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Review Committee

Dr. Elizabeth Clark, Committee Chairperson, Psychology Faculty

Dr. Sandra Rasmussen, Committee Member, Psychology Faculty

Dr. Debra Wilson, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost Sue Subocz, Ph.D.

Walden University 2021

Abstract

An Interpretative Phenomenological Analysis of Singapore Ex-Addict Prisoners'

Motivation to Remain Drug Free After Release

by

Steven Tham Chee Kin

MSc, University of South Australia, 2003 BEng, National University of Singapore, 1991

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Psychology

Walden University

August 2021

Abstract

Reducing recidivism for drug offenders has been a challenge in Singapore since the late 1990s, when there was a spike in reentry into the system. In the year 2000, resources were invested in rehabilitation and reintegration programs to bring a reduction to the recidivism rate, but the interventions have been unsatisfactory in preventing relapse and reincarceration. This study's purpose was to describe and interpret the lived experience of male ex-addicts who were in prison in Singapore and how they made sense of their motivation to stay drug free after their incarceration. Motivation is an important predictor of reduction and abstinence outcomes for illicit substances, and self-determination theory provided a broad framework for the study. Eight participants were selected to share their lived experiences and meaning-making processes to remain motivated to stay off drugs. Interpretative phenomenological analysis was employed and interviews were conducted in which the participants answered semistructured questions. The findings revealed that (a) addicts' core issues hinder recovery, (b) negative peer influence exists among inmates, (c) addiction might not be absolutely a chronic disease, (d) triggering events may be a good catalyst for permanent change, (e) there was a preference for quality of life over addiction, (f) there was growth in motivation, and (g) spirituality and religion are essential for successful abstinence. The study supported the recommendation to implement further segregation within prison clusters and to implement counseling that includes the resolution of underlying core issues. This study may lead to positive social change by supporting efforts to reduce the recidivism rate, thereby making the society in Singapore safer, and increasing the local workforce.

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Dedication

It took me many years to complete my required modules before doing my dissertation. All this time, it has been the grace of my Lord Jesus Christ who had given me the strength to persevere in this journey. I would not have completed my doctorate program without the support and understanding of my lovely wife, Wannee, and three children, Ian, Elliot, and Jonathan. They accommodated my schedules and allowed my assignments to take priority over theirs. I dedicate this doctoral study to my God and my family. Last but not least, this dissertation is dedicated to all the ex-drug addicts who are constantly battling with addiction.

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Chapter 1: Introduction to the Study

Introduction

The prison population in Singapore was about 12,800 in 2018, which was relatively high at a rate of incarceration of 221 per 100,000 persons (Chin & Iyer, 2018; Singapore Prison Service, 2019). The statistics for this prison population show that a large proportion of inmates had histories of drug misuse (Lin et al., 2018). Many attempts have been made by the local government of Singapore to deter individuals from the use of illicit substances, and Singapore is known for its uncompromising stance against drug use and trafficking. In 1993, William Gibson, a novelist, described the nation as "Disney with the death penalty" (Chan, 2016, p. 179). Singapore has adopted a zero-tolerance policy against drugs (Central Narcotics Bureau, 2018), and those who are involved with drug-related activities, such as consumption, possession, and trafficking, are judged with long custodial sentences, including strokes of the cane and the death penalty as a deterrent in keeping Singapore drug free. Preventing relapse and reoffending by ex-prisoners has become a major concern of the contemporary criminal justice system, and intensive efforts of preventive drug education have been organized for the people in Singapore (Ganapathy, 2018).

Cannabis, opiates, and amphetamine-type stimulants are the three most sought-after illicit substances worldwide (Feng et al., 2016), and Singapore is not an exception (Lunze, et al., 2018). For those who are caught because of illicit substance consumption, comprehensive rehabilitation and reintegration programs are provided by the government. When ex-offenders are rehabilitated, they can contribute to society economically and help the nation to remain a safe and secure place in which to

live and conduct business (Chan & Boer, 2016a). Individuals who are in stable recovery also tend to give back to the community by volunteering with community groups (Belenko, 2018).

Singapore is ranked as the world's second safest city after Tokyo (The Economist Intelligence Unit, 2017), and the government is determined to keep the country safe from drug-related criminal activities (Myers et al., 2016). Besides reducing the crime rate, another way to achieve the government's goal is to reduce the recidivism rate. Recidivism refers to relapse into criminal activity after an individual has been incarcerated for a previous crime (Castro, 2018). Singapore measures recidivism by the reentry of local inmates into the system for a conviction of crime within 2 years of their release (Singapore Prison Service, 2017a). However, the efforts and investments made to lower the recidivism rates have not brought satisfactory outcomes (Chan & Boer, 2016a), even though a lot of public funds have been invested into rehabilitation programs in Singapore. Financial statistics from the United States have indicated that about US\$500 billion (estimated 2.9% of 2016 GDP) is spent on funding the criminal justice system and addressing the cost imposed by crime (Kushner & Philipson, 2018). The government of Singapore has been steadfast in seeking ways and policies to decrease the recidivism rate further, although it was lowered from 44.4% in 1988 to about 23.7% in 2016 (Chan & Boer, 2016a; Singapore Prison Service, 2019). Though the rate of recidivism has decreased over the years, the aim is to achieve an even better rate to generate greater safety and stronger social benefits. Factors identified by researchers to date as effective for the rehabilitation of drug offenders are reflected in similar programs and interventions put in place by the government of Singapore. My study of the influence of motivation on drug addicts to

stay drug free after incarceration is important for understanding new ways of reducing the rate of recidivism through motivation, which can inform existing intervention programs. In this study, I focused on individuals who were incarcerated for illegal drug activities, who were addicted to illicit substances, and who had remained clean after their release despite the numerous links between incarceration, social stigma, and identity.

In this chapter, I provide a background description of the need to conduct a study on ex-drug addicts and ex-offenders in Singapore. This section is followed by sections on identifying the problem statement, defining the purpose of the study and the phenomenon of interest, and constructing research questions that complement the theoretical framework. A section on self-determination theory (SDT) as the theoretical framework for the study is presented, along with a section regarding the nature of the study, where the rationale for choosing the qualitative method is detailed. The rest of the sections in the chapter are comprised of the definitions of key concepts and the assumptions made that were critical to the meaning of the study, the scope and delimitations, limitations, and the significance of the study.

Background

Drug offenders in Singapore are sent to the Drug Rehabilitation Centre of the Singapore Prison Service or to long-term imprisonment. After incarceration, exoffenders encounter multiple and complex challenges such as unemployment, shame (Rosino & Hughey, 2018), stigmatization (Mitchell et al., 2017), marital instability (Sykes & Pettit, 2015), housing, homelessness (Tyler & Brockmann, 2017), limited financial resources, and lack of social support. Ex-offenders can be socially isolated, deprived of employment, and marginalized by family and friends, and they may

undergo internal conflicts between their prison and postprison identities (Ganapathy, 2018). To avoid reentry into the system requires enormous effort on the part of the exoffenders, especially with the challenges ahead of them upon release (Chan & Boer, 2016a). In the case of those convicted for drug consumption, the approach to resolving addiction is also a complex issue. Neuroscience has confirmed that addiction is a chronic brain disease with strong genetic, neurodevelopmental, and sociocultural components (Volkow & Morales, 2015). Drug addiction is a chronic relapsing disorder that could also lead to increased mortality (Herdener et al., 2017).

In the United States, the relapse rate for those who have been incarcerated is 64% for a 24-week treatment of therapy and community treatment programs as compared to 43% for those who undergo extended-release naltrexone (Lee et al., 2016). Given this disappointing result and the Singapore government's prohibition of methadone or naltrexone maintenance treatment (George et al., 2018), it is essential to understand how ex-addicts can stay away from drugs and reintegrate into society. Thompson (2018) postulated that there is a lack of an agreed-upon framework to guide research on drug addiction, as existing addiction research is a sprawling investigation.

In this study, I sought a deep understanding of how motivation is part of male prisoners' experiences in staying clean after their release from prison. The high recidivism rates in so many countries suggest that drug addicts who were caught by the law are willing to risk reimprisonment. Baumeister and Nadal (2017) wondered about the rationale for consuming drugs: "Explaining what motivates people to pursue addiction at such cost to life's presumably most important concerns is a profound

challenge to motivation theory and the easy explanation that 'They cannot stop themselves' raises more questions than it answers' (p. 179).

Brunelle et al. (2015) and Prochaska and DiClemente (1986) postulated the importance of motivation within the individual to change. If they were correct, then those who relapse do not seem to have sufficient motivation or have no motivation to overcome the temptation. According to Baumeister and Nadal (2017), addicts who have no motivation to change have decided to live their lives dependent on drugs. However, for those who are ready to change, there is little knowledge of how motivation can empower addicts to stay away from drugs (Årstad et al., 2018). Limited knowledge is available to clinically treat those with a lack of motivation to alleviate motivation deficits (Silverman, 2015). The motivation to remain drug free over time for an ex-addict is also less understood (Korcha et al., 2016). The search for more information is crucial to deal with the issue of reentry for ex-drug addicts so that appropriate treatments may be proposed to abate the relapse and recidivism rates.

The aim of this study was to gain a deep understanding of the motivation for Singapore male ex-addict prisoners to remain drug free after release. The outcomes of this study can be used to design rehabilitation programs to help more ex-drug addicts develop a prosocial life and to bring a further reduction to the recidivism rates in Singapore. This may help to make Singapore a safer place for locals and foreign tourists to stay in and visit, respectively. With better programs, it is possible to achieve secondary desistance where the ex-offender transforms to a permanent state of change in offending behavior in the absence of the threat of punishment (Best et al., 2017).

Problem Statement

The recidivism rates in Singapore (Singapore Prison Service, 2019) for male and female prisoners released in 2014, 2015, and 2016 are 26.5%, 25.9%, and 23.7%, respectively, and policymakers consider them high. In Singapore, the government tries to rehabilitate as many drug offenders as possible while they are incarcerated as well as after their immediate release from prison (Singapore Prison Service, 2017b). Singapore has invested greatly in social services to rehabilitate drug offenders compared to other countries, yet the recidivism rates do not show that the efforts by the government have alleviated the problems.

Research has indicated that many countries experience a high proportion of drug-related prisoners rearrested within 3 years of release (Cepeda et al., 2015; Dolan et al., 2015; Link & Hamilton, 2017). According to the Bureau of Justice Statistics, the 5-year recidivism rate for both male and female prisoners released from the United States in 2005 was 43% (Markman et al., 2016). In the United Kingdom, the 1-year recidivism rate was 30% from January 2016 to March 2016, fluctuating between 29% to 32% every quarter for both male and female prisoners (Ministry of Justice, 2018). In Japan, Watson (2017) recorded a recidivism rate of 64.8% for both male and female prisoners in 2015, and the Ministry of Health, Labour, and Welfare warned that the drug problem could be much worse than what had been reported. Another Asian country, Hong Kong, reported a 2-year recidivism rate of 52% for males and 48% for females, with many of them being drug offenses (Chan et al., 2015). Nordic countries are known for their high-quality national crime statistics and low recidivism, and 2-year recidivism rates of 43% and 20% were reported for Sweden and Norway, respectively (Fazel & Wolf, 2015). With the high recidivism

rates around the world, it is apparent that prisons are not adequately equipped to rehabilitate and reintegrate ex-prisoners into society (Ganapathy, 2018).

Werb and his fellow researchers (2016) reported that little evidence was shown to indicate that compulsory drug treatment is an effective approach to eliminating drug consumption or reducing criminal recidivism. Rafful et al. (2018) mentioned that involuntary drug treatment is a predictor factor for a high relapse rate. How much do researchers and clinicians know about bringing relevant treatments to those who are ready to change to eradicate bad habits? The argument that incarcerated addicts retain the capacity to remain drug free has little evidence (Chang et al., 2017; Perry et al., 2016). Kelly and colleagues (2018b) asserted that the challenges that the researchers described were referred to as the "black box." According to Arstad et al. (2018), many studies on patient treatment-seeking processes have revealed limited understanding because of quantitative designs and methodological weaknesses. These studies focused on isolated factors instead of investigating the patients' perspectives and meaning of their life events. Årstad et al. commented that the studies failed to address the complexity in the help-seeking process. They added that a few studies had attempted to widen the scope of the inquiry. However, there is more to discover about the components, process, and dynamics of treatment for drug addiction (Kelly et al., 2018b). It is of paramount importance for researchers to understand and seek more effective approaches to treating drug addiction (Zhou et al., 2016) because quality treatment is crucial for the success of treatment (Kelly et al., 2018b).

Research on addiction recovery, addiction, and the neurobiology of drug use is well established (Best & Colman, 2019; Conrod, 2016; Koob & Volkow, 2016), yet Kelly et al. (2018b) stated that when investigations attempted to identify why and how

certain treatments were effective, the components, process, and dynamics of the treatment were described as difficult to conceptualize or unknown. Despite increasing global attention to identifying treatment effectiveness, little is known about the role of motivation in sustaining ex-drug addicts in Singapore who manage to stay clean. Studying the motivation to stay drug free in this population phenomenologically might shed some light on this issue.

Purpose of the Study

The purpose of this qualitative phenomenological study was to explore the lived experiences of male ex-addicts who were in prison in Singapore and how they made sense of their motivation to stay drug free after their incarceration. A phenomenological approach within the qualitative tradition was appropriate to draw out the true experience of the participants through an open-ended and reflexive form of inquiry (Chong, 2019). Specifically, I used an interpretative phenomenological design (Smith et al., 2009) to describe and interpret the experiences of male exaddicts who were in prison in Singapore and how they made sense of their motivation to stay drug free after their incarceration. I planned to explore the participants' lived experiences to learn how they overcame the struggles and temptations that they faced daily from consuming drugs while many of their fellow ex-prisoners failed to keep away from relapse and reoffending. Using interpretative phenomenological analysis (IPA; Smith et al., 2009), I could gain a deep understanding through the in-depth exploration and detailed narratives of male ex-addicts who were motivated to keep away from drugs to understand their feelings, thoughts, and meanings (Pietkiewicz & Smith, 2014).

Research Questions

The research questions that were aligned with the research problem and guided the research were the following:

- How do male ex-addicts who were in prison and now are drug free talk
 about their lived experiences while remaining motivated to stay off drugs?
- What are the meaning-making processes involved in the motivation to remain drug free for these ex-addicts?

Theoretical Framework

The theory for this research was self-determination theory (SDT). According to Ryan and Deci (2017), this theory explains the factors that support or distort the psychological needs of competence, relatedness, and autonomy, and it has expanded to biological research underpinned by the psychological processes of meeting needs. Deci et al. (1994) explained that SDT refers to people with the ability to transform external regulations into internal regulations, which can be facilitated or impeded by social factors. Ryan and Deci (2000) posited that SDT is conceptualized as a descriptive continuum with intrinsic motivation at one end, extrinsic motivation in the middle, and absence of motivation at the opposite end. Intrinsic and extrinsic are the two types of motivation that lead to an action based on various personal reasons, goals, or vicissitudes of life (Ryan & Deci, 2000). A more detailed explanation of the SDT is provided in Chapter 2.

My intention was to use SDT as a theoretical framework that aligned with a phenomenological approach. The decision was based on the need to gain a deep understanding of how the experiences were lived by the participants as they shared their narratives. I sought to use the SDT to guide analysis of data that reflected the

participants' perceptions regarding the pathway for changes to remain drug free. The theory would help in connecting lived experiences to the meaning of the decision-making process for participants. Pettersen and his colleagues (2018) reported that little knowledge exists to comprehend the nature of the processes and mechanisms that underlie the reasons that addicts reach a final decision to quit.

Nature of the Study

Working in the qualitative tradition, I used IPA (Pietkiewicz & Smith, 2014; Smith, 2011) within the phenomenological approach to gain a deep understanding of what motivated male ex-addicts who had been incarcerated to remain drug free. The IPA methodology was appropriate for investigating how the experiences of the exoffenders made sense to them. IPA was most effective when the participants were able to share their experience (Smith, 2011) of their journey of resisting drugs, how they felt about the journey, and what sense they could make of it. Every phenomenon or experience was unique to each individual, bringing personal meaning to the relationship between person and world (Larkin et al., 2019). Through the narrative in the interview, insights on how participants perceived and talked about objects, encounters, and events were captured as data. According to Pietkiewicz and Smith (2014), using IPA gives space for participants to express themselves, and at the same time, it helps a researcher to identify the essential components within the phenomenon that are distinguishable from others. This methodology required me to explore the process of change in each of the ex-addicts in detail and increased the understanding of the pathways and processes of becoming successful in staying drug free. Pietkiewicz and Smith warned that when a researcher has decided to choose IPA as a methodological framework, the application of the theory must be suitable for the

research setting (e.g., Western culture or Asian culture). For example, several research topics conducted in Asia that involved SDT as a theoretical framework also used IPA as the methodology in their research design (De Cruz & Duncombe, 2016; Wo et al., 2015).

