of honoraria, including as cash/electronic money, gift cards, and pre-paid credit cards, and ranged from $20 to $50 (currency dependent on location). There are specific ethical considerations to make around the provision of honoraria, including what constitutes fair compensation and an appropriate type of compensation (CIHR et al., 2022; Cheff, 2018; Collins et al., 2017). Working with a vulnerable population, especially where substance use is involved, it is important to balance participants' agency and respect for them with the duty to minimize harm to participants (Collins et al., 2017). Finally, ensuring that participants had access to support services throughout the course of their participation in the studies was important in addressing barriers and promoting participants' well-being (CPA, 2017; CAP, 2023; Fathallah, 2022; Williamson & Burns, 2014). Shirley-Beavan et al. (2020) were the only researchers to indicate that their participants had access to support services prior to, during, and after the focus groups and interviews. Since the topics that were being studied could have been triggering or even traumatic for participants, it is crucial that researchers ensure participants have access to supports, and each of the researchers should have done so to minimize and offset/correct harm (CPA, 2017).

Chapter 4: Application to Clinical Practice

Harm reduction is important to understand as a mental health professional since it has the ability to improve mental health care and interventions for individuals who use substances or engage in other behaviors associated with risks (Cramer, 2024; Logan & Marlatt, 2010; SAMHSA, 2023a). Not only can mental health practitioners improve their practices by exploring and implementing harm reduction approaches, but as shown in Chapter Three, clients can benefit greatly and strengthening of the therapeutic relationship can occur (Bardwell et al., 2021; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023). Harm reduction interventions have shown effective application with individuals who have experienced primary and/or secondary substance-related harms in various settings. Additionally, exploring harm reduction approaches can add to the development of knowledge around factors contributing to substance use, individuals' reasons for substance use, and motivations for change (Hendy et al., 2018; Slocum et al., 2023). These aspects are important to understand when working with individuals experiencing substance-related harms, and are key to providing the support the individual client needs. As indicated by the theoretical frameworks guiding this study, developing an integrated understanding of individuals' experiences grounded in their unique contexts is key to taking steps toward reduced risk and enhanced safety (Hupp et al., 2008; Logan & Marlatt, 2010; MacCoun, 1998; Nurius & Macy, 2008; Regehr, 2001). By implementing harm reduction approaches, mental health professionals can also contribute to destigmatization and the dismantling of systems of oppression present in society (Bardwell et al., 2021; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; McNeil et al., 2016; National Equity Project, n.d.; Shirley-Beavan et al., 2020; Slocum et al., 2023;

Williams et al., 2023).

Although therapists often engage in harm reduction, especially when working with clients who engage in self-injury or experience suicidal ideation, and even with clients experiencing addiction, it remains something that is not widely established or discussed (Cramer, 2024). Harm reduction is not only important in the context of substance use and the ongoing opioid epidemic, but also within other contexts that have arisen more recently. Throughout the COVID–19 pandemic for example, many people experienced challenges related to mental health, and continue to face these challenges even after the pandemic has ended (Cullen et al., 2020; Kathirvel, 2020). Additionally, with the recent surge in psychedelic-assisted psychotherapy, harm reduction approaches have become even more important for therapists to hold knowledge around and incorporate into their practice (Pilecki et al., 2021). By adopting a perspective aligned with harm reduction theory (Logan & Marlatt, 2010; MacCoun, 1998) and cognitive behavioral theory (Hupp et al., 2008; Nurius & Macy, 2008; Regehr, 2001) therapists can focus on supporting clients in modifying their internal and external worlds and strive toward greater safety and adaptive coping through manageable steps.

Harm reduction approaches can be applied to, and adapted for, any number of presenting issues and with clients of varying backgrounds (Cramer, 2024; Logan & Marlatt, 2010; SAMHSA, 2023a). Not only can counselors and mental health professionals working in private practice utilize harm reduction approaches, professionals working in community organizations and non-profits, or in hospitals or other clinical settings can also implement these approaches.