Given the nature of the study, I recruited eight ex-drug offenders to form the sample population for this phenomenological study. These ex-offenders had had similar experiences; they had undergone rehabilitation programs from halfway houses or aftercare agencies in Singapore. After obtaining Institutional Review Board (IRB) approval, I recruited the participants from among those who had completed the rehabilitation program at the halfway houses or aftercare agencies after their release from prison.

Eight participants who were former residents of the halfway houses or exclients of the aftercare agencies were interviewed with open-ended questions as a form of data collection. I conducted semistructured face-to-face interviews or interviewed participants using Skype in the event that it was not possible to meet them in person due to the COVID-19 pandemic. According to Pastor et al. (2018), face-to-face interviews are appropriate to encourage participants to narrate their experiences, understandings, perceptions, and views. From the data collected during the interviews, I interpreted the meaning-making process of motivation using the steps outlined in IPA (Pietkiewicz & Smith, 2014).

Definitions

The following terms are used in this study:

Amotivation: Refers to the state of zero intention to act due to the nonexistence of motivation in the SDT model (Ryan & Deci, 2000).

Autonomy: The ability to be the source of one's own behavior; the ability to own an internal locus of control and believe that one's personal actions are self-directed (Ryan & Deci, 2002).

Competence: The feeling of being effective and confident in achieving and expressing one's capacity (Ryan & Deci, 2002).

Compulsivity: The predisposition of persistent and repeated unsuitable responses that are unreasonable (Koob & Volkow, 2016).

Conditioned reinforcement: The process whereby a previously neutral stimulus acts as a primary reinforcer and becomes a reinforcer subsequently (Koob & Volkow, 2016).

Drug addiction: A chronically relapsing disorder that is characterized by two observable behaviors: a compulsion to seek and take a drug with no control in limiting intake, and when there is no access to the drug, a display of negative emotional state (e.g., anxiety, guilt, irritability; Koob & Volkow, 2016).

Extrinsic motivation: Refers to the performance of activity due to the external rewards associated with that activity (Ryan & Deci, 2000).

Impulsivity: The failure to resist both internal and external stimuli that lead to unplanned and rapid reactions without any consideration for negative consequences to self or others (Koob & Volkow, 2016).

Incentive salience: The motivation for rewards cued by the mesocorticolimbic dopamine system due to the drive of the physiological state and previously learned associations about a reward (Koob & Volkow, 2016).

Internalization: The process of transforming attitudes, beliefs, or behavioral regulations into personal values, goals, or regulations (Deci & Ryan, 1985).

Intrinsic motivation: The state of doing an activity that an individual inherently enjoys and finds satisfying without any apparent reward (Ryan & Deci, 2000).

Relatedness: The need to belong, connect with, be integral to, and be accepted by the community (Ryan & Deci, 2002).

Reward: Something that increases the probability of a pleasurable response (Koob & Volkow, 2016).

Spirituality: An individual's awareness of a divine or higher power combined with a belief in and acceptance of unchangeable situations as well as open-mindedness and respect toward individuals and their environments (Hill & Pargament, 2008; Selvam, 2015).

Assumptions

Throughout the period of data collection, information was gathered from participants who had been free from drugs or had not relapsed for at least 24 months from the day when they were released from prison. The assumptions were that they had not used any illicit substances and that they had been sober for the minimum stipulated period. During this period, they should not have had a slip or relapse. It was also assumed that the following factors would not affect the outcome of the study: frequency of incarceration and degree of addiction of the participant, as well as the stage of recovery from substance addiction upon their discharge from the halfway house or aftercare agency.

The participants were assumed to have been keen to share their experiences and preconceptions regarding the phenomenon and to have answered the interview questions honestly. I believed that the participants who volunteered for the study

wished to contribute to the research to bring a better understanding so that improved interventions could be proposed to help those who struggle to stay clean from drugs in the future. I also assumed that the participants were capable of interpreting their experiences in ways that were understandable to them. In so doing, I assumed that they were able to relate a narrative of experiences that was understandable to me as the researcher (Rodham et al., 2015).

Although a professional transcriber was engaged to transcribe the audio interview into text, there were assumptions that minor errors and inaccuracies might be committed. Some of the participants may have been likely to be less educated, and English was not their first language; as such, participants might have used colloquialisms that are common in multiracial/multilingual Singapore, also known as *Singlish* (Tupas, 2018). According to McGrath and fellow researchers (2019), a transcriber should add in the pauses, giggles, and other cues that occur during an interview, which are likely to be overlooked by professional transcribers.

Another assumption involved me as a researcher. It was inevitable that I might not be able to follow the narratives of the participants' world totally and reflect and analyze them into accurate data (Smith & Osborn, 2008). I would need a sufficient understanding of cultural differences when the participants came from a different ethnic background to minimize research resistance due to personal and cultural biases. Without these assumptions, biases might have precluded me from reaching definite conclusions about recovering ex-drug offenders.

Scope and Delimitations

In this study, I sought to describe and interpret the experiences of male exaddicts who were incarcerated in Singapore and how they made sense of their motivation to stay drug free after their incarceration. The recidivism rates in Singapore remain in the unacceptable range, although the rates have declined over the years. Policymakers have put in place many efforts and resources to address the recidivism issue, but outcomes have been limited. Policies have been implemented to inject various forms of motivation in those who are released from prison, such as policies related to employment, housing, and social networking. Community agencies are also engaged as partners to help drug offenders to rehabilitate and reintegrate into society. Though these could be relevant external motivations to help ex-addicts to overcome their addiction problem, they do not seem to resolve the recidivism issue. External motivation yielded no evidence of positive effects of treatment for those who are pressured to complete treatment or are court-mandated to treatment (Ryan & Deci, 2017). My experience working with ex-addicts and ex-offenders has taught me that they do not want to remain addicts, and they wish to live a normal life. However, the programs available are not comprehensive and effective enough to haul them out of their compulsive behavior. Therefore, the salient aspects to explore in this study were specific lived experiences of events, emotions, and thoughts that were associated with participants overcoming the temptations to relapse into drug use.

Participants in the study were restricted to male ex-addicts who had been incarcerated and were no longer involved in criminalized activities. The reason for using a purposive sample of individuals was that these individuals would have developed an offender identity that remained in them even after they were released from the institution (Bachman et al., 2016; Ganapathy, 2018). In a prison environment, inmates develop an offender identity because they are deprived of liberty, restricted to few personal possessions, not given control, and deprived of

security and autonomy, and they encounter loss of relationships, loneliness, and boredom (Durjava et al., 2018). Frequently, inmates encounter hostility, suspicion, and unpredictability. During incarceration, individuals have many opportunities to network with other prisoners and learn many things and skills related to crime from them; this experience could be summed up as learning from the "university of crime" (Braga et al., 2018). The offender identity was crucial for this study, in that individuals bring along this identity into the community after their release, which is detrimental to their efforts to desist from reoffending (Tarpey & Friend, 2016).

A qualitative study has limited transferability. Transferability refers to the ability to generalize the outcome of a study to other similar settings or groups (Connelly, 2016). The outcomes of this research project, along with the small sample size, might not apply to ex-drug addicts who have been institutionalized and undergone forms of rehabilitation and reintegration programs in other geographic areas such as Southeast Asia and some Asia-Pacific countries. The participants were from ethnic groups that had similar cultures to these regions, but more research involving a larger sample size is recommended for transferability.

Limitations

Smith and Osborn (2008) asserted that researchers using IPA may have a small sample size. However, qualitative approaches facilitate in-depth exploration of the life experience of participants. The study was constrained by having an adequate ratio of participant representation of the ethnic groups in Singapore, where about 74% are Chinese, 13% are Malays, and 9% are Indians (Statistics Singapore, 2019). As the study was about Singapore, an equivalent proportion of these ethnic groups could have been represented in the study: six Chinese participants and one each from the

Malay and Indian communities. However, I recognized that many who had recovered might not want to be associated with or be reminded of their past or be identified as an ex-addict or ex-offender. Hence, I accepted any potential participants who met the criteria without being confined to the ratio. The other limitation was that the sample included only individuals of the male gender because responses from individuals of the female gender about abusing drugs might have been different from those of males (Becker et al., 2017; Fattore & Melis, 2016). The study was conducted in English, and potential participants who were keen to participate but did not speak and understand the language were excluded from the study. This limitation might have hindered those who had limited education from sharing their perspectives.

Transferability is limited to applying the outcomes of the study to institutionalized individuals who have undergone rehabilitation and reintegration programs funded by the government. These individuals would have gone through the good lives model and risk-need-responsivity model and placed in a community-based program toward the end of their sentence. The halfway houses and the aftercare would implement their programs according to the frameworks laid by the prison authority. The outcome of the study is most suitable when ex-addicts undergo similar programs that are supervised by the prison authority.

As I was the only resource of data collection, it was necessary that I be consistent when recording the interviews and jotting reflexive notes in my journal to achieve dependability (Johnson & Rasulova, 2017). My previous experiences with exaddicts might have led to my bias emerging during data collection. Recording the sessions, having an external transcriber, and then having member checking constituted my process to address possible misinterpretations of the data. The reflexive journal

was helpful in clarifying my emerging perspectives and checking whether any intense emotion emerged regarding the research topic (Ellefsen, 2017; Roddy & Dewar, 2016). To minimize any bias, I reminded myself that when using the IPA methodology, the participants are the primary experts on the lived experience (Piškur et al., 2016).

Significance

This research is significant because it could help professionals who work with prisoners who are addicted to understand the process of how addicts are motivated to stay off drugs. The findings could contribute to knowledge for those working with clients in mental health institutions, aftercare agencies, and prisons to develop relevant programs at a national level in Singapore to help to reduce the recidivism rate. Such success could encourage more ex-drug addicts to stay away from drugs for a longer period or quit the addiction permanently. The findings from this study may also help those who develop programs for addicts to make these programs more cost effective than the social service interventions currently used in Singapore because clinical practitioners and counselors could gain insights into motivational influences that assist them in designing more effective and appropriate interventions for use with clients. As a result, Singapore could have fewer crimes related to drugs and more exaddicts taking ownership of their own lives and their families. Rehabilitated exoffenders could then remain with their family members; if this occurs, they and their family members could take care of each other instead of depending on social support from the community.

Summary

The SDT model was the theoretical framework that I used to examine how exdrug addicts remain motivated to stay drug free and to formulate recommendations for practitioners to bring effective interventions to help ex-addicts. I used a phenomenological approach in this study to explore the motivation of male ex-addicts who were released from incarceration and remained drug free. The IPA methodology was used because this study focused on understanding and interpreting the experiences that ex-addicts encounter to explore the influence of motivations that enable them to resist the temptation of drugs. Eight participants were recruited to form the homogenous purposive sample.

In the following chapter, I provide a literature review that establishes the nature of the problem and interventions to address the problem. A more detailed explanation of the SDT model (Ryan & Deci, 2017) is provided to rationalize how the model was essential during analysis to understand the influence of motivation in the lives of ex-addicts to remain drug free.

Chapter 2: Literature Review

Introduction

The problem of the high recidivism rate in Singapore despite the efforts of the government led to this study, through which I sought to contribute new knowledge regarding how motivation could influence ex-drug addicts to stay drug free. There are about 30 million men and women incarcerated in prison each year, and many countries report that drug-related offenses contribute largely to this number (United Nations Office on Drugs and Crime [UNODC], 2015). The prison system in Singapore has been set up to keep prisoners who were sentenced for drug offenses away from drugs, not only within society but also within the prison, yet there is no prison system that has successfully remained drug free (Stöver & Hariga, 2016). It is no surprise that prisoners with dependency on drugs find ways to inject illicit substances even when incarcerated. It is reported that up to 75% of prisoners who were drug users prior to incarceration continue the habit in prison and up to 25% of prisoners experience their first drug injection while incarcerated (UNODC, 2015). The percentages of prisoners continuing to inject drugs while in prison in Australia, England, the Netherlands, and Thailand were 52%, 12%, 3%, and 25%, respectively (Lazarus et al., 2018). The established reasons for such activity are to relieve insomnia and boredom and as a coping mechanism (O'Hagan & Hardwick, 2017). O'Hagan and Hardwick (2017) remarked that prisoners become more exposed to the risk of contracting diseases because of sharing contaminated needles in order to inject drugs. Consequently, they are vulnerable to infection with human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV; Moazen et al., 2018; UNODC, 2019). In some settings, the prevalence of HIV and HCV in the

prison population can be 50 times higher than in the general population (UNODC, 2016). The situation has become an epidemic to which prisons have responded by running a needle and syringe exchange program. However, only 60 out of more than 10,000 prisons worldwide adopted such a program (Stöver & Hariga, 2016). In Switzerland, about 10% of prisons are equipped to provide needle and syringe exchange as a harm reduction measure (Annaheim et at., 2018).

The consequences of taking drugs can be damaging in every respect for individuals and their family members. Those who take drugs are aware that continuing use of drugs has a diminishing pleasure effect while inflicting severe damage on their lives (Ersche et al., 2016). The aberrant learning process is meant to describe maladaptive and ill-judged behaviors. It is a process where initially, drugtaking is a learned behavior that individuals engage in to enjoy euphoric effects, but after frequent consumption, individuals lose control over drug-seeking and drugtaking (Ersche et al., 2016). However, there are some who want to change and live free from the influence of drugs in their lives.

There are many models of treatment to help drug addicts to live independently of illicit substances. These include pharmacological treatments (Bond & Witton, 2017), the risk-need-responsivity (RNR) model (Brogan et al., 2015), therapeutic community interventions (TCI), individual and group therapy (Yitayih et al., 2018), and the biopsychosocial model (Becoña, 2018).

In this chapter, I explain which databases were used as the sources for the literature review. The key concepts for the search are made known to show that a careful search for relevant literature was conducted. Using this literature, I elaborate on SDT (Ryan & Deci, 2017) as I used it as the theoretical framework to guide me in

explaining and analyzing the collected data. I review literature on how countries in the world make progress in managing recidivism, such as the United States, countries of Europe, China, Hong Kong, and countries of Southeast Asia. Then, I explain how Singapore adopted its prevention and treatment programs. Recidivism rates are indications of the effectiveness of interventions that facilitate changes for drug addicts who wish to stay free from drugs. This chapter also contains a discussion of literature on the recovery made by individuals despite multiple challenges in various internal areas (e.g., neurobiological, psychosocial, and emotional) to show that abstinence is possible.

Literature Search Strategy

For this review, I searched for peer-reviewed articles, books, and online government/NGO reports. I retrieved literature from 16 databases: Medline, JSTOR, PsychINFO, ERIC, ProQuest Central, EBSCOhost, DOAJ, Google Scholar, Academic Search Complete, Elsevier, SAGE Journals, Science Direct, PubMed, SocINDEX with Full Text, PsycARTICLES, and Taylor and Francis Online. Three main concepts were identified to establish the search strategy: (a) SDT and motivations, preventions, treatments, and outcomes; (b) drug addictions and impacts; and (c) ex-prisoners, recidivism, relapse, and recovery. These were subsequently expanded in the search by considering related terminology, alternative spellings, and synonyms.

The key search terms included *SDT*, *motivation*, *intrinsic motivation*, *extrinsic motivation*, *recidivism*, *reentry*, *prison*, *addiction*, *ex-prisoners*, *drugs*, *substance abuse*, *involuntary addiction treatment*, *mandatory treatment*, *relapse*, *substance use disorder*, and *recovery*. Journal articles that were published in English were used for

the review. Boolean operators were combined with keywords to restrict the search in narrowing down the literature related to the research questions. For example, I searched for *addiction* AND *recovery*, *motivation* AND *recidivism*, *drugs* AND *addiction* NOT *gambling*, and *reentry* AND *relapse*. Each database had a time limiter set for search from its inception not earlier than the year 2015. However, some of the theories and their base literature were cited before the 2015 timeframe because they contained foundational literature for reference.

There were numerous resources available on treatments for drug addicts who have been released from prison, as well as treatments for drug addicts who are nonprisoners. However, there was little current research available on ex-prisoners who were drug users or abusers before incarceration but managed to stay free from drugs, or longitudinal studies of those who managed to abstain from any illicit drug use. To understand the effects of incarceration on individuals and the challenges that they have to endure after release, the associated literature on prisoners was reviewed to support the understanding of this study on ex-prisoners.

Theoretical Foundation

During recent decades, researchers have tried to understand the complexity of change among individuals diagnosed with a substance use disorder (Årstad et al., 2018). Individuals who were drug users before or during incarceration who wish to stay drug free must make a personal decision to change (Chan & Boer, 2016a). Chan and Boer (2016a) posited that it is a common phenomenon that prisoners, at some point in their incarceration or reentry process, become determined to change. However, having a desire to stop antisocial behavior might be insufficient to achieve this goal. Årstad et al. (2018) reported that motivation is essential to developing and

sustaining a commitment to change. Only SDT was reviewed for the purpose of the study. This theory was useful in guiding me when interpreting and analyzing the collected data.