Many existing therapeutic approaches integrate well with a harm reduction lens (Logan & Marlatt, 2010; SAMHSA, 2023a). Directive, nonjudgmental approaches, such as motivational interviewing or cognitive-behavioral approaches, can be highly effective when used within a

harm reduction framework. These kinds of approaches allow clients to explore their motivation and reasons for change, help to set appropriate and reasonable goals, develop skills, and identify coping behaviors within a supportive and nonjudgmental therapeutic environment. When used in tandem with harm reduction, other counseling approaches, including trauma-informed approaches, acceptance and mindfulness-based approaches, family and group therapy models, and psychoeducational approaches can be highly effective (SAMHSA, 2023a). Logan and Marlatt (2010) also noted the distinct difference in definitions of therapeutic progress when a harm reduction approach is taken rather than an abstinence-based one. Within a harm reduction framework, therapeutic progress includes setbacks such as behavior recurrence and other behaviors that would otherwise be considered a failure by a traditional definition. Adopting this more flexible and empathetic understanding of progress can help reduce stigma and negative feelings in clients as they engage in their therapeutic journey. It also provides a more realistic perspective on healing, where challenges and setbacks are to be expected and treated with grace and understanding, compared to many abstinence-based approaches which essentially condemn any recurrence and create a strict expectation for clients and their success (Logan & Marlatt, 2010; see also Connors et al., 2013).

Gorman et al. (2021) highlighted how integrating harm reduction into practice also affects how therapists interact with clients. They found that clinicians utilizing harm reduction approaches showed more warmth and flexibility, and were more honest and respectful in relationship with their clients. Logan and Marlatt (2010) similarly found that harm reduction approaches in therapy prioritize clients' wants, needs, and goals. This ensures that therapists work to meet clients where they are at, and respect their decisions and autonomy. These findings were prevalent throughout the literature reviewed in Chapter Three as well (Bardwell et al.,

2021; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023). As therapeutic approaches evolve and new ones emerge, working through a harm reduction-informed lens will allow clinicians to provide a greater level of care that aligns with client needs and goals in ways that honor clients' experiences.

As a framework, harm reduction also upholds key standards within the *Canadian Code of Ethics for Psychologists* (CPA, 2017), *Ethical Principles of Psychologists and Code of Conduc*t (APA, 2017) and *Standards of Practice* (CAP, 2023) which guide professional practice in the counseling field. Maintaining dignity and respect for individuals, advocating for their rights, maximizing benefits and minimizing harms, and promoting the benefit of society are all key standards of ethical practice and are also tenets of harm reduction as a philosophy (CPA, 2017; Denis-Lalonde et al., 2019). Vearrier (2019) also stated, upon exploring the ethics of harm reduction, that it aligns closely with the principles of beneficence and nonmaleficence (APA, 2017), and works to promote and uphold individual autonomy and social justice. Therefore, by implementing harm reduction approaches into their clinical practice, mental health professionals can better adhere to the ethical standards of practice guiding the counseling field.

Implementing harm reduction within counseling practices can also lead to more holistic, wrap-around models of care, integrating clinical practice with community-based supports (SAMHSA, 2023a). Not only does this act to benefit the individual client, but it can also have positive impacts on the wider community by increasing levels of support and providing care for individuals who may be otherwise unable to access it. Additionally, allocation of funding within the realm of substance use and harm reduction depends on need (Health Canada, 2022). Therefore, if services go unused due to lack of knowledge around them or inaccessibility, then

funding is less likely to be provided for them (McKay, 2024). By implementing harm reduction into counseling practice and advocating for it within the broader community, mental health professionals can further uphold their duty to beneficial activities within society (CPA, 2017). Additionally, by integrating harm reduction approaches, community members can become more involved and, as noted by Kesich et al. (2023), this can promote a sense of social responsibility and empathy for each other.

Some of the more common theoretical models used to conceptualize addiction and understandings of substance use are the moral model and the medical model of addiction (Alderson, 2020; Cramer, 2024; Ruvins et al., 2024). The moral model conceptualizes addiction as a moral failing of the individual, where addiction is a choice influenced by a lack of willpower. In comparison, the medical model of addiction conceptualizes addiction as an often fatal disease outside the control of the individual. For mental health professionals who ascribe to these models, it may be more difficult to implement harm reduction approaches. The view of addiction and substance use as a moral failing or chronic disease can lead to counselor expectations that clients want to become completely sober, and that sobriety is the only cure (Alderson, 2020; Cramer, 2024). Another way the medical model of addiction may influence how counselors conceptualize addiction and substance use is as a progressive disease for which treatment or recovery is not realistically attainable. Each of these models can lead to further stigmatization of individuals who use substances or experience substance-related harms (Alderson, 2020; Cramer, 2024). Instead, models such as the biopsychosocial model (Engel, 1977), self-medication theory (Khantzian 1997, 2017; Suh et al., 2008), self-determination theory (Richards et al., 2021; Ryan & Deci, 2017), and protection-motivation theory (Boer & Seydel, 1996; Norman, Boer, & Seydel, 2005; Norman, Boer, Seydel, & Mullan, 2015) could be