Self-Determination Theory

In their development of SDT, Ryan and Deci (2017) posited that there are several aspects and sources of motivation that are responsible for the quality and dynamics of behavior. Motivation may involve conscious or unconscious desires (Baumeister & Nadal, 2017). The motivation for an individual's behavior can range from unwillingness to passive compliance, to active commitment, to persistency, to more positive self-perceptions and quality engagement (Ryan & Deci, 2000); there are multiple distinguishable facets in a continuum of self-determination. The continuum has autonomous motivation at one extreme end, amotivation at the other far end, and controlled motivation in the middle (Deci & Ryan, 2008; Ryan & Deci, 2017). The choice of motivation defines the different experiences and quality of performance in an individual (Ryan & Deci, 2000). Autonomous motivation comprises both intrinsic motivations and identified/integrated forms of extrinsic motivation (Deci & Ryan, 2008; Ryan & Deci, 2017). It reflects behaviors based on choice, volition, and selfendorsement of action. Controlled motivation is comprised of both external regulation and introjected regulation (Deci & Ryan, 2008). Clinicians have found positive consequences of using treatments that are based on SDT for drug-dependent individuals (Ryan et al., 2016). In other research, legally mandated clients who at admission felt guilty and shameful when they did not undergo their treatment remained in treatment compared to those who had a low level of introjected motivation—a result that was replicated in other SDT research (Wild et al., 2016). In

Spain, a study to ascertain prisoners' well-being that involved their motivation and coping strategies was conducted (Ávila & Sanjuán, 2018). Ávila and Sanjuán (2018) reckoned that goal progress and goal achievement are salient factors in improving well-being and motivation underlying goals. They had used SDT as the theoretical framework to distinguish the different motivations that the prisoners exhibited.

Intrinsic and extrinsic motivations are identified as the main factors that lead to actions based on an individual's reasons or goals, or the vicissitudes of life (Ryan & Deci, 2000). According to Ryan and Deci (2002), they describe the quality of human functioning with motivation capable of meeting the inner psychological needs of autonomy, competence, and relatedness. Autonomy is exhibited when individuals are the source of their own behavior (Ryan & Deci, 2002), while competence refers to individuals' sense of confidence in achieving and expressing their capacity.

Relatedness is described as individuals' desire to show care to and receive care from others and be able to assimilate with others in the community (Ryan & Deci, 2002).

SDT is based on organismic theory, which operates on the assumption that human beings act because they inhibit an active organism (Deci & Ryan, 1985). Deci and Ryan (1985) posited that every human action depends on their internal regulation and external environments to be effective and to meet needs. Humans are inherently curious, physically active, and social beings (Ryan & Deci, 2017). The propensities to explore, manipulate, and understand are associated with intrinsic motivation. The proclivity to assimilate social norms and regulations involves accept and embrace them through internalization and integration. According to Deci and Ryan (1985), the assumption has been that individuals actively attempt to master their external environments as well as forces and emotions in themselves. This implies that a shift

from regulation by external forces is possible for an individual to become self-regulated by internal factors in producing behavioral change (Deci & Ryan, 1985).

Over time, an individual's general regulatory style tends to become internalized (Ryan & Deci, 2000).

Intrinsic Motivation

Intrinsic motivation is manifested when an individual engages in an activity for the enjoyment inherent in the activity itself (Deci & Ryan, 1985). The organismic nature tends to seek novelty and challenges and to explore and learn for its own sake (Ryan & Deci, 2013). Intrinsic motivation is characterized by autonomy and involves a sense of willingness and volition (Ryan & Deci, 2017). Through the process of internalization, intrinsic motivation can be developed to demonstrate autonomy and volition (Deci & Ryan, 1985). It involves resolving the inherent conflict between one's natural desire and what one wishes to do by integrating extrinsically motivated regulations such as rewards and punishments, to move toward greater competence and self-determination. Drug addicts who tried to prevent relapse found themselves more capable of improving the recovery process when they were intrinsically or extrinsically motivated through social support from their supervisors at their workplace and the perception of being a part of the community (Barbieri et al., 2016).

Between intrinsic motivation and extrinsic motivation in the SDT continuum are three other types of motivation: introjected regulation, identified regulation, and integrated regulation. A more autonomous type of motivation is identified regulation (Ryan & Deci, 2017). Such motivation occurs when an individual is motivated to behave because a behavior is important and worthwhile and is congruent with the personal goals and values of the individual (Deci & Ryan, 1985). Adjacent to intrinsic

motivation in the continuum is integrated regulation. An individual is considered to obtain integrated regulation when the individual has fully integrated external values into a personal value system (Deci & Ryan, 1985).

Extrinsic Motivation

Extrinsically motivated behavior is a result of external factors put in place to impose externally controlled regulation to bring about and reinforce desired behavior (Deci & Ryan, 1985). External factors may include external rewards, social approval, fear of punishment, or achievement of a desired outcome (Ryan & Deci, 2017). Next to extrinsic motivation is introjected regulation, which does not require external contingencies such as rewards and punishments to drive behavior or self-regulation (Deci & Ryan, 1985). Introjected regulation is behavior driven internally and is more effective than cognitive. Deci and Ryan (1985) highlighted that motivated behavior is attributed to the avoidance of self-conscious emotions such as guilt and shame and seeking approval and appraisals. For example, ex-offenders who have been incarcerated several times may stay out of trouble involving criminal activities because they are afraid that if they were to be incarcerated again, their sentence might be lengthy, and they might not live to witness their release from prison (Chan & Boer, 2016a).

The Rationale for Self-Determination Theory as the Theoretical Framework

SDT has been widely applied as an integrative framework for complex research findings involving motivation, personality development, and wellness (Ryan et al., 2019). Ryan et al. (2019) stated that SDT has been frequently used to explain phenomena and generate tools for intervention in the fields of counseling, clinical, and developmental psychopathology literature. SDT research has addressed complex

topics such as suicidal ideation (Lin, 2019), depression (Quitasol et al., 2018), severe mental illness (Jochems et al., 2017) and addiction (Chan et al., 2019).

When SDT is used to explain the phenomena and experiences of ex-addicts who have struggled very hard to stay free from drugs for more than 24 months, it is able to identify whether motivation has a major role in this process. In so doing, it may also be used to identify and map the various types of motivations that ex-addicts engage in regulating prosocial behaviors. The influence of motivation reflects its significance for ex-addicts who have been released from incarceration.

Drug Prevention and Intervention

Heroin has become the most popular drug among users in many developed and developing countries (Sun et al., 2015). In the 1960s, methadone maintenance treatment (MMT) was used to treat addicts who were severely dependent on heroin use and resisted other possible treatments in the United States (Bond & Witton, 2017). Accompanying this treatment was a comprehensive program that included a psychiatric evaluation and progressive reentry into the community that involved social assistance such as employment, education, and housing. Bond and Witton (2017) revealed that methadone maintenance treatment became the main program nationwide, but without the support of psychological and social assistance, the outcomes became less effective.

Nevertheless, a similar program known as opioid substitution treatment (OST) was implemented in Europe, with about 50% of opioid users undergoing such treatment. In 2012, 74 countries adopted the OST model for drug users and 39 countries also included the model in their prisons (Dolan et al., 2015).

Pharmacological maintenance treatment was recommended worldwide for treating

opioid users, and according to De Andrade et al. (2018), the World Health Organization approves the use of opiate maintenance treatment (OMT) to reduce relapse. Countries that have carried out the suggestion to use OMT include China, Hong Kong, and Vietnam (Dolan et al., 2015).

Substitution treatment or agonist therapy aims to keep users on a therapeutic drug such as methadone and buprenorphine to suppress withdrawal and curb cravings for heroin. In the United Kingdom, the National Treatment Outcomes Research Study (NTORS) conducted a program that involved 1,000 drug users receiving treatments and continued with a 5-year follow-up in 1995 (Gossop, 2015). The participants were selected to take part in one of four main treatments: inpatient detoxification, residential rehabilitation, methadone reduction, and methadone maintenance. The results showed that the longitudinal program had a positive effect on abstinence. The participants involved in the residential programs increased abstinence from 1% to 38% after 5 years. Gossop (2015) also reported that as many as half of those who underwent the methadone maintenance programs also managed to abstain from drug consumption for 5 years. The methadone reduction treatment did not yield favorable outcomes because the percentage of reducing doses was associated with greater frequency of heroin use at follow-up.

A third agent is naltrexone, which is capable of nullifying both the analgesic and rewarding effects of heroin, resulting in higher rates of abstinence when included as another option in substitution treatment (Uhl et al., 2019). MMT has been implemented in China since 2004 because the country has the highest numbers of illicit drug users in the world (Liu et al., 2018). However, countries such as Russia have argued against and rejected agonistic treatment because these countries believe

that such treatment is a replacement of one addiction with another (Lunze et al., 2016). Researchers have also claimed that pharmacological treatments are likely to be addictive and harmful for addicts (Zhou et al., 2016). In addition, the approved agonist treatment, which is considered a meaningful advance in therapeutics for addictions, may not be effective for all cases (Volkow & Boyle, 2018).

Today, the approaches to treat heroin addicts involve detoxification and pharmacological maintenance treatment (Bond & Witton, 2017). The former is to stop opioid use until the bloodstream is free of toxins, which could be effective for those who are less severe users of the opioid drug. China and Cambodia would sentence drug users to undergo compulsory detoxification. For example, China had more than 800,000 drug users arrested in 2014, and 260,000 of them were sent to receive compulsory detoxification treatments while another 197,000 of them underwent a community rehabilitation program (Dolan et al., 2015). Detoxification is an inpatient treatment, and it is not a cost-effective way of treating those who are addicted users as they are likely to relapse.

In 2013, the Council of State Governments Justice Center announced that the risk-need-responsivity (RNR) model was the most effective community supervision strategy for criminal justice treatment (Brogan et al., 2015). Andrews and Bonta (2010), who first proposed the model, stated that RNR emphasized assessing the offender's deficits that predict reoffending and prioritizing specific factors for the offender to obtain correctional interventions (Andrews & Bonta, 2010; Bosker & Witteman, 2016). According to Brogan et al. (2015), RNR hinges on three principles: (a) match the program intensity to the level of risk of the offender, (b) address the offender needs that may lead to criminal behavior, and (c) correspond the

interventions to the learning ability and preferences of the offender. Several countries have embraced the RNR model, including Australia, Canada, the Netherlands, and Great Britain (Bosker & Witteman, 2016; Morash et al., 2017; Newsome & Cullen, 2017).

The therapeutic community interventions (TCI) program, community-oriented interventions, can lower incidences of reoffending and relapse (Galassi et al., 2015). Based on a systematic literature review about TCI in the United States, Galassi and his colleagues (2015) discovered that 70% of the studies on relapse showed TCI to be effective in lowering rates of reincarceration, especially with minimally 2 years' long-term follow up. The TCI model emphasizes having the community be the therapist and teacher in the treatment process; the concept is to use a group-based approach in which peer support is organized to influence each other to develop prosocial behavior and work towards a drug free life. A commitment to stay drug free will allow for more personal or recreation time while undergoing the program. Some prisons choose to factor an aftercare component into the program (Galassi et al., 2015), such as halfway houses where the offenders live in the community.

Treatment for offenders with substance abuse problems released from incarceration has been advocated to be gender sensitive (Kolind & Bjønness, 2019). The rate of female incarceration has grown faster than that of men in the United States, although women are still the minority as compared to men in terms of drug abuse and addiction (Miller et al., 2016; Morash et al., 2017). There is a significant difference in the ability to control impulsive behavior and drives for women and men (Fattore & Melis, 2016). The reentry program specifically for female offenders became necessary as they endured more severely in many areas than the male

offenders (Kolind & Bjønness, 2019). The female offenders are likely to have dire substance abuse histories, physical or sexual abuse since they were young, physical and mental health problems, dysfunctional family histories, and family histories of drug abuse (Gilbert & O'Dowd, 2019; Kolind & Bjønness, 2019; Laing, 2016; Montgomery & Zeng, 2016). For example, Michigan's Department of Corrections instituted that women offenders who posed no risk to the public, the state would place efforts to minimize offenders to return to prison when they violate supervision conditions and reassess and evaluate interventions to prevent any causes of offending based on the RNR model (Morash et al., 2017). Morash and the team reported that the majority of women offenders who were sanctioned for noncompliance had a mental illness, little education, suffered from disabilities and domestic violence, and were Black. The direction set in Michigan to have an accommodative reentry program enabled the state to register the lowest low economic recidivism risk in America.

Another approach to aid drug-using offenders to stay free from drugs after their prison release is to involve them in aftercare programs such as case management. Case management has been well received as a means to help newly released prisoners for reintegration and rehabilitation in the community (Maguire & Raynor, 2017; Perry et al., 2016). In the United States, case management is incorporated into the Treatment Accountability for Safer Communities (TASC) programs, and it has shown some promising effectiveness, although there seems to be a lack of systemic evidence (Woodhouse et al., 2016). In case management, the priority of the case manager is to take an active role in helping the clients by focusing on resilience, change, empowerment, and reintegration into the community (Hunter et al., 2016). The good lives model (GLM) was introduced as part of the framework for case management by

Ward and Stewart (2003) as an alternative and enhancement to RNR (Hunter et al., 2016). GLM is a strength-based model to enhance the capabilities of the offender to achieve a certain degree of human goods for personal fulfillment through the development of skills and knowledge (Chan & Boer, 2016b). The model's fundamental assumption is that all humans will have primary goods (the things that individuals value in life) to pursue (Chan & Boer, 2016a). However, the secondary goods (the means by which individuals pursue what they value) might get an individual into trouble.

An addiction management program that has established itself around the world is the free community-based recovery mutual-help organization known as Narcotics Anonymous (NA; Wendt et al., 2017). It has a 12-step program, and it is meant to provide support for long-term recovery. A sponsor, a fellow regular attendee and who is willing to serve as a recovery role model and provide support and guidance, is available to help new members overcome the challenges of early recovery and beyond (Kelly et al., 2016a). The sponsor makes him- or herself available 24 hours a day should the new member require a supportive guide.

In some countries, such as Cambodia and China, physically demanding exercises and labor were considered as the drug treatment program (Dolan et al., 2015). Dolan et al. (2015) commented that sweating through physical activities is the most common cure for drug dependence. In Cambodia, the addicts caught by the authority could spend hours doing military drills and attending classes on drug education and vocational training for a few months (Dolan et al., 2015). Centers using forced labor or arduous physical exercise do not seem to have any positive rehabilitation effects (Dolan et al., 2015).

Counseling as Part of Treatment

The Global Commission on Drug Policy has recommended that resources for treatment for drug addiction should include counseling programs (UNODC, 2016). According to the UNODC (2016) report, some countries, such as the United States and many European countries, have changed the legislation from incarcerating minor cases involving possession of cannabis for personal consumption to counseling, probation, fines, or warnings. While psychosocial treatments such as cognitive-behavioral therapy are widely used for substance use disorders, there are limits to their effectiveness (Volkow & Boyle, 2018). Counseling is part of the program in addiction treatment in countries like Denmark, the United States, and China (Liu et al., 2018; O'Hagan & Hardwick, 2017; Sofuoglu et al., Carroll, 2018; Stöver & Hariga, 2016). Empirical evidence is available to suggest that such a model, together with medical and psychosocial services, could obtain good outcomes (Liu et al., 2018). However, Liu and colleagues (2018) also commented that there was evidence to show that having any psychosocial support to MMT might not have any additional advantage.

Engaging addicts in counseling is crucial to success while they undergo pharmacological maintenance treatment (Bruce, 2018). In the United States, behavioral therapies are part of structured programs, for example, residential programs, after detoxification and stabilization to prevent relapse or during the period of the agonist treatment (Sofuoglu et al., 2018). However, Sofuoglu et al. (2018) posited that the combination of methadone treatment and counseling produces a better outcome than buprenorphine treatment and counseling. They could not make any conclusion with regards to naltrexone treatment and counseling as the former was

only recently introduced after approval by the Food and Drug Administration in the United States, and limited research exists.

Leichsenring et al. (2015) revealed the broad range of psychotherapies in psychodynamic therapy are effective interventions to treat drug addicts. According to them, whether it was psychodynamic therapy or cognitive behavioral therapy used as interventions in counseling, clinical therapy contributed to addiction abstinence.

Volkow and Boyle (2018) reported that behavioral therapies are good counseling approaches to treat stimulant, cannabis, and hallucinogen use disorders.

While the above has listed several therapies that have shown potential success in helping addicts to recover, the basic counseling skill of therapeutic alliance is a salient factor to note (Kelly et al., 2016a). Therapeutic alliance refers to the professional working relationship between the counselor and client in which agreement on goals, tasks, activities, and pace of intervention are established (Kelly et al. 2016b).

Drug Prevention and Intervention in Singapore

Since the 1990s, active efforts have been invested in decreasing the recidivism rate. There is a focus on providing offenders with a second chance (Chan & Boer, 2016b). The Prime Minister of Singapore, Lee Hsien Loong, encouraged the community to support the prisoners in part of his National Day Rally Speech in 2011 (Prime Minister's Office Singapore, 2018). Drug offense is a severe criminal charge in the view of Singapore law. In 2012, an amendment was made for the court to have the sentencing discretion for life sentences instead of the death penalty if the accused is proven to be merely a courier or if a certain amount of drugs is found in possession of the accused (Chen, 2015). Nevertheless, Singapore is considered to have one of the

world's most stringent drug laws as it could be punishable by mandatory death (Baltzer, 2018). Drug users caught by the authority in Singapore are ordered by law to undergo compulsory treatment either in an institution, a community-based treatment, or both without their consent (Lunze et al., 2018). They undergo rehabilitation, treatment, and reintegration during and post imprisonment (Korman, 2018) with the help of community partners, notwithstanding the criminal infraction.

The Singapore Prison Service (SPS) sends drug addicts to the Drug
Rehabilitation Centers (DRC) where the hardcore addicts are separated from
nonhardcore addicts. The prisoners receive intervention programs based on their
specific risks and needs, where the hardcore addicts will be detained for a longer
period (Korman, 2018; Ministry of Home Affairs [MHA], 2019b). The intervention
programs encompass psychological-based correctional programs, family programs,
and skills training to enhance employability upon their release. Among the addicts
who are assessed to be at higher risk of reoffending, they will have scenario-based
simulations related to drug use, and they will be equipped with strategies to reject the
temptation of drugs (MHA, 2019). Months before their release, the prisoners may
choose to undergo community-based rehabilitation (CBR) or extended institutional
rehabilitation (EIR). The CBR will last for another 12 to 24 months for rehabilitation
programs such as counseling and additional vocational training and work. Those with
family support are allowed to opt for a residential scheme to stay at home after work,
but they are electronically tagged.

The responsibility of the Singapore Prison Service (SPS) is to provide rehabilitation and aftercare to all prisoners in Singapore (Chin & Iyer, 2018). GLM has been adopted to help the inmates find alternatives towards achieving their primary

goods via capabilities and strength building that would turn them away from the antisocial activities in their lives (Chan & Boer, 2016a). The RNR model is also part of the intervention strategies implemented because the accurate classification of the prisoner's level of risk and needs is crucial for effective rehabilitation (Chan & Boer, 2916b; Drake, 2018).

SPS also has a throughcare (2014) framework approach to rehabilitation, which means a meaningful and purposeful engagement with the offenders once they enter prison until their release and reintegration back into society. This throughcare approach started in 2014, and it involves (a) administering assessment of risk; (b) equipping the prison staff with correctional skills and knowledge to prepare the inmates for prosocial living, providing family, vocational, and skill-building programs to foster family relationships and boost employment opportunity; and (c) providing inmates with aftercare case management and supervision upon their release. SPS also partners with about 100 agencies to provide counseling, rehabilitation, and reintegration programs to achieve its vision (Chin & Iyer, 2018; Korman, 2018). For example, the Singapore Corporation of Rehabilitation Enterprises helps the inmates to upgrade their skills and academic knowledge with the goal of enhancing their employability and improving the reintegration rate (Chan & Boer, 2016a).

Singapore believes that preventive drug education has great potential to achieve a drug free society as part of its overall strategy (Korman, 2018). Roadshows for the neighborhoods and campaigns at the national level are commonly held. The Central Narcotics Bureau also included antisubstance abuse messages into schools' curriculums for children and teenagers to educate them about the dangers of drug dependence (MHA, 2019).

However, limited evidence is available to suggest that compulsory drug treatment is effective in increasing rates of abstention from drug use or in reducing recidivism rates (Werb et al., 2016). Singapore is actively seeking ways to further decrease its recidivism rates despite these rates being considered low among its neighboring countries (Chan & Boer, 2016a).

Factors for Male Desisters in Singapore

Twelve participants aged between 25 to 60 who were formerly incarcerated due to drug offenses but had been out of prison for at least 5 years or longer were interviewed in Chan and Boer's study (2016a). The qualitative research findings indicated seven factors that determined the success of reintegration: (a) personal decision to change, (b) age of the prisoner, (c) purpose and vision in life, (d) spirituality and faith in a religion, (e) environment after their release from prison, (f) employment, and (g) consistent network support. Chan and Boer (2016a) stated that the probability of success in the reintegration process increases when all these factors were put together.

Singapore Prison Service (SPS) conducted a survey involving 78 ex-prisoners who had been crime-free for an average of 8.3 years (Lin et al., 2018). The results of the survey showed that (a) those with higher self-efficacy scores were directly associated with a greater sense of desistance; (b) self-efficacy could facilitate motivation to change, have a goal, take action to disengage from drug friends, or join voluntary activities; (c) those with higher counts on prosocial relationships tended to have better sense of desistance; and (d) the importance of prosocial relationships helped many of them to persevere to change.

Mental and Physical Impacts of Drugs

Li et al. (2015) provided scientific and evidential proof via the MRI scans to explain the impacts on the mental and physical health of male heroin addicts. Besides physiological impairments, individuals also suffer social damages due to the influence of drugs. Volkow and Morales (2015) postulated that the prefrontal cortex and frontal lobe of an addict could be affected as they reviewed relevant studies. The prefrontal cortex and frontal lobe are responsible for learning new behavior, regulating attention, recalling, and making a logical decision. Volkow and Morales (2015) also highlighted that the brain circuitry had altered the capacity to exercise self-control over consuming drugs, which led to the tendency for addicts to be more sensitive to stress and negative moods. Synthetic drugs, such as methamphetamine, can affect the memory, attention, and executive function of the abuser (Huckans et al., 2015). In the Huckans et al. (2015) study, research participants of both genders were recruited: (a) a control group with no lifetime history of drugs dependence (n=31), (b) active users (n=17), (c) and those in remission from methamphetamine dependence between 1 to 12 months (n=36). The neuropsychiatric impairments persisted following abstinence of drugs because the immune factor associated with neural and behavioral aspects had become dysregulated, which led to drug-seeking behaviors and the likelihood of relapse (Huckans et al., 2015). According to Belin-Rauscent and colleagues (2016) drug-associated conditioned stimuli such as a syringe and an environment (i.e., a stairway), could activate drug-oriented behaviors. These challenges and struggles that an addict encounters are some of the pathways to relapse.

Neurobiology of Addiction

Impulsive behaviors occur to satisfy the feelings of pleasure or gratification and compulsions in disorders; for example, obsessive-compulsive disorder behaviors are acted on to fend off obsessive thoughts and reduce tension or anxiety (Koob & Volkow, 2016). According to Koob and Volkow (2016), in the context of addiction, users move from impulsivity to compulsivity, and the drive to consume drugs shifts from positive to negative reinforcement. They posited that it is possible that impulsivity and compulsivity coexist in different stages of the addiction cycle. They also postulated that the neurological circuits undergo molecular and neurochemical changes when drug users progress to addiction, and the changes persist in causing possible relapse even when the drug addicts stop taking drugs. During intoxication, the drugs release a fast and steep amount of dopamine and opioid peptides into the central striatum that gives rise to the sensation of the so-called high. Koob and Volkow (2016) had shown that the circuitry had been widened to include many neural inputs and outputs, and they also interacted with the basal forebrain, which could cause cognitive deficits such as amnesia and attentional impairments. Further research of the neurotransmitters and neuromodulators, which included not only dopamine and opioid peptides but also γ-aminobutyric acid (GABA), glutamate, serotonin, acetylcholine, and endocannabinoid systems in the ventral tegmental area or nucleus accumbens, showed that the neurotransmitters and neuromodulators could be affected to stop performing proper inhibitory control and decision making. These affected areas in the brain would also impair the functioning of the reward, motivation, stress, and memory systems. Both signal transaction mechanisms and changes in gene

transcription might constitute a critical neuroadaptation for the establishment and maintenance of addiction to drugs.

When individuals become drug addicts, Koob and Volkow (2016) postulated that the construct of both conditioned reinforcement and incentive salience impel the cue-induced drug-seeking and self-administration behaviors. Any external cue or stimulus associated with a drug can trigger the cue-specific engram to cause a drug-seeking response; a nonaddict is able to alter the thoughts or cues (Uhl et al., 2019). During the withdrawal stage, addicts may suffer chronic irritability, emotional pain, malaise, dysphoria, alexithymia, states of stress, and loss of motivation for natural rewards.

Psychological Challenges to Reintegration

Tran and colleagues (2016) posited that discrimination, blame, and shame are common experiences among both male and female drug addicts when they try to reintegrate into the community and society. Their quantitative research involved 1016 subjects who were methadone maintenance patients in two provinces in Vietnam. The research emphasized the need to integrate support services into the program. Chang et al. (2019) researched the quality of life for 268 treatment-seeking opioid-dependent individuals in Taiwan. They concluded that there is a tendency for the participants to experience bias in areas such as employment, socialization, and healthcare treatment.

Temporal Discounting

In understanding the role of craving in addiction that could undermine the influence of motivation, the behavioral economics model is suggested for explaining maladaptive substance use. According to Worley and colleagues (2015), behavioral economics examines the factors that determine decision-making processes among

goals. The behavioral economics model is founded on the principles of psychology and economics to research values, preferences, and decision making. The phenomenon of excessive discounting of delayed rewards caused by drug dependence is known as "reinforcer pathology" (Worley et al., 2015). From a pathological valuation's perspective, addiction could distort decision-making, and people incline towards overvaluing immediate, drug-associated stimuli and undervaluing longer-term rewards (Myers et al., 2016). Myers and colleagues (2016) recruited 45 adult participants (53% female) with a history of heroin addiction undergoing treatment at Drug Health Services and Opioid Treatment at Royal Prince Alfred Hospital located in Sydney. Their control group was comprised of 35 healthy participants (28.6% female). Each participant was placed in a quiet room with a laptop that had a program to study the reward-learning and punishment-learning trials. The results revealed that there is a vast difference between opioid addicts, especially heroin addicts, and the nondrug users' probabilistic reward task as the former preferred immediate rewards.

Abstinence Without Formalized Treatment

There is research that shows that recovery and abstinence from abused substances are possible without treatment (Zschau et al., 2016). For example, natural recovery through individual effort is possible. An important factor that this study attempted to show is that motivation, as highlighted in the SDT, is needed to stay drug free.

Natural Recovery From Drug Addiction

The prevalence of natural recovery from alcohol abuse is more common than from drug abuse (Breidenbach & Tse, 2016). Natural recovery (also known as

spontaneous recovery, unassisted recovery, spontaneous remission, etc.; Mudry et al., 2018) is preferred for individuals with cannabis problems, although seeking outpatient treatment seems to be a growing trend in recent years (Kelly et al., 2018a).

A systematic review of seven published articles on natural recovery from substance abuse in people with psychosis indicated that addicts who are nonpsychotics have similar reasons to change (Rebgetz et al., 2015). Breidenbach and Tse (2016) mentioned that two systematic reviews on published studies documenting the process of self-change with substance abusers up to 2005 showed that there are two predictors for recovery: namely family-related and health-related. Family-related reasons, such as pressure and support from friends or family toward abstinence, and family responsibilities of getting married and becoming parents motivated selfchange. The other predictor, health-related, is associated with health consequences due to consumption. The above predictors are considered extrinsic motivations. Breidenbach and Tse (2016) claimed that until their published article, there was no exploratory study on natural recovery in Asia published in English. Their study, conducted in Hong Kong, sought to present the cognitive appraisal that drove natural recovery. They did an exploratory study by interviewing two participants who were residing there. Three questions were asked, and one of them was "What are the causes and conditions that lead to natural recovery?" (Breidenback & Tse, 2016, p. 487). One of the participants was a white male born in the United States who had been studying in Hong Kong for 5 years. The other participant was a half Chinese and half White American female born and raised in Hong Kong. The interviews were conducted in English to focus on the personal, familial, and cultural domains of a phenomenon. The IPA was used to collect the data via the context interviews, narratives, lived

experiences, relationships, and social challenges of the participants. Breidenbach and Tse (2016) observed that people who went through natural recovery had a certain level of awakening to dismantle strong habits by managing the cognitive process, addiction behavior, and emotional experience.

Recovery

Among ex-addicts, there is a saying, "We do not recover from drug addiction until the day we die; we are always a recovery addict." Baumeister and Nadal (2017) used the phrase, "They cannot stop themselves" (p. 179) to illustrate the degree of difficulty for an addict to recover. Literature has indicated that less than 50% of addicted individuals have received treatment in the United States (Laudet & Hill, 2015). It was noted that recovery is complex, and it is a long process that requires 5 to 7 years for those who take heroin (Collins & McCamley, 2018). But the definition of recovery is viewed differently by professionals and peers (Ashford et al., 2018). It is because there are different methods of individual recovery and the accompanying experiences in recovery that add complications to the issue.

In the UK, recovery is considered a voluntary process of sustainable control over substance use where health and well-being are not affected and active participation in the rights, roles, and responsibilities of society (Collins & McCamley, 2018). The Substance Abuse and Mental Health Services Administration (SAMHSA) defined recovery as: "Recovery is a process of change through which individuals improve their health and wellness, live self-directed lives, and strive to reach their full potential" (National Academies of Sciences, Engineering, and Medicine, 2016, p. 2). The American Society of Addiction Medicine (ASAM) has defined recovery as "A process of sustained action that addresses the biological, psychological, social, and

spiritual disturbances inherent in addiction" (ASAM, 2015, p. 13). William White, known for his recovery advocacy movement, referred to recovery in this way:

The experience (a process and a sustained status) through which individuals, families, and communities impacted by severe alcohol and other drugs (AOD) problems utilize internal and external resources to voluntarily resolve these problems, heal the wounds inflicted by AOD-related problems, actively manage their continued vulnerability to such problems, and develop a healthy, productive, and meaningful life. (Ashford et al., 2018, p. 3)

Ashford and colleagues (2018) highlighted several salient points from the above definitions regarding recovery: (a) the recovering addict must be actively working towards wellness; (b) wellness would include the dimensions of physical, psychological, and spiritual of the recovering addict; and (c) the recovering addict is able to engage the community that upholds prosocial values and behaviors. However, these definitions were not comprehensive because: (a) they are not specific enough to be meaningful, (b) they do not account for the process as the dynamic nature of change but rather as static measures, and (c) the subjective and personal experiences of change are omitted, which is inappropriate because they are central to the lived experience of recovery (Best et al., 2017). The proposed conceptual understanding of the recovery process involves connectedness, hope and optimism about the future, identity, meaning in life, and empowerment (Hampson et al., 2019).

According to Best et al. (2017), the average duration of an addiction career, which is from the initial use to at least 1 year of remaining drug free, was 27 years.

During this long period, a usual pattern of recovery, relapse, and repeated treatments would occur through many cycles (Scott et al., 2018). Scott and his colleagues (2018)

asserted that to achieve and sustain recovery, substance use disorder (SUD) treatment is paramount. The outcome of this study might add benefits to a more effective treatment program.

Summary and Conclusions

The complexity of treating drug addicts to recover and reintegrate into society is a major issue in reducing the recidivism rates that prisons in the world, as well as Singapore, face. The challenges that the drug addicts encounter extend beyond financial and physical needs; they undergo psychological, social, and physiological changes that could impair them from recovery. There are many treatments and programs available to drug addicts caught by the law. However, the effectiveness of these programs and their ability to keep ex-addicts and prisoners in treatments and programs have not shown improvement in curbing relapse. Motivation is an essential component for an individual to change, and the sources and aspects of motivation to keep addicts from reentry into the system are important desistance factors (Brunelle et al., 2015).

The literature reviewed demonstrates that there is substantial research on drug addicts' treatment and recovery for those who were nonprisoners and drug-addict prisoners who were released from prison and their imminent challenges (Wild et al., 2016). SDT has been applied by different researchers to understand the motivation to keep individuals who were and were not legally mandated for treatment. According to Ryan and Deci (2002), the individuals' psychological needs for autonomy, relatedness, and competence are to be met to keep them motivated to remain on course for recovery. Despite the available literature, limited knowledge exists about the role of motivation in sustaining ex-drug addicts in Singapore who manage to stay

clean. The proposed study would find out from ex-drug addicts who had been incarcerated and remained drug free how they were motivated and how their motivations were sustained to prevent relapse. The study of the experiences of the participants would provide insights into the salient factors and processes of behavioral change caused by motivation.

In this study, male ex-addict prisoners were recruited to share their lived experiences while they were incarcerated, at the halfway house or aftercare agency, and after they completed the rehabilitation and reintegration program. I used IPA as the approach to gather data because the participants' lived experiences were desired (Smith et al., 2009). The following chapter provides detailed information about the methodology, research design, and the role of the researcher.