used by counselors to conceptualize addiction and substance use in ways that align more closely with the implementation of harm reduction. Alongside these models, both harm reduction theory and cognitive behavior theory can also be effective means of conceptualizing addiction and substance use within therapeutic settings as shown throughout this study (Hupp et al., 2008; Logan & Marlatt, 2010; MacCoun, 1998; Nurius & Macy, 2008; Regehr, 2001).

Proposed in the 1970s, the biopsychosocial model views addiction as a complex interaction of multiple factors (Cramer, 2024; see also Kelly, 2015). This model posits that consideration of the specific risk and protective factors experienced by individuals within the context of substance use and addiction is crucial. Therefore, substance use and addiction is viewed as treatable, with numerous pathways to recovery that do not require abstinence (Cramer, 2024; see also Kelly, 2015; Marlatt & Witkiewitz, 2010). In this model, utilizing harm reduction approaches and working to provide individuals with effective coping mechanisms and support are key aspects of treatment.

The self-medication theory is a theory of addiction that arose in the 1980s (Khantzian, 2017) and derived from clinical observations and psychoanalytic perspectives (Khantzian, 1997; Suh et al., 2008). This theory explored how and why people may use and become addicted to various substances. According to the self-medication hypothesis, addictive disorders are not about pleasure-seeking—rather, they are about coping with suffering, with the theory highlighting that substances are often used to relieve painful and distressing feelings and thoughts (Khantzian, 1997, 2017). Additionally, this theory posits that certain approaches to attempting to support individuals experiencing substance addiction actually increase distressing feelings such as shame and guilt, thereby rendering them ineffective. The self-medication hypothesis instead inquires as to the purpose served by the substance for the individual. This

approach encourages exploration and understanding without the burden of stigma. Although it is not a theory based on biological or social factors, the self-medication hypothesis does not contest such theories, instead complementing the various perspectives.

Finding its roots in humanistic psychology, self-determination theory holds many similarities to harm reduction approaches (Richards et al., 2021). This theory of motivation includes assumptions that there are inherent tendencies toward growth, as well as three basic psychological needs: competence, autonomy, and relatedness (Richards et al., 2021; Ryan & Deci, 2017). From this perspective, these basic psychological needs constitute requirements for healthy development and wellness. When individuals attain these basic needs, Ryan and Deci (2017) posited that intrinsic motivation becomes enhanced alongside internalization and integration, and that wellness and vitality increase both individually and socially. Self-determination theory also discusses basic need frustration. This occurs when individuals do not have these basic psychological needs met, and developmental harms can arise as a result. Ryan and Deci (2017) discussed that need frustration impacts individuals cognitively, affectively, and can impact motivation and wellbeing negatively.

Utilization of protection-motivation theory as a framework focuses on influencing health-related behaviors (Boer & Seydel, 1996). The primary components to the theory—including threat appraisal (the perceived severity of the threat, vulnerability to it, and fear), and coping appraisal (the available coping responses, response efficacy, and self-efficacy)—alongside perceived rewards and response costs act to influence the protection motivation, or whether an individual engages in a recommended behavior (Boer & Seydel, 1996; Norman et al., 2005). It essentially posits that when a person experiences increased levels of fear due to a perceived vulnerability to a threat, the individual will become motivated to engage in protective behaviors

(Norman et al., 2005). Uses of this framework primarily occur in the promotion of health behaviors, and include applications—albeit minimally—in the reduction of alcohol use, however the studies that have focused on this found positive results (Boer & Seydel, 1996; Norman et al., 2015). Protection-motivation theory also includes conceptualizations of maladaptive coping. Maladaptive coping responses can arise when an individual does not perceive a threat as being serious or as not being vulnerable to it (Norman et al., 2005). Additionally, reinforcement of maladaptive coping responses can occur through intrinsic or extrinsic rewards that the individual perceives themselves as gaining due to the behavior. According to Boer and Seydel (1996) maladaptive coping responses put individuals at risk, stating that such responses may lead to negative consequences, directly or indirectly, by preventing an individual from engaging in behaviors that would help prevent or mitigate the risk. However, considerations for the rewards obtained from maladaptive coping responses remain unaddressed, leaving a gap in understanding such behaviors (Norman et al., 2015).

By reflecting on their own clinical approaches and conceptualizations of substance use and addiction, counselors can better support their clients through experiences of substance-related harm. Through the integration of different theoretical models, harm reduction approaches, and client-centered practice, counselors can benefit their clients by creating an empathetic space where they prioritize clients' wants, needs, and goals without stigma or judgment.

Chapter 5: Recommendations and Conclusion

This chapter provides a review of the gaps in the literature that were addressed and the study conclusions. Also included in this chapter is an outline of recommendations for future research and practice, alongside a brief overview of some of the remaining gaps in the literature, and a reflection on learnings from this study.

Gaps Addressed by the Literature Reviewed

All of the research teams identified various gaps in the literature that their studies aimed to address and fill. This included policy, program, and education gaps that exist within various service provision settings, specifically in relation to individuals with highly intersectional experiences and how such gaps pose additional barriers to care (Bardwell et al., 2021; Hendy et al., 2018; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023). Some of the studies also addressed and raised awareness of gaps related to the social-emotional experiences of individuals engaged in harm reduction, primarily from the perspective of individuals who use substances (Bardwell et al., 2021; Kahn et al., 2020; Kesich et al., 2023; McNeil et al., 2016; Shirley-Beavan et al., 2020), but also from the perspectives of those supporting individuals using substances, whether in a formal or informal role (Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; Slocum et al., 2023). Also addressed were some of the gaps around understanding the factors contributing to substance use as well as overdose symptom severity and treatment needs (Hendy et al., 2018; Madah-Amiri et al., 2019; Slocum et al., 2023). Gaps around the experiences of navigating treatment and perspectives on available treatment options were explored within various settings and from the perspectives of individuals engaged in substance use as well as professional and peer care providers (Bardwell et al., 2021;

Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023).

Study Conclusions and Take-Home Message

The findings of this study indicate that implementing harm reduction can have enormous impacts for individuals who have experienced substance-related harm (Bardwell et al., 2021; Hendy et al., 2018; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023). Not only can implementing harm reduction approaches lead to increased safety, positive outcomes, and destigmatization for individuals who use substances, it can also have positive impacts on professional and peer care providers. Additionally, due to the more relational nature of harm reduction strategies, consideration for how the unique contexts of individuals' lives and their intersectional identities shape individuals' well-being is important (Smye et al., 2011. Through the implementation of harm reduction, development of a more holistic, person-centered, empathetic, and social justice-oriented system of care for individuals who have experienced substance-related harm can occur (Bardwell et al., 2021; Hendy et al., 2018; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023; see also Cramer, 2024; Keller, 2023; Logan & Marlatt, 2010; Smye et al., 2011; SAMHSA, 2023a).

Recommendations for Future Research and Practice

Numerous gaps remain to be addressed in this area of research and practice. Overall, there is a distinct lack of research addressing topics related to the implementation of harm reduction. This is especially true in relation to substance-related harms experienced by individuals who do not use substances, as well as in counseling settings. Not only research, but