Chapter 3: Research Method

Introduction

The specific purpose of this research study was for me to gain a deep understanding of the motivation for male ex-addict prisoners in Singapore to remain drug free after release. In Chapter 1, a description of the phenomenological research approach using IPA as the methodology was discussed. In this chapter, I provide a detailed account of the research method. I discuss the research design after restating the research questions and explain the rationale for choosing IPA to conduct qualitative research. I discuss the role of the researcher and my efforts to ensure that my involvement in the study met the highest professional standards, and I reveal any aspects of my professional practice that could have undermined ethical practice in this psychological research study. Additionally, I delineate the reasons and criteria for the homogenous purposive sample and the instrumentation for collecting data.

Included in the chapter is a section in which I elaborate on the procedures used to recruit the participants. In addition, there are sections on how I planned to collect data and on the data analysis process. In this chapter, I also cover any possible bias that I might have had by evaluating issues of trustworthiness in the research and ethical procedures, as the researcher serves as the instrument in IPA.

Research Design and Rationale

In this study, I aimed to gain a deep understanding of how motivation is part of male prisoners' experiences in staying clean after their release from prison. I constructed two research questions to guide me during the study:

1. How do male ex-addicts who were in prison and now are drug free talk about their lived experiences and remain motivated to stay off drugs?

2. What are the meaning-making processes involved in the motivation to remain drug free for these ex-addicts?

The Research Phenomenon and Research Tradition

This study involved describing and interpreting the experiences of male exaddicts who were in prison in Singapore and making sense of their motivation to stay drug free after their incarceration. The participants in the study shared their personal insights into their lived experiences as they expressed what was important and meaningful for them. The qualitative research tradition was most suitable for the collection and analysis of data for this study because the information collected through the qualitative method tends to be richer and fuller in understanding a phenomenon (Creswell & Creswell, 2017).

The decision to adopt a qualitative tradition was made in part because many of the existing studies evaluating the effectiveness of the rehabilitation and reintegration community reentry program were conducted in the quantitative tradition (Kendall et al., 2018). Kendall et al. (2018) posited that the quantitative method is limited in determining the benefits of a program that prevents reincarceration. Qualitative researchers seek to identify and bring insights concerning a phenomenon, a process, or the perspectives of the people in a sample (Bellamy et al., 2016). Data for qualitative research can be gathered through various forms such as interviews, observations, documentation, and photographs, instead of relying on a single data source (Creswell & Creswell, 2017).

Using the method of qualitative inquiry allows the researcher to explore data and analyze data inductively (Patton, 2015). The inductive approach also allows the researcher to build patterns, categories, and themes from raw data (Creswell &

Creswell, 2017). According to Patton (2015), a researcher should work toward understanding the emerging interrelationships among the participants from the data instead of presupposing in advance patterns, categories, and themes. Qualitative research has an emergent design for the researcher to establish a comprehensive set of themes as well as the outcome of the study, and the researcher does not specify any prior hypotheses, which are based on assumptions that the researcher may or may not be aware of (Creswell & Creswell, 2017). Saha (2019) posited that new perspectives and in-depth information on the topic of interest might be obtained when they are difficult to convey quantitatively. Collecting data through an interview enables a researcher to probe deeper into the data and obtain important and more relevant information (Corbin & Strauss, 2015).

Role of the Researcher

For the purpose of this study, I was the only resource for data collection, interpretation, and analysis. My role was to remain impartial throughout the process, from the recruitment of participants until the end of the study. My role involved conducting the interviews, collecting data, interpreting the data, and making observations on the interviews. During the semistructured interviews, I established rapport and explored the participants' experiences, emotions, thoughts, and sense making (Durjava et al., 2018). I adopted an impartial stance, although I had experiences with addicts in my previous employment. I used a journal to record observations and those times when my biases or past experiences emerged. IPA is underpinned by the notion of intersubjectivity, which involves self-awareness of the shared, overlapping, and relational nature of self-engagement with others (Smith et al., 2009). I planned to capture the experience of the participants as they told it,

integrating my knowledge and experience to produce relevant and important meanings and impressions of the participants (Willmott & Bentley, 2015).

Although I used to work at an aftercare agency for drug addicts who were released from prison, the participants whom I intended to interview would not have any previous interaction with me, either directly or indirectly. In Singapore, prisoners can receive rehabilitation and reintegration programs from either of the two types of service providers (i.e., a halfway house or an aftercare agency). Prisoners only receive one type of rehabilitation and reintegration program when they are near the end of their incarceration, after the prison authority has assessed their suitability. I left the aftercare industry more than 3 years ago, and it was unlikely that I would have any past or current relationship with participants. As for cases where the prisoners were reincarcerated, they might have known me because they might have received different rehabilitation and reintegration programs for each incarceration. In such cases, I would have declined the participants as part of my sample group when I evaluated them over the telephone to determine whether they met the criteria. I made this commitment to avoid having any potential coercive influence over participants for them to participate in the study. If a participant had heard of me through programs I introduced, they could still be eligible for the study, which I would determine during the telephone screening process.

I ensured that I maintained integrity and an absence of bias when interpreting and analyzing the data. My experience as a counselor, which included working with ex-drug addicts, had given me the edge of understanding how they behaved and functioned psychologically and socially. I reminded myself to be impartial and avoid influencing the participants' opinions. This required me to set aside any perspectives

about them and their abstinence experience while processing and interpreting the data to ensure integrity and reduce bias in this scholarly research study. These were the ethical issues that I could report, and there was no other issue that existed that could have tainted the outcome of the study.

Methodology

Participant Selection

The eight participants were either former residents of halfway houses or clients from aftercare agencies because they were sent by the prison authority to complete the last phase of their incarceration there. These aftercare programs served as a way to support their continuous rehabilitation so that they might seamlessly reintegrate into society through the community-based program. After 6 to 9 months of successful completion of the aftercare program, during which they were not involved in any drug activities, they would receive their remission order and be released from prison as a free person. Participants in this study were male ex-drug addicts who had been incarcerated for drug-related offenses and had remained drug free for a minimum period of 24 months since their release.

The sample was selected purposively via a homogenous sampling technique. The purposive sampling technique (also known as judgment sampling) was a good choice for selecting these participants because of the qualities of the participants that were crucial in the study (Etikan et al., 2016). Purposive sampling is a nonrandom technique involving individuals or groups of individuals who are willing to share information by virtue of their knowledge or experience with regard to a phenomenon of interest (Palinkas et al., 2015). The homogenous sampling strategy is for the researcher to choose only precise behavioral or traits similarities (Etikan et al., 2016)

of ex-offenders who lived through the criminal justice system and had remained drug free after their release. If there had been a shortfall in the sample size from the halfway houses or aftercare agencies, I would have used the snowball sampling technique to reach out to more individuals (Smith et al., 2009) to recruit as participants.

In order to meet the criteria to participate in the study, individuals needed to be male ex-drug addicts who had been drug free for at least 24 months and no longer participated in any criminal activities after their incarceration, such as drug trafficking or peddling. To ensure that I gained diverse perspectives on staying drug free, the participants were individuals between 24 and 60 years old who were reformed via the prison system, including halfway houses or aftercare agencies. The age and maturity of individuals can be key reasons for desistance from crime, because older exoffenders do not wish to die inside prison and recognize that frequent reentry into the system may mean that upon the next reoffense, their sentence may become lengthier (Chan & Boer, 2016). When potential participants contacted me, I screened them by asking them about their age, their gender, how long it had been since they had left the halfway house or aftercare agency, whether they had been involved in any drug-related offenses since prison release, and when their last incarceration was. Only participants who met all the specified criteria were enlisted as the sample for the study.

I aimed to recruit eight male participants because the IPA approach was fitting to the study's purpose (Smith & Osborn, 2008). Other researchers, such as Smith et al. (2009), posited that three to six participants are a reasonable sample size for a good

IPA study. Near saturation of the data is likely to occur when the participants have completed the interview, according to Guest et al. (2006).

I approached the management of the halfway houses and aftercare agencies to provide information concerning the purpose and significance of the study. I requested that the managers of these aftercare community agencies post the recruitment flyers in a place where ex-residents and ex-clients would see them. I sought the management's help to distribute the flyers by posting the printed flyers and sending the digital flyers via WhatsApp to invite their ex-residents and ex-clients to volunteer as participants in the research.

The recruitment procedure began when the flyers were distributed to each of the halfway houses and aftercare agencies, and ex-addicts who were interested in sharing their experience contacted me directly via the telephone number printed on the flyers. During these telephone conversations, I evaluated and screened their suitability for the study. The participants who met the criteria and agreed to an interview chose a time and place for the interview during the screening conversation. Then I sent each participant an email to invite them to become part of the sample and attached a copy of the consent form. The consent form was sent prior to the interview to allow the participants to think about their readiness to participate in the study and consider any questions or concerns that they might have.

Although only eight participants were intended to be recruited, according to Smith et al. (2009), that number should have been sufficient to reach saturation. However, when each interview transcript was returned from the professional transcriber, I read and analyzed the data to derive patterns, categories, and themes. This process continued throughout the data collection process, and empirical

confidence was achieved whereby saturation occured when there was no new information to construct a new theme (Saunders et al., 2018). If there had been an emergence of a new theme in the eight transcripts, I would have recruited up to two more participants to verify that no other new patterns or themes emerged. If new information emerged again, I would continue to recruit more participants until I was certain that I had reached saturation. I expected to need no more than eight participants in total to reach saturation.

Instrumentation

As part of the preparation for the interview, I developed a protocol to guide me in the interviewing process. The interview protocol consisted of statements that included a brief introduction of myself for rapport building, an explanation of the purpose of the research and its benefits, a statement intended to alleviate concerns about confidentiality, and phrases for early termination of the interview, in case this was requested by the participant or I discovered that the client did not meet the criteria for the interview. The interview protocol also contained semistructured openended questions for the participants to share their lived experiences. The questions were constructed in a funneling fashion to direct the questions from general views to specific issues (Smith & Osborn, 2008). A digital audio-recording application on my mobile phone was used to capture the exact words of each participant.

The first research question involved the participant's lived experiences and motivation to stay off drugs. I developed the interview protocol so that all of the interview questions were relevant for the discussion of lived experiences and motivation. The answers by the participants were well elaborated using follow-up questions to provide flexibility to encourage the participants to think deeper. Follow-

up questions could prompt or elicit more and detailed information from the participants (Castillo-Montoya, 2016). In this way of questioning, I sought to achieve sufficiency of the data for the research. I addressed the second research question about meaning-making processes using the same approach. The data should contain information about how the participants constructed and made sense of themselves, events, and relationships in their lives.

Researcher-Developed Instruments

The semistructured questions that I developed were grounded in the literature and were suitable for this IPA study so that I could explore sensory perceptions; psychological phenomena of thoughts, memories, associations, and fantasies; as well as the participants' interpretations of the experiences (Pietkiewicz & Smith, 2014). As part of the development and refinement of the instrument, and to establish sufficiency of data collection, the interview process was practiced with one individual to evaluate whether the open-ended questions had clarity, limitations, and to ensure that questions were relevant and not perceived as impertinent by the participant (Kåven et al., 2019). The individuals selected to participate in the practice had similar interests and backgrounds to those who were recruited for the study (Piškur et al., 2016). They met the criteria set for the participants, except that they were people whom I knew and had facilitated aftercare counseling programs with when they were released from prison. After the practice, I revised the questions and probing questions accordingly so that the participants could explain their lived experiences and the meaning that they made of them. When I revised the questions, I ensured that they were still related to the study's research questions.

These questions were meant to elicit rich and detailed information from each participant to establish the sufficiency of data collection. The data emerging from the in-depth interviews that did not yield new insights about the major themes were determined as the sufficiency of data (Tait et al., 2015). If a new theme was found within the thematic framework that identified the overarching themes, more participants would have been recruited through the snowball sampling technique. The addition of participants would have contributed to the dataset and also verified the validity of the new information to determine whether data sufficiency had been established.

The questions were open ended so that I could probe deeply into the experiences of being drug free, which included participants' behaviors, perceptions, and attitudes. These tailored questions were relevant to the research questions so that the participants could share meaningful insights about the psychological and social experiences of a drug free life.

Before approaching the participants, I became familiar with the interview questions and follow-up questions. Castillo-Montoya (2016) posited that a good interview session requires the interviewer to use observational strategies, creativity, and insight instead of pursuing a mechanical conversion of the interview questions. I observed the responses from the participants and, if necessary, rephrased the follow-up questions in a manner that could help the participants to understand them, as English might not have been their first language. The follow-up questions afforded me the flexibility to alter the sequence of questions and probe to help the participants to feel noninterrupted as they told their narratives (Sikes et al., 2019). The follow-up questions were useful in encouraging the participants to elaborate or clarify responses

(Patton, 2015). I cautioned myself to engage the participants in a way that entered into their personal world and to ensure that I did not coerce them into responding to my questions (Smith & Osborn, 2008).

To establish content validity, the self-designed interview protocol were exhaustive enough to prompt the participants to reflect deeply (Casper et al., 2018), and the approach to gathering information were carefully planned and carried out, so that interview questions were sufficient to produce enough data to fully address the research questions. Another criterion to establish content validity was to reach data saturation from the interviews (Fusch & Ness, 2015).

Member checking was an important aspect of validity in my study. Once the transcript was completed, the respective participant would receive an email with the attached transcript for member checking. The purpose of member checking was to minimize research bias by involving the participant to check and confirm the results (Birt et al., 2016). The participants were encouraged to look through the verbatim transcripts when they received the hardcopy so that they could verify if the transcripts of the interview were accurate. They were to make the corrections if there were any errors and returned the amended transcript to me. I also seeked permission to contact them over the phone should I required further information and/or clarification of their interview.

Procedures for Recruitment, Participation, and Data Collection

The collection of data for each research question involved me using the selfdeveloped interview protocol to obtain information from the eight recruited participants. The participants were male ex-drug addicts who had undergone their rehabilitation and reintegration at the halfway houses or aftercare agencies. Each participant scheduled a time to meet with me once for the interview, and the interview should last between 60- 90 minutes. The participant decided the place, day, and time to hold the only interview. The place for the interview had minimum distraction, and only the participant and me were in the room to ensure quality data was collected. To minimize any interruptions to the livelihood of the participants who were involved in the study, they needed to meet me only once for a face to face interview. The participants were likely to hold two jobs or need the overtime to earn more income to keep up with the household expenditure. They would feel less inconvenience and become more willing to participate in the study if the frequency of the interview was maintained to only one event.

A digital audio recorder application from the Samsung Galaxy S10 were used to record the session as part of the process of data collection. A professional transcriber who signed a confidentiality agreement did a verbatim transcription of the session.

I hoped to recruit all the participants from the ex-beneficiaries of the halfway houses and aftercare agencies. However, my experience tells me that many ex-drug addicts who succeeded in staying away from drugs after their release might prefer not to be identified as ex-addicts. It is because they had rehabilitated and successfully lived a new life and did not wish to be associated with sensitive topics such as drugs and ex-offenders again. If there was a shortfall of participants from the halfway houses and aftercare agencies, I approached the participants to ask them to refer me to those who might be interested in the study using the snowball sampling technique (Smith et al., 2009).

Debriefing After the Interview

Patton (2015) asserted that before the participant and I left the interview site, a debrief was necessary. I ended the session by checking how the participant was feeling after answering all the questions and sharing his lived experiences, thoughts, emotions, and critical events. Lune and Berg (2017) mentioned that during the face to face interview, participants might become upset, agitated, or otherwise unsettled. During the interview session, it was possible that the participants might feel uneasy and unsettled because they recalled the bad experiences of life in prison and the disappointments and hurts that they had caused to their loved ones. In such a situation, I would provide a list of Family Service Centers that they could approach to receive low-cost counseling near their house.

If a participant decided to terminate the interview, he was free to leave the study at any point, and I would assure him that there were no consequences to him. I would inform him that his contribution to the interview would be omitted as part of the study. The sharing of the past might also trigger a desire for drugs. It was necessary to make suggestions to the participants that they might need assistance (Lune & Berg, 2017).

Data Analysis Plan

Data analysis in IPA and the data collected should have a direct association with the research questions regarding the motivation to stay off the drugs. The purpose of the analysis was to focus on the accounts of the lived experience and meaning making with an open-minded approach. The process of data analysis involved data immersion (Pietkiewicz & Smith, 2014), which required me to become immersed in the data by reading the transcripts several times and referring to my own

journal and notes (Smith & Osborn, 2008). Pietkiewicz and Smith (2014) asserted that the researcher should be immersed in the transcriptions and data, make notes pertaining to their observations and reflections relating to the interview, or to incoming thoughts and comments that could give significant information. According to Pietkiewicz and Smith (2014), the detailed and comprehensive notes are the source material that will align with each research question.

By examining the details of the first transcript and then subsequent cases, I traced the patterns as similar data and differences emerged across the transcripts and became evident (Smith et al., 2009). Based on the work of Edmund Husserl, phenomenology refers to the events and objects that can only be perceived by the individual as an essential phenomenon (Pietkiewicz & Smith, 2014). Incorporating the phenomenological attitude, I was attentive to how participants articulated their lived experiences and meaning-making processes to explore the emerging themes. I also referred to my journal, where I made regular inputs throughout the research process. This was because, in interpretive research, the notes from the reflexive journal were essential in approaching and interpreting the data (Arsel, 2017).