also clinical practice, can benefit from addressing the remaining gaps, resulting in advancement. The researchers of the core articles reviewed also indicated areas where further research would be beneficial. These suggestions focused on either further developing their studies or addressing additional gaps in the literature. Recommendations also highlighted a need for further research focused on the experiences of other structurally vulnerable and minoritized populations, including incarcerated individuals, gender diverse individuals and Black, Indigenous, and other persons of color (Bardwell et al., 2021; Hendy et al., 2018; Kesich et al., 2023; Madah-Amiri et al., 2019; McNeil et al., 2016; Shirley-Beavan et al., 2020). Several researchers also indicated that their findings warranted further research into specific harm reduction interventions and substance use practices (Bardwell et al., 2021; Hendy et al., 2018; Kahn et al., 2020; Kapadia et al., 2021; Kesich et al., 2023; F. Khan et al., 2022; McNeil et al., 2016; Shirley-Beavan et al., 2020; Slocum et al., 2023). Future research should also examine the role played by familial support and the effectiveness of various intervention approaches in mitigating substance-related harm (Slocum et al., 2023). Further, gaps around the impact of increased support and destigmatization for care providers require addressing (Kapadia et al., 2021; Slocum et al., 2023). Longitudinal studies could provide a means of better understanding the impacts of various factors or interventions over time (Hendy et al., 2018; Kahn et al., 2020; Kapadia et al., 2021). Additionally, causal research could be highly beneficial to further developing our understanding of various factors related to substance use, substance-related harm, and treatment approaches (Hendy et al., 2018; Madah-Amiri et al., 2019).

How the Current Study Might be Improved

The current study had a limited scope methodologically, requiring a brief review of the literature, and did not involve carrying out a research study. Therefore, improvements to this

study in further research should involve conducting it on a larger scale or carrying out a research study rather than a review. Due to the limited scope of the methodology and broad topic of research, the findings of this study may be impacted. Additionally, many of the studies reviewed lacked diversity within their participant samples, which could further influence the findings. Many of the studies also addressed a vast array of substance-related harms, so future research may benefit by focusing more specifically on each type of substance-related harm and who is affected. Similarly, the studies reviewed occurred in various settings, including urban, rural, clinical, and community-based settings in a few different countries. Benefits may arise by conducting further research on each of these different settings and exploring the specific experiences of substance-related harm and harm reduction implementation within them.

Potential Future Research Questions

Based on the current findings, as well as the existing gaps in the literature, there are a number of potential research questions that warrant exploration. A few examples include:

- "How might harm reduction approaches be applied effectively for individuals in professional or peer care provider roles who have experienced substance-related harm?"
- "How do experiences of intersectionality exacerbate substance-related harm?" and "How can harm reduction approaches be applied to better navigate the complex identities and experiences of individuals seeking support and treatment services for substance-related harm?"
- "What are the clients' experiences of working with a counseling therapist who uses harm reduction-based approaches compared to abstinence-based approaches?" and "How does the counseling therapists' approach influence client outcomes and retention?"

Author Reflection

In conducting this study, I have had opportunities to reflect on my prior knowledge and experiences, and have further developed my understanding of the topic. There were many times when I was not aware of the extent to which research was lacking, especially with my background working in the field of harm reduction and substance use. It was incredibly interesting to be able to compare and contrast my experiences and knowledge to the research findings of various studies. Additionally, to be able to contextualize my own identity and experiences as they relate to the research topic and existing literature was illuminating. Through this research and my previous knowledge and experiences, I have developed a greater appreciation for the complexity of intersectional identities and individual experience. This has contributed to fostering my personal and professional values of advocacy, nonjudgment, and inclusivity in both research and clinical practice.

This process has also provided me with insights that I believe will help guide my future research and practice. My passion for creating a holistic, harm reduction-based, trauma-informed, anti-oppressive, and social justice-oriented counseling practice has been further fueled by this research. I am excited to continue building my knowledge and advancing my practices as I move into a career in counseling. In addition to this, I am excited to further engage in research on this topic and in other areas relevant to my professional practice and personal interests.

Conclusion

This study aimed to explore how the implementation of harm reduction impacts individuals who have experienced substance-related harm. In resolving to answer the question "what effect do harm reduction interventions have on individuals who have experienced substance-related harms?" this study examined literature on the impacts of various harm reduction approaches applied across clinical and community settings for individuals who use

substances, friends and family members supporting an individual who uses substances, as well as professional care providers. The findings indicated that each of these groups experience substance-related harms and can benefit greatly from the implementation of harm reduction interventions within various settings. Within counseling settings specifically, utilizing alternative theories of addiction and substance use in clinical conceptualizations can provide a foundation for implementing harm reduction strategies in practice. By implementing harm reduction strategies, counselors can provide therapeutic support in a way that honors individuals' experiences, intersectional identities, and their holistic well-being. This study will hopefully provide a foundation for further research exploring the impacts of harm reduction across settings in supporting individuals who have experienced substance-related harm.

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Appendix A

Tables A1 and A2

Table A1

Search Engines, Databases, and their Descriptions

Search Engines & Databases	Description
Google Scholar	A search engine designed to specifically search for scholarly literature, including articles, books, theses, and more.
Institutional Library Databases	An electronic index of published resources which can be searched. Includes access to academic journals, newspapers, ebooks, and more.
EBSCOhost	A digital research platform, often accessed by institutional library databases, where multiple databases can be searched simultaneously.
APA PsycInfo	A digital database providing resources relating to psychological research.
SpringerLink	A digital database providing access to a variety of resources and topics.
National Library of Medicine/PubMed	A digital library search platform and database providing resources on various topics related to biomedical research.

Note. This table provides the names and brief descriptions of some of the search engines and databases used during the literature search process. This is not an exhaustive list, but instead is meant to provide examples of the databases accessed and search engines utilized.

Table A2

Examples of Key Search Terms and Phrases Used in the Literature Search Process

Search Terms	Search Phrases
Qualitative/Quantitative/Mixed Method Study	"Qualitative study exploring the impact of harm reduction interventions on substance use."
Harm reduction	"The effects of implementing harm reduction in substance use treatment and intervention"
People who use substances/family/care providers	"Qualitative study exploring the experiences of care providers using harm reduction approaches to substance use"
Substance-related harm	"Experiences of substance-related harm"

Note. This table provides examples of the key search terms and specific search phrases utilized in the literature search process. This is not an expansive list, but is meant to indicate the type of search terms and phrases used. Various combinations of the search terms helped in the creation of key search phrases.

Appendix B

List of Core Articles

Authors	Year	Title of Study	Methodological Approach
Bardwell, G., Austin, T., Maher, L., & Boyd, J.	2021	Hoots and harm reduction: A qualitative study identifying gaps in overdose prevention among women who smoke drugs	Qualitative
Hendy, H. M., Black, P., Can, S. H., Fleischut, A., & Aksen, D.	2018	Opioid abuse as maladaptive coping to life stressors in U.S. adults	Quantitative
Kahn, L. S., Wozniak, M., Vest, B. M., & Moore, C.	2020	"Narcan encounters:" Overdose and naloxone rescue experiences among people who use opioids	Qualitative
Kapadia, S. N., Griffin, J. L., Waldman, J., Ziebarth, N. R., Schackman, B. R., & Behrends, C. N.	2021	A harm reduction approach to treating opioid use disorder in an independent primary care practice: A qualitative study	Qualitative
Kesich, Z., Ibragimov, U., Komro, K., Lane, K., Livingston, M., Young, A., & Cooper, H. L. F.	2023	"I'm not going to lay back and watch somebody die": A qualitative study of how people who use drugs' naloxone experiences are shaped by rural risk environment and overdose education/naloxone distribution intervention	Qualitative
Khan, F., Lynn, M., Porter, K., Kongnetiman, L., & Haines-Saah, R.	2022	"There's no supports for people in addiction, but there's no supports for everyone else around them as well": A qualitative study with parents and other family members supporting youth and young adults	Qualitative
Madah-Amiri, D., Skulberg, A. K., Braarud, A-C., Dale, O., Heyerdahl, F., Lobmaier, P., & Clausen, T.	2019	Ambulance-attended opioid overdoses: An examination into overdose locations and the role of a safe injection facility	Quantitative

McNeil, R., Kerr, T., Pauly, B., Wood, E., & Small, W.	2016	Advancing patient-centered care for structurally vulnerable drug-using populations: A qualitative study of the perspectives of people who use drugs regarding the potential integration of harm reduction interventions into hospitals	Qualitative
Shirley-Beavan, S., Roig, A., Burke-Shyne, N., Daniels, C., & Csak, R.	2020	Women and barriers to harm reduction services: A literature review and initial findings from a qualitative study in Barcelona, Spain	Qualitative
Slocum, S., Paqueete, C. E., & Pollini, R. A.	2023	Drug treatment perspectives and experiences among family and friends of people who use illicit opioids: A mixed methods study	Mixed Methods