I organized the data for initial clustering and thematic development in order to construct the final structure of themes, noting which superordinate themes and subthemes were identified across the total data (Smith et al., 2009). The hermeneutic application of IPA requires the researcher to interpret and make meaning of the participants' psychological, emotional, and social experiences and to articulate the essence of these experiences (Pietkiewicz & Smith, 2014).

Following the principle of idiography in IPA (Smith et al., 2009), I analyzed one case at a time; only after completion of the first case, I moved to the second; only

after completion of the second I moved to the third, and so on. I also chose the most detailed, complex, and engaging case to start the case analysis as suggested by Smith et al. (2009). The process to analyze the data began with manual coding from the transcribed documents to understand the meaning-making that the participants shared about their experience (Meneses & Larkin, 2017). IPA analysis starts with coding at the individual case, referring to the transcript line by line to identify the individual's experiential claims, concerns, and understandings (Meneses & Larkin, 2017). I noted comments that surprised me and caught my attention as being important. Coding the data continued according to Smith and colleagues' (2009) processes as I searched the data for meaning and essential patterns and through immersing myself with the transcripts again and again.

I consolidated codes to find inferences and established the experiential meaning of the participants. The consolidated codes were grouped together to form categories. At this stage, I encapsulated the central meaning of the participants' lived experiences in one or two words (Alase, 2017). The next phase was to craft the themes from the categories and patterns of the essential meanings that were associated with the phenomena (Tuapawa, 2017). Any discrepant cases that were identified through the dataset were noted.

Issues of Trustworthiness

The quality and rigor of the research were crucial factors to determine the trustworthiness of the study. In qualitative research, rigor is synonymous with trustworthiness, which means the level of confidence in the data and interpretation, as well as the methods used, that attest to the quality of a study (Connelly, 2016). In this study, it was desired that a high quality IPA research was maintained via the

trustworthiness of the data. Criteria for trustworthiness are credibility, transferability, dependability, and confirmability (Connelly, 2016; Patton, 2015).

Credibility

Credibility refers to the assurance that the researcher accurately represents the participants' views of their lived experience; the concept is parallel to internal validity in quantitative research (Patton, 2015). Strategies to increase credibility were prolonged engagement by using relevant interview protocols, extensive exploration of the data, persistent observation and reflexivity, and member checking (Creswell & Creswell, 2017; Korstjens & Moser, 2018). Each individual transcript would be verified by checking against the original digital recording to enhance credibility (McGrath et al., 2019). I was committed to spending time with each participant to build rapport, listen attentively to the responses, show interest and curiosity, and ask relevant follow-up questions to invite continued conversation during the interviews. I diligently made notes and observations during the interviews. During data analysis, I immersed myself with the data, carefully reconstruct the data as the truth, and made reflexive notes, which became my journal throughout the whole study. Member checking was another method to ensure credibility (Birt et al., 2016) as I returned the interview transcripts to the participants and asked them to check that their thoughts were accurately reflected on the transcript and then the transcript should be returned to me via email (or snail mail using the self-addressed stamped envelope provided by me). Credibility was also established when the data had reached saturation, which meant the dataset no longer revealed new themes (Fusch & Ness, 2015).

Transferability

The researcher's duty is to provide readers with information for them to determine whether the findings are applicable to their own cases (Korstjens & Moser, 2018). I aimed to provide a thick description of lived experiences that included rich and direct quotations, descriptive phrases, or experiences that expressed the participants' interaction with the environment (Anderson, 2017). The careful interpretation of thick descriptions was for the reader to assess the suitability of the experience of the ex-drug addicts who were released from prison whether there is any potential application to other times, locations, individuals, and contexts for transferability.

Dependability

I made an effort to take notes in my journal to register the impression of the interview and after the interview. Reflective journaling would take place immediately to improve the quality of data collection (Greenwood et al., 2017). Greenwood and her fellow researchers also suggested the researcher listen to the digital recording and amend or revise the field notes and observations. I also compared the transcript to the audio recording after the transcriber had returned the transcript to me. Dependability in qualitative research also includes an audit trail (Amankwaa, 2016). An audit trail required me to be reflexive in raising questions about the interpretation of notes, the aggregation and interpretation of data, and the choice of methodological procedures and its implementation and review. I showed discipline in making proper documentation of the data, methods, and the decisions made during and about the project so that the process was traceable and documented (Patton, 2015). This would facilitate easy references for audit trail.

Confirmability

To assure confirmability, the aspects of neutrality and intersubjectivity in interpreting the data are major factors (Korstjens & Moser, 2018). Intersubjectivity is understood as the shared perception of reality among each other (Smith et al., 2009). To secure intersubjectivity, I remained curious during the interviews to garner details from participants to clarify what they meant and stayed cognizant of when my personal preferences and worldviews were influencing how I engaged with participants and during data analysis (Korstjens & Moser, 2018). I reviewed the notes from the interview and wrote my reflections and elaborations in my reflexive journal (Amankwaa, 2016). Without proper journaling, bias undermined the rigor of qualitative inquiry (Patton, 2015) and limited confirmability in the research method (Amankwaa, 2016).

Ethical Procedures

To maintain the expectations and requirements of ethical research practice, I stayed faithful to the ethical procedures throughout the research process. The approval of the IRB of Walden University was obtained (approval numbers: 06-11-20-0492147) before any recruitment or collection of data begins. Even though the men in the study had a history of imprisonment, institutional permission was not required as all the participants already had received their remission order, a court statement to indicate that they completed their incarceration. The participants were not considered vulnerable populations because they were ex-drug addicts who had abstained from drugs and integrated into society. Yet they might feel uneasy and unsettled because they recalled the experiences in prison and events of the past during the interview. They could even encounter flashbacks (Durnescu, 2019) and feelings of the

disappointments and hurts that they had caused to their family members. In such a situation, I would provide information about the Family Service Centers, where each could receive government subsidized counseling near his house.

If the participants refused to sign the consent agreement for the interview as well as the digital recording for any reason, I should respect the decision of the participant, and I would not proceed with the interview. In cases when the participants knew me because they might have heard of some of the intervention programs that I had introduced, I would inform them during the interview that they could terminate the interviewing process at any time without consequences.

To ensure confidentiality, the environment of the room should provide privacy and security for the participants to share their experiences, feelings, and meanings of the experiences. The place of the interview should be in a room with no visibility from outside and without any other individuals around except the participant and me. There were counseling rooms that were available for renting in the private area of a public building to suit the participant's preference and time. I would pay for any room fees should that be necessary.

Because I was formally employed in an aftercare agency, my experience tells me that many ex-drug addicts who had rehabilitated and successfully lived a new life do not wish to be known as an ex-offender. I assured participants that their names or any identifying information were not revealed in the study. Each participant was identified by a number.

The recordings from all the participants were sent to a professional transcriber for verbatim transcription. The professional transcriber signed an agreement of confidentiality before the recordings were handed over for transcription into text. I

carefully reviewed each transcript for accuracy while I listened to the audio recording and compared it with the transcript to ensure that the data was correct.

After the interview, it was not necessary to contact any of the participants and I will delete all their telephone numbers on my handphone when the study is completed. As part of the qualitative research, I informed the participants that direct quotations, descriptive phrases, or experiences of their lives would be used to support the conceptual findings and codes, but they should remain anonymous so that no one can trace them.

I informed the participants that the data collected, such as the hard copies of the transcripts and the digital audio files, would be stored and locked in the drawer located in my personal study room. The digital files were encrypted with a password, and no other individual was able to access the documents and digital audio files except me. All documents will be destroyed 5 years after the completion of the study. There were no other ethical issues that I could foresee at this time that could jeopardize the study as there was no association or relationship that I might have with the participants. There was no undue influence on the participants to take part in the study.

A compensation amount for the participant was given in the form of grocery vouchers to reflect the time spent for the interview. Participants received the grocery vouchers of S\$20, which would be purchased by me from the NTUC Fairprice supermarket. The amount should not become a coercive factor to draw individuals into participation (American Psychological Association [APA], 2016).

Summary

The data collected formed a substantial database for data analysis and construction of themes to understand the lived experience and meaning making processes of the participants to remain motivated to stay free from drugs. The eight participants of two religious beliefs and of three different ethnic groups provided comprehensive data to the study. The interviewing format via video calls resulted in little impact on the collection of data as compared to face to face interview. The five superordinate themes and 10 subthemes constructed from the raw data contributed sufficiently to answer the two research questions. The themes and their respective quotations from the narratives of the participants gave sufficient insights into the lived experiences of male ex-addicts and how they made sense of their motivation to stay drug free after their incarceration. The results showed that the participants had similar experiences and perspectives on how to remain successful on the journey of drug cessation. They also described the different types of motivations associated with the things and concerns that caused them to remain clean from drugs when they answered the research questions and the follow up questions. No discrepant cases were identified that needed to be accounted for and factored into the analysis. I had also listed the evidence of trustworthiness, including credibility, transferability, dependability, and confirmability to demonstrate the rigor of the study. Chapter 5 contains sections that include the interpretation of the findings, limitations of the study, and recommendations for future research. The chapter will end with a section to discuss the implications of the study for positive social change.

Chapter 4: Analysis and Results

Introduction

The purpose of this qualitative phenomenological study was to explore the lived experiences of male ex-addicts who were in prison in Singapore and how they made sense of their motivation to stay drug free after their incarceration. The research questions that guided the research were the following:

- How do male ex-addicts who were in prison and now are drug free talk
 about their lived experiences while remaining motivated to stay off drugs?
- What are the meaning-making processes involved in the motivation to remain drug free for these ex-addicts?

This chapter reveals how the participants took part in the interviews under the COVID-19 pandemic situation. I also explain the demographics of the participants and provide details of the data collection process. I then include a description of the in-depth analysis of the data collected that reveals the emergent themes. The next section involves the evidence of trustworthiness in the research and an elaboration of the credibility, transferability, dependability, and confirmability of the study. Finally, this chapter addresses the results of this study that answer the research questions, supported by detailed information abstracted from the transcripts.

Setting

The interviews were conducted during an unprecedented time when many countries in the world experienced a lockdown due to the COVID-19 pandemic or its resurgence. In Singapore, the government did not impose a lockdown to contain the spread of the virus, as compared to the neighboring country, Malaysia. Singapore implemented a circuit-breaker measure that restricted movement and involved

mandatory mask wearing for people who were outside their homes to suppress infection. There was the temporary closure of premises such as places of worship and entertainment venues, while malls and retail establishments had to reduce their crowd density. Offices could only allow operation with a percentage of employees who provided essential services. Counseling centers could not conduct face-to-face sessions unless the clients would suffer significant or rapid deterioration of their condition, or if their health and well-being might be threatened if no intervention were rendered. Because of the pandemic, all of the interviews for this research had to be conducted using video calls via the WhatsApp mobile phone application, except for one face-to-face session. The exception was made because the circuit-breaker measures imposed by the Singaporean government were lifted partially, and the participant requested that the interview be held at his workplace as his employer had given permission to conduct the session during office hours.

Demographics

A total of eight participants were recruited to discuss or share their lived experiences and meaning-making processes. They were all males who had been incarcerated, and two of them had previously been detained in the Singapore Boys' Home (a Detention and a Juvenile Rehabilitation Centre for youth). All of the participants were incarcerated for between 1 and 16 years and had been imprisoned between one and eight times. Six of them had also been sentenced to caning for offenses related to drug activities. However, one participant was given short-term imprisonment of 2 weeks at the Drug Rehabilitation Centre (DRC). He was caught in the year 1995, when the view of punishment and discipline as a form of rehabilitation shifted to a framework that included more counseling and teaching of life

development skills before the amendment of the Misuse of Drugs Bill (Misuse of Drugs, 1998). Among the eight participants, five were Chinese, two were Malays, and one was Indian, and they had all undergone the residential programs at a halfway house based on their faith. Table 1 provides information about the age, race, number of drug free years, history of incarceration, admission into halfway houses, and Boy's Home of the participants.

Table 1Participant Demographics

	P1	P2	Р3	P4	P5	P6	P7	P8
Age	38	35	26	50	46	46	47	37
Race	Chinese	Chinese	Chinese	Malay	Chinese	Malay	Indian	Chinese
Drug free since (year)	2009	2015	2017	2000	2006	2014	2014	2010
Number of incarcerations	4	3	3	4	1	6	8	2
Total years of incarceration	7	9	4	5	1	12	16	8
Sentenced to caning in prison	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Multiple admissions into halfway house	Yes	No	No	No	Yes	No	No	No
Admitted to Boys Home	No	No	Yes	No	Yes	No	No	No

Data Collection

The eight participants were recruited from the list of halfway houses submitted to the IRB. I contacted the management of the organizations so that they could help publicize the study. The management from the various halfway houses sent out the digital fliers to their ex-residents, and five participants responded to form part of the

sample after 6 weeks. A snowball sampling technique (Parker et al., 2019) was then used to recruit three more participants. One participant was referred by one of the five existing participants, and two other participants were referred by those who did not meet the criteria to become participants. It took 4 months to recruit and interview all eight participants.

Each participant had one interview, and each interview lasted not more than 90 minutes. Seven of the participants did the interviews through WhatsApp video calls. Participants were in their office, home, or car, where they could have the privacy and security necessary to share their responses to the protocol questions. I conducted the interview in my study room at home, where I was alone, ensuring that no external interference could influence my concentration and understanding of the participants' narratives. I used the local area network (LAN) instead of the Wi-Fi internet connection at home to secure and stabilize my calls.

One interview took place in person at the participant's office venue, where the participant and I occupied a room for the interview. As this interview was conducted during the easing period of the COVID-19 circuit breaker, we had to ensure social distancing inside the room, and I had my temperature checked by the employee there. We wore our masks throughout the interview, although it was quite uncomfortable when the participant spoke at length, as it was a little difficult for us to breathe while wearing masks. I managed to ask all of the questions in the interview protocol, and we did not encounter any interference, unlike the connectivity issue of WhatsApp or people entering the room to disrupt the face-to-face interview. Being face to face brought different elements to the interview; it was difficult to read the participant's facial expressions because he was wearing a mask, and I believed that he had the

same difficulty in reading my expressions. The face-to-face interview session seemed more formal in comparison with the WhatsApp sessions, although I put in more effort to build rapport and nodded my head more often when he was sharing to encourage him because he could not see my smiles as participants usually did during video interviews. The air-conditioned room made the place comfortable and quiet for the participant to speak with me privately.

The interviews were based on the semistructured questions constructed in the interview protocol, and each session lasted between 55 and 85 minutes. It was sufficient to conduct one interview per participant without contacting the participants for further clarification concerning the information provided. When I conducted interviews via WhatsApp video calls, I used another mobile phone for digital audio recording because it was not possible to record the conversation while using the WhatsApp video call simultaneously. During the face-to-face session, the same mobile phone was used to record the conversation to avoid any confusion regarding where I had stored the digital recordings.

Throughout all of the interviews, we were not constrained by any time limitations. Some of the interviews were conducted during working hours, as the participants' employers had permitted them to take part in the interviews then. I held most of the interviews in the daytime, except for two of them that I held in the evening hours. I also arranged the interview schedule based on the convenience of the participants to ensure that they could spend at most 90 minutes with me for the interview.

The use of technology via WhatsApp complemented the traditional face-toface method of qualitative interviews. It seemed that using WhatsApp allowed a casual level of discourse that enhanced the involvement of the participants. The video call permitted me, as an interviewer, to judge participants' emotions because I could listen to the tone of their voice and see their facial expressions, which helped me to understand what they meant (Wasserman & Zwebner, 2017).

In Chapter 3, I stated that the planned mode of interviewing was in person. However, the COVID-19 pandemic made it impossible to follow this plan, and after submitting a new plan to the IRB, I received approval to conduct the interviews via WhatsApp video call. Seven of the eight participants participated in the interview via WhatsApp, and one participant had a face-to-face session. The other variation from the plan was to email the consent form to the participants when they agreed to participate in the research; they were to reply to the email by stating "I consent." However, the consent form was sent as an attachment through the WhatsApp platform because it was more convenient to access the form and reply to the consent in this way. I sent the consent form after screening the participants through a WhatsApp call. The participants were likely to keep the consent form in their mobile phones for easy reference instead of their computers.

Unusual Circumstances Related to Video Interviews

When the IRB allowed interviews to be conducted via WhatsApp as a result of the COVID-19 pandemic situation, it made the interview experience very different from traditional face-to-face interviews. According to Wasserman and Zwebner (2017), the use of technology tends to neutralize the social and cultural differences between users, especially as they pertain to levels of the social hierarchy. I agree with this position, as the participants and I were able to build rapport very quickly, and the participants seemed comfortable in answering the questions. During the WhatsApp

interview, there were some occasions when disruptions interrupted the session. The internet connection was not always strong and stable in capturing the narrations of participants. In such situations, I asked the participants to repeat what they had just said. The poor connection could have interrupted the flow of participants' thoughts. After reviewing the transcript and my journal, I realized that it might also have given room to the participants, allowing them to become more willing to elaborate and provide more details in that particular section of the interview. Second, when using WhatsApp via the mobile phone, the participants were distracted by incoming messages. I had to politely ask them not to reply to these messages unless they were urgent. However, some of the participants were replying to messages using another mobile phone or reading the messages, and I only discovered what they were doing when they looked distracted. In these instances, I asked them another question to help them continue with their train of thought.

Data Analysis

Data analysis was based on the interpretative phenomenological method outlined by Pietkiewicz and Smith (2014). Its fundamental principles of phenomenology, hermeneutic, and idiography were incorporated for data analysis. I interviewed the participants to help me answer the research questions, capture the phenomenon as perceived by the participants, and decipher existential meaning and contextual relevance. Following the principle of idiography, I conducted the analysis of each interview before comparing themes across interviews (Miller et al., 2018). I had my journal with me to take notes during the interviews on my perceptions of events that the participants described and my other observations. I also recorded any biases that emerged so that I could set them aside. After the interviews, I listened,

reflected, and recalled how the sessions had taken place to add notes to my journal before sending the digital recording to the transcriber. In this way, I ensured that the recording was complete before sending it for transcription. After the transcription, the participants received a copy of the full transcript for accuracy and member checking (Birt et al., 2016).

While reading the transcript, coding the data helped in organizing the information to transition into themes later. These codes represent the hermeneutic account of the meaning and experiential claims made by the participants (Larkin et al., 2006). The codes formed part of the exploratory comments, and they were exported into an Excel spreadsheet for data management. A tab spreadsheet contained the codes of one transcript so that subsequent grouping of the codes could be established into categories (Moser & Korstjens, 2018). The eight individual tabs' information was combined into a summary tab and then clustered into similar categories. These categories formed a broader level of higher order categories where the themes emerged (Eddy & Bustamante, 2020; Saldaña, 2015).

The process of data analysis began with analyzing the first transcript before moving to the second transcript as required by the principle of idiography (Smith et al., 2009). As I listened to the digital recording and matched it with the transcript, I also referred to my journal and wrote additional notes before I developed the exploratory comments (Pietkiewicz & Smith, 2014) or sense-making (Smith et al., 2009). This process took three cycles for me to be fully immersed in the data by reading the transcript and recalling the setting and how the participant responded to the questions, such as with a smile, with a high-pitched and rapid manner of speaking in excitement, or with watery eyes of sadness. The multiple readings helped me gain

insights into the participants' meaning-making, which is fundamental to phenomenological inquiry in psychology (Smith et al., 2009). With this process, I found myself closely involved with the data that contained the lived experience of the participants.

In understanding the meaning-making of the participants, considering contextual relevance was necessary. For example, when Participant 6 discussed the programs in the prison as not being very helpful, I asked the participant to elaborate by using a follow-up question, and he said, "Because uh in prison you see, we want to spend our time in prison uh when expert counselors to come in to conduct a program with us, we just want to avoid staying in the cell for 23 hours." By understanding the context, I saw that the participant was implying that the prison programs were not effective because the prisoners did not have the correct attitude to benefit from the programs. They did not care about the program, as their goal was to get out of the cell. After compilation of the transcript to include the exploratory comments, the next phase involved identifying emerging themes and clustered themes (Pietkiewicz & Smith, 2014). The process of reading the transcript several times, reflecting and inputting new insights into the journal, framing the exploratory comments with inputs from the journal, coding, and constructing the themes was repeated for the subsequent transcripts until all of the transcripts were analyzed.

Generating Codes and Themes

Each transcript's exploratory comments were completed after multiple close readings of the transcript and listening to the audio recording three times. From the data and comments, specific codes were derived to form categories. These codes captured the way that the participants responded to the interview protocols (Alase,

2017). According to Alase (2017), themes should emerge from codes after coding and categorizing the whole transcript.

The first listening served to ensure that the audio recording was complete and audible for transcription. As I listened, I also recalled the interview to add notes to my journal for future reference. The second review occurred when the transcriber had completed the transcription, and I counterchecked it by listening to the audio recording again. I also added notes when new reflections and thoughts appeared significant. The third time that I listened to the recordings was when I compiled the exploratory comments with the aid of my journals. While trying to understand the matters that the participants deemed important, I had to refer to the original data to verify my understanding, and there were times that it became necessary to repeat the process of listening again. For example, when the participants used the Mandarin or Malay language to describe how they felt or what they experienced, I always asked them to explain these vernacular statements, although I understood their meanings. I created a column to put the exploratory comments and codes next to the transcribed data.

To construct the emergent themes, I worked through the exploratory comments and the codes to reduce the volume of details to inscribe a concise and pithy phrase for each of the comments. These phrases reflected psychological conceptualization that was based on the details of the participant's account (Pietkiewicz & Smith, 2014). The themes represent the participant's original content and meanings, and they emerged based on the pattern of the data.

To elaborate on how the codes and themes were generated, here is an example.

The participants talked about the impact of religion in helping them to change.

Participant 3 affirmed, "God is the one that change me. That is my own perspective..." The codes that emerged were as follows: religion gave him hope that he could change; God intervened to enable him to change; Word of God inspired him; and prayers helped him to overcome weaknesses and temptations. These codes became the subtheme called *Spirituality* because they described how religion and growing spiritually had become a force strengthening their resilience against succumbing to temptations, helping them to learn to live in a godly manner, and giving them the strength to journey in life without drugs. I also rechecked the themes with the transcript to ensure that the meanings were accurate and aligned.

The next phase was to establish the clustered themes that included the connection between the emerging themes. Not all the themes were incorporated since only relevant ones that gave information to the overall research question were considered (Smith et al., 2009). They were categorized together according to the conceptual similarities (Pietkiewicz & Smith, 2014). As the analysis progressed, I updated the themes and clustered them to construct the superordinate themes (Smith & Osborn, 2008). These superordinate themes were copied into electronic spreadsheets to aid me in managing the analyzed data more effectively. For example, the themes were listed chronologically to trace the journey of abstinence. It provided a good overview of the themes before moving them around to form the superordinate themes. Upon completing the superordinate themes, I moved on to the next transcript by treating it independently from the previous transcript and repeated the process to construct the subordinate themes. After analyzing all the transcripts and obtained all the subordinate themes, I continued looking for patterns across the themes and made some reconfiguring and relabeling them. Based on the patterns that surfaced, they

were organized into a table (see Table 2) with new labels to identify the superordinate themes and subthemes. The second column in Table 2 indicates the participants who had provided the data that were categorized into the emerging themes. The absence of a participant number implies that the particular participant did not share the theme that emerged on the left of the table.

 Table 2

 Emergent Superordinate Themes and Subthemes

Superordinate themes (SOT) and subthemes (ST)	Participants identified (P)
SOT1: Relapse	1, 2, 3, 4, 5, 6, 7, 8
ST1a: Childhood influences	1, 3, 4, 5, 7, 8
ST1b: Negative prison environment and disinterest	1, 2, 3, 4, 5, 6, 7, 8
in programs	
ST1c: Tendency to relapse	1, 2, 3, 4, 5, 6, 7, 8
ST1d: Attempts to change	1, 2, 3, 4, 5, 6, 7
SOT2 – Change	1, 2, 4, 5, 6, 7
SOT3 – Recovery journey	1, 2, 3, 4, 5, 6, 7, 8
ST3a – Insight to their problems	1, 2, 3, 4, 6, 7
ST3b – Progress	1, 2, 3, 4, 5, 6, 7, 8
ST3c – New mindset	1, 2, 3, 5, 6, 7, 8
ST3d – Positive influences	1, 2, 3, 4, 5, 6, 7, 8
ST3e – Spirituality	1, 2, 3, 5, 7, 8
ST3f – Always on guard	1, 2, 3, 4, 5, 8
SOT4 – Motivations	1, 2, 3, 4, 5, 6, 7, 8
SOT5 – Relapse prevention	1, 2, 3, 4, 5, 6, 7, 8

Table 3 shows samples of supporting codes found in the superordinate themes and subthemes. The codes were collated data linked to the themes, and they were found at the right column of the table. The codes shown in the table formed a portion of all the codes available from the analyzed data.

Table 3Superordinate Themes and Subthemes With Supporting Descriptions of Codes

Superordinate themes (SOT) and subthemes (ST)	Supporting codes
SOT1: Relapse	Supporting Court
ST1a: Childhood influences	• Peer negative influence since young
	Parent was an addict
	• Stayed at boy's home
	• Inhalant/substance abuse
	• Join gangs
ST1b: Negative prison environment and	• Frequent re-entries
disinterest in programs	• Used to prison life
	Prison could not transform life—new mindset
	• Negative influence from fellow inmates
	Not ready to change
	• Prison programs not effective
ST1c: Tendency to relapse	Easy to relapse
	Cannot resist drugs
	• Self-gratification
	Triggers, urges and cravings
	Withdrawal is terrible
	• "When they are out from prison. Less than few months
	they will come back again"
	• "I want to meet my friend"
	Easy money to sell drugs
ST1d: Attempts to change	Making many attempts
	• Lack determination
	• Family's wish
	• "I stay seven time (at the halfway house)"
	Lack motivation
	Self-recovery failed
SOT2: Change	• "I lost my elder brother during a drug dealing
	misunderstanding"
	• "Suddenly they (family members) age a lot"
	• "my mother damn old already ah, but still have to go to work."
	• "when I look at that mirror, I can't even recognize myself"
	"But I realize that my mother is getting older"
	• "but all the children got their father and mother but
	there's no one for me"

Superordinate themes (SOT) and subthemes (ST)	Supporting codes
SOT3: Recovery journey	supporting court
ST3a: Insight to their problems	Awareness of limitation and issues
	Keep busy
	• Seek help
	• "don't condemn yourself"
	,
ST3b: Progress	Stop fighting
· ·	Increase self-esteem and self-confidence
	• "no more gang for me"
	Care for family and other people
	• There is progress made
	Achieving goals set
	• "do different things in order to live a different life"
	• "I get myself involved in positive activities"
	Upgrade skills and education
	Accountability on progress
	J 1 8
ST3c: New mindset	• "every day I just as per normal, where we go to
	work do my work as a whatever assigned work"
	• "shouldn't live life for ourselves should live life for
	others"
	• "I am able to change my mindset"
	• "But if our mindset never change, we will still go back to
	our habit"
	• "I need to hold on to many responsibility la. I need to
	provide"
	"My mindset is really need to discipline"
	• "I want to live a new life"
ST3d: Positive influences	• "I see people who have changed"
	Care and concern
	• Staff was sincere to help
	Positive environment at halfway house
	Programs were useful and included spiritual teachings
	• "taught me a lot, how to change to be a better
	person"
	• Role model
	Benefitted from halfway house
ST3e: Spirituality	. Hans in Cod
313c. Spirituality	 Hope in God "the biblical principal and value that I have learnt"
	if I have any problem I pray, I can recover"
	Help to renew mindset
	God's love
	God's help to overcome temptation
	God's forgiveness
	God's forgiveness Word of God inspired
	- Word of God inspired

Superordinate themes (SOT) and subthemes (ST)	Supporting codes
ST3f: Always on guard	• Previous groups of friends were bad influence
	 Things that could trigger drugs craving
	• "the one that bring us back to drugs is uh, finance"
	Safeguard oneself
	• "what can lead me to addict, uh cigarette"
	• Beware of discouragement from people
	Stress could lead to drugs
SOT4: Motivations	Return to prison to inspire inmates to change
	• New life
	 Could give back to society
	• "It's a new life. It's so much better than the past"
	• Purpose in life
	 Could take care of parent family members
	• Could be a model to others
	• Enjoy the freedom/autonomy
	 Not to return to prison as inmate
	• Living without fear that the law is catching up on them
	Continue to do good
	• Live meaningful
	• Live purposefully
	Has a future
	• Love their own family
	 Life as an addict was very meaningless
	 Not living a dangerous life as a gang member
	• Do not wish to let others who supported him down
SOT5: Relapse prevention	• "I have changed my friends, my surrounding"
	Supportive network of friends
	• "the society is totally different from last time"
	Supportive employer
	Supportive family
	Supportive church community

Discrepant Cases

Discrepant cases are understood as collected data from a participant that is not congruent with the analyzed themes (Landrum & Garza, 2015), and such cases are accepted as outliers. More participants should be recruited to verify the existing data to confirm that the study has reached saturation. As saturation occurred by the sixth participants and no outlier data obtained, the study did not present any discrepant cases.

Evidence of Trustworthiness

The research data had to undergo strict compliance to meet the criteria for trustworthiness as mentioned in Chapter 3. The checks involved credibility, transferability, dependability, and confirmability. I used some methods to ensure trustworthiness, including member checking, reflexivity, extensive exploration of the data, astute observation, participant quotations, dogmatic interpretation, and comprehensive interviewing.

Credibility

Being mindful of the plans listed in Chapter 3 to obtain credibility, I worked according to the plans. I used the constructed interview protocols to collect the data by interviewing via video WhatsApp or face to face, whichever setting the participants felt most comfortable due to the COVID-19 pandemic. Besides asking the semistructured questions in the interview protocol, I asked follow-up questions to explore the lived experience and meaning-making processes to remain motivated to stay drug free. Sometimes, the participants used their mother language to express themselves in Mandarin or Malay. On such occasions, I asked them to explain the meanings even though I could understand most of them. I made observation notes and

reflexive notes in my journal during the interviews as I explored and interpreted the data (Arsel, 2017). I was careful to ensure the textual evidence was consistent with the interpretation (Kekez, 2019; Patton, 2015). The participants received the respective transcript to verify their narrative's accuracy following the member checking method. It is noteworthy that the data reached saturation by the sixth participants, and no further themes arose from the rest of the participants' database.

Transferability

Eight participants formed the sample to take part in the research. Although the sample size seemed to be small, the data reached saturation after the sixth participant, a phenomenon that matched the numbers of participants (between three to six) that Smith (2009) and his colleagues suggested when using IPA. Data saturation is a crucial factor for transferability (Mason, 2010), so readers can consider the results' applicability to their own contexts. Transferability was also promoted by providing a thick description of the lived experiences with direct quotations and descriptive phrases from the participants (Mokoena et al., 2019).

Dependability

During the interview sessions, I took notes to register my observations of the participants' non-verbal communication, such as smile, laughter, sadness, and even the participants' distractions because of the messages on their mobile phone. I also registered some immediate thoughts I had while interviewing so that further reflections of the interview after the session were added to my journal (Greenwood et al., 2017). I improved the dependability by listening to the digital audio recordings three times to make additional revisions to the field notes and observations. The data's necessary documentation was carefully preserved and kept in hardcopy and digital

form stored in the thumb drive in my locked cabinet. They included the interview transcripts, reflexive notes, and data analysis methods to establish the audit trail (Amin et al., 2020; Korstjens & Moser, 2018).

Confirmability

The process to establish confirmability required me to honor neutrality and avoid bias in interpreting the data (Nowell et al., 2017; Patton, 2015). I was reflexive and self-critical, and journaled my thoughts on the phenomenon of the lived experience and the meaning making decisions of the participants. I avoided any preconceived ideas about the behaviors and understanding of drug addicts due to my previous work experience with them. I went to the interview sessions with an open mind to listen, learn, and comprehend the narratives. I initiated follow-up questions to investigate details from the participants so that the research questions were answered adequately and relevantly. The insights became part of the analysis for deriving the themes that were critical to the research findings. Using my notes in the journal as a reference for my reflections and observations played a regular role in keeping me from bias and inaccurate data interpretations (Korstjens & Moser, 2018). Details and quotations were available for the readers to understand the constructions of the various themes. I also offered clarity to the findings in this study by providing explanations and descriptions.

Results

The purpose of this study was to explore the lived experiences of male exaddicts who were in prison in Singapore and how they made sense of their motivation to stay drug free after their incarceration. Two research questions that were aligned with the research problem guided the construction of the four semistructured questions in the interview protocol to generate data. The research questions were:

- How do male ex-addicts who were in prison and now are drug free talk
 about their lived experiences while remaining motivated to stay off drugs?
- What are the meaning-making processes involved in the motivation to remain drug free for these ex-addicts?

All the participants answered the four semistructured questions in the interview protocol, including follow-up questions to gain a deep understanding of the lived experience and meaning making decisions of the participants. The results provided insights into the participants' perspectives concerning how they were able to stay away from drugs for at least 24 months.

Addressing Research Question 1 (RQ1)

The first research question was 'How do male ex-addicts who were in prison and now are drug free talk about their lived experiences while remaining motivated to stay off drugs?' Five superordinate themes (see Table 2) emerged from the data describing the lived experience of remaining motivated to stay drug free. They were (a) relapse, (b) change, (c) recovery journey, (d) motivations, and (e) relapse prevention. I derived four results based on the themes to answer the research question (RQ1) as they were the experiences by the participants: (a) making right decisions, (b) staying drug free, (c) the triggering event, and (d) pathways to recovery. This section comprises quotations from the available transcripts of all the participants, and they complemented the themes and codes listed in Table 2 and Table 3, respectively.

Result 1 of RQ1—Making Right Decisions

Making the right decisions after the participants had decided to change paved the way to abstinence. The actions and behaviors that followed after the decision were not wavering as the participants persevered to commit to change. Participant 1 gave his views on making the right decision to change his familiar environment to one that could support and maintain the process of change. He said,

It is about the opportunity I have, 11 years ago, and I take hold of the opportunities to come, to set aside my peers my friends and move to the halfway house to restart. I think that is one of the key that I have changed my friends, my surrounding, and changed my mindset. I think these three thing changes, that's why my new life started ah.

The change of mindsets was necessary for the recovery journey, and all the participants shared this view. They reckoned the challenges ahead, but they knew it was the right decision to change their mindset. Participant 6 explained,

It's not easy, but is possible... I determine myself I want to change. So it's all about yourself, like what I say it's all about yourself, your mindset. The drug does not come to you, you know? You come out from prison ah, the drug does not come to you... we are the one who go and find these drugs. From

Participant 7 also shared he decided to quit his gang, although he was one of their leaders, as he realized that it was necessary to stop his addiction.

Tampines, you willingly to travel to Jurong, just to purchase the drug.

Yah, that's the main focus that I set, the focus on my son then I say I need to do something for my son. I not and it is enough because I also came from a secret society background which I said okay I need to renounce from the gang

because uh that's a lot of unrelated issues inside prison you see, to get you involved in unnecessary things if you are in a gang.

Result 2 of RQ1—Staying Drug Free

The participants had gone through many occasions of relapse that led to the resumption of their addictive behaviors. Although there were intentions to change, they failed so frequently that they might experience fatigue, with numerous abstinence attempts. They shared information to describe their lived experiences about the failures which hindered their progress. For example, Participant 3 believed addicts needed to "know what" kind of person they were so that they knew the things in their life that required changes. They provided some insights into the factors that pulled them back into relapse and the preventive factors that could help ex-addicts who are keen to change. The superordinate themes such as 'Relapse' (SOT1) and 'Relapse Prevention' (SOT5) gave insight into the participants' experiences.

Relapse (SOT1). Returning to the criminal justice institution is one thing that the prisoners do not want because of the lack of autonomy to do what they want. The participants had thought about changing, especially while they were serving their terms. They made promises to themselves and their family members that they would change and would not reoffend. However, all the participants were repeated offenders and could not carry out these promises. Participant 4 picked up the habit of inhalant abuse at the age of 9 when he started glue sniffing, and he became addicted to psychoactive drugs after mixing with wrong groups of friends, "I started uh drugs, it's not drugs la, it's glue, I started with glue at the age of 9, and I already started to mix around at that age. So my uh, the way I grow up is totally different. Different atmosphere, so different types of life." Participant 5 even demanded money from his

parent to feed his habit when he replied during the interview about how he could purchase drugs when he did not work, "My parents la. If not, sometimes, you buy urm, a big quality, for a quantity of it, then you take half and then you sell half. That would also help to bring you some income to support my own consumption." Participant 3 viewed drugs as fun and enjoyment before he changed, "I feel like drugs is just fun lor, I feel that I am having a good time taking drugs ah." Participant 8 shared that it was difficult for him to leave his old friends because they knew each other since young as they did not support his transformation from crimes, "When we are young, we are so close, after that become like that… who gossip about me, or say bad about that."

They also found difficulties changing their behaviors because the prison environment was not conducive for rehabilitation. Participant 1 became bolder in committing criminal offenses because he made more friends inside the prison, who gave him more ideas to commit crimes and escape from getting caught. He said,

Okay because since young I know that it is wrong, but maybe is because of peers influence where I get to know about drugs when I was in second imprisonment, ah, first imprisonment. I get to know what drug is, how do I play drugs, what drug is it. So when I was released from my first imprisonment, my peers of friends is actually involved with drug. And so, I actually get involve with them and that's how we get deeper and deeper lor. We sink deeper and deeper.

Participant 3 discovered possible ways of peddling drugs after talking to other inmates while he was inside the prison. He disclosed, "When we are talking it will just revolve around drugs... then you think that the way they peddle drugs is feasible, then instead

of you think of wanting to be good right? You be more daring, firstly, you get more ideas." He also said, "Based on the statistics (recidivism rates), it doesn't work for me. There is many programs but it is just not working ... there are more factors to it and they (prison officers) are not able to see it." According to Participant 7, the prison's negative influence was eminent that he survived by assimilating into the culture. He explained,

There is nothing much positive inside the prison for me to adapt... So these are the people that be against the law... all these people are not positive mindset but everyone will be the negative... Is like you know, you fall in the sea, or in a river, you sense the current is very strong. The only thing that you can do is uh you can't swim against the current right? ... Float on it. Don't go against it... What does that mean is that so whatever this is, just listen and keep on and moving on la.

Another cause for the failure to change, which the participants identified, was the craving and urges that they experience as temptations. Participant 2 had not consumed any illegal substances since 2015 admitted,

... definitely right now the temptation is still there, the impression never go one know, the experience, the impression. It's in my mind so vivid and so clear ah, that the, the high that the drug bring us to, but right now, I'm able to make uh, a sober and a right decision, which in the past I couldn't.

Participant 5, who had stayed in the halfway house for seven times, indicated his difficulties to change. He recounted the periods he could abstain from drugs, "Ya. sometimes few weeks, sometimes few months also there's one time I think 2 years after that I fall back to drugs again. Only my last trip la. 2006, that was 14 years ago."

Another reason for failing to recover from drug use was the lack of self-determination and motivation to persevere. The participants gave up after some attempts or discouragements, and they caved in because of the stressors in life. Participant 3 gave a representative account of the others' experiences.

When I was going in and out of prison, I was like quite used to it. Because when I went back to drugs it is somehow or rather I would go back to prison what. But then it is meaningless la. I find it meaningless. But it is just a vicious cycle that I can't seem to break out from you know?... I mean I want to change but I cannot change eh. I just cannot break free of that vicious cycle leh.

Participant 4 also remarked he could not understand why he was unable to change even though he had purposed to do so, "I try to many time to change but I cannot change. So where's the mistake come from? What did I did until I really cannot (change), the mistake that I did until I really cannot change my life."

Relapse Prevention (SOT5). Seven out of eight participants identified the preventive factors that helped them remained hopeful and fervent in staying away from drugs. Some of the factors indicated included a new network of friends, community, and employers giving them a second chance, a support network to help adjust and reintegrate into society, and upgrading skills and education. These factors could provide a supportive network and enhance the chances of abstaining.

The participants viewed having new positive network support, reconciling with their family members, and setting social boundaries to avoid any temptation to slip into drug consumption. Participant 2 highlighted some of these protective factors for his successful recovery.

But right now I see drug as a poison and I think ultimately is also something that help me to stay on this journey is my, is uh the leaders, the people that help me along, is a family support, and the people, the my leaders here that help me and advise me.... And what really help me is I think is my faith and friends and environment I think, plays a very big part and the family support... I think really have to be very wise to set boundary, urm for places and contact la.

Participant 8 emphasized the need to have new friends to sustain the ability to recover,

You need to meet with a group of new friends lorh. You need to meet with more new friends that bring you away from the area, so you gather them meet more like one week, meet 2, 1 time for counseling or gathering like that then let them go find work. If they got work right, got lesser time to find drugs what. If they got work, they can work, they got time to gather with the new friends (at the workplace), I think it's okay one la.. That mean they (new group of friends) support me in my working, in my lifestyle, in counseling, in religious reading, in a lot of places la. It help me ya.

The other social factors involved the society's willingness to give the exoffenders a second chance to reintegrate into society and giving them an employment opportunity. Participant 4 gave his experience.

I believe that the society nowadays uh, the society is totally different from last time.... I need to give something back to the community. Because without the community support right, I also cannot change my life. Very important.

Lastly, some participants stressed that when they were released from the prison system, the latter should have a supportive network available to help them adjust and reintegrate into society. Participant 6 highlighted this protective factor because of his experience,

They need support. For example, last time when I come out from prison, like what I share with you just now, if I got problem, I don't know who to talk to. I will go back to my friends. I will take my phone, I call them. Call, call call call, talk, talk talk, I can find solution. The solution is what? Dealing with drugs. smoke drug first, then sell drugs that is the solution.

Result 3 of RQ1—Triggering Event as Catalyst for Identity Change

For six of the eight participants, a triggering event became a catalyst to work hard and refrain from drugs. The event caused an awakening about their state of living and became a turning point for lasting change. The event could be the result of a traumatic event or the searing of their conscience.

When the police arrested Participant 1 for drugs, and they escorted him home to search for more evidence, it was the first time that he realized how unfilial he was and the disappointment and sadness that he had caused his family members since he had promised to change for so many times. He recounted, "So when I was brought back home to search for drugs in my house, I saw my granny, my father, my family members suddenly they age a lot, and it just dawn on me that something had to be changed la."

Participant 2 witnessed his brother's killing because of a drug deal, and this event motivated him to change. However, he returned to drugs about 9 months later and was incarcerated. During that incarceration, he reflected on his behaviors and the

continuation of consuming drugs after his brother's tragic death. His reflections brought a stop to his drug activities. He said,

I thought I tell myself it would not happen to me again. Ya, so I very disappointed myself and another thing is I felt that I very inhuman and cold blood because my brother pass on because of drug... something that I witness and I see and I saw, something that I witnessed and saw in front of me. And yet, I go back to drugs. I am thinking I don't know how to be, I don't know how to face my family, I don't know how to face myself, and I was very disappointed because I, though ah, drug is like always in my mind, I have been putting a lot of effort and determination to overcome la. But somehow or rather, on that afternoon, I just give into the temptation.

Participant 5 described his unexpected turn of events when one morning he could not recognize himself anymore while looking into the mirror to inject drugs at his major vessels of the neck. That morning triggered him to decide to quit drugs as he recalled,

I was injecting myself with all these drugs la. So all my hand and my feet those vein ah, I have no more visible vein. So I have to inject through my neck's vein. So that morning when I look at that mirror, because I need to use the mirror to inject myself mah, but that morning, although I've been doing this quite often, but that morning, when I look at that mirror, I can't even recognize myself.

Result 4 of RQ1—Pathways to Recovery

The change process is a very long journey, and there were many things the participants had to commit to stay on the path and remain motivated. The lived experience the participants described included (a) resolving their personal issues to

embrace new mindsets and attitudes, (b) making practical changes and having a positive environment, and (c) having spiritual faith.

Resolving Their Personal Issues to Embrace New Mindsets and Attitudes.

Most participants had a negative influence in their childhood days as they did not receive substantial parental supervision. They spoke about the circumstances they were in that influenced their personality, such as strengthening their egoism and fostering fake and inflating views of themselves. Participant 4 confessed, "Because sometimes you see, drug addicts ah, they're, our ego is very high. Right, so when you ego is high, you have to bring down your ego for you to change." Their false sense of self needed to change to adopt a different set of values in their lives.

Subtheme 'Insight of their problems' (ST3a) emerged because the participants explained that there were personal issues they had to address. Participant 3 shared his experience about how he could not progress with his decision to change if his issues were not resolved.

Because these issues, I cannot progress, I cannot do anything. With all these issues it's going to stumble me it's going to hold me back. Let's say I go and work outside. With all these issues I cannot work. Bad temper, low self-esteem, prideful, these type of things you cannot make it to society what, with all these issues. You know what I mean?

Participant 7 added how he grew up to become a violent and aggressive person as he joined the secret society. His attitude had to be addressed, and it should not remain in him if he wanted to succeed in recovery.

What previous mindset is to mmm... is violence... when I was in the secret society right, the mindset is that you need to be aggressive you should not care

for others, right! You see, this is what the seniors have been taught me to do.

Eh you don't give them face; you need to be aggressive. People talk to you like that, you must be talk to them in an arrogant manner. Gangsters need to be aggressive and arrogant. You cannot give way to them...

The participants shared their experiences and saw the need to change their mindset, attitudes, and values as part of the process to live a drug free life.

Participant 2 commented on his new perspectives after his change in mindset and values.

I always think for myself but after I came here (halfway house), eh I start to see that we shouldn't live life for ourselves la. I think should live life for others, especially your family member, learn how to appreciate them, learn how to love them. And maybe some of the values is I think that if I got money, I can have everything. That initially, but after that I think... money can do a lot of thing but there are some of the thing that money couldn't do la. Ya. So is to, also some of the value is like, last time maybe I believe in like... you are recognised, like people respect you, like you are something. But that is all trying to put a strong front. Actually, that is not you ah.

Participant 3 emphasized changing mindset was not merely receiving knowledge about change, "What I am trying to say is that the program (prison) give you knowledge but it doesn't change your thinking. Because only when your thinking change that your action and behaviour would change." Participant 8 was incarcerated 2 times before changing his mindset from being indifferent towards his family members who cared for him to becoming appreciative towards those who cared for him, "Nothing else, just don't want to let my family worry ah, everything... Wah then

I think I waste my time again la. Then I will let a lot of my friend down lor, everything... all those church friend, everything."

Making Practical Changes and Having a Positive Environment. When the participants were willing to change their mindsets and attitudes, they had to show it by putting practical efforts to learn new perspectives and experiences. Subtheme 'Progress' (ST3b) represents the efforts and changes that the participants made to incite and maintain the change process, including attending counseling, volunteering in social welfare organizations, and listening to good advice from other recovering addicts. They should also remain in a supportive and positive environment (subtheme 'Positive influences,' ST3d) to sustain their interest, receive encouragements, and stay focus on their desire to live a drug free life. Their lived experiences of transformation also taught them that they should set boundaries (subtheme 'Always on guard,' ST3f) and refrain from falling into situations where they could be tempted.

Participant 1 gave an account of how he made the first practical step to incite his determination to change by admitting into the halfway house upon release despite his family's discouragements. He said,

Uh I made myself straight to the halfway house (upon released from prison)... mean I don't go home. I sleep here, I stay here, I work here, for 9 months without pay. And at first, my family member is not in favor la, they want me to go back home, they say why you want to go back to a second prison after a prison, but then I told them that I rather come here to learn, rather than go out then go back to prison within 3-6months.

Another participant realized the efforts he made had brought him the outcome of change which led to many years of living a new life without drugs. He and all other participants had found new meaning and purpose in life. Participant 6 described,

Like I mention to you, during my second time, second timer right, I really want to change my life. But I, I uh cannot do it. So at least with counseling, I believe someone can uh, support you, you see. In other ways, can assist you in other ways. Rather than you try to do it on your own.

Participant 8 took up a security course license to become a security guard after losing his job as a gym instructor due to the COVID-19 pandemic. He rationalized, "Not related la, because now the job (security) need people what, so I just take the license lor. My passion is still in the fitness la. I hope I can go back, but before I go back, I need to train myself first also. Go back into the mega gym or what."

The participants' environment and people were important to the participants, especially in the initial stage to make changes (subtheme 'Positive Influence,' ST3d). The participants found encouragement and hope for recovery when they met others who came into the prison to share their success stories or received religious counseling from them. All of them benefitted greatly from the halfway house programs which they had undergone. The halfway houses were designed to provide positive support to the participants when they became discouraged and wanted to give up. Participant 1 felt safe to be with like-minded residents, "But so by getting away from them (old drug friends), I'm mixing with a group of friends who don't have this problem. That's why down here at halfway house, we don't even smoke." Participant 3 described the positive residential experience at the halfway house, "Okay, I think down here right, it gives, a very good circle of friends. A very good environment and

I got very good leaders So all these matters help me to change. That's why I am able to change my mindset."

Participant 4 also had a very positive experience during his stay at the halfway house that he returned to provide counseling to the residents there. He attributed, "So (halfway house) has been helping me a lot during my time (there)... The first step I took is go back (there). To give the counseling to the resident." The halfway house environment protected them from the ubiquitous triggers that the ex-addicts would have faced in normal circumstances for those who do not have the aftercare program. Participant 5 explained the reasons why having a positive environment is necessary,

Ya because if our old life, we stay at home, that would be the environment la, that we will continue mah (to take drugs). Because the environment will also trigger. But when you are in the new environment, ur, life halfway house, there's people around, there's restrictions, that will help you in your early stage of, even you are thinking about changing.

An important attitude the participants had was to safeguard themselves by remaining on guard (subtheme ST3f); being aware of compromising their personal stance on their newfound values and principles that could lead them to temptation or a single slip. Participant 4 warned, "But you know these drugs when you start because one puff, you take one puff right, there's no such thing as just a puff only. You start to carry on right, then you start again." The participants knew their predictive stimuli (such as drug friends and places) and formulated ways to avoid drug use. They would not assume they could resist the temptations even though they had been abstaining from illicit substances for all these years. Participant 1 cautioned many addicts that they could have many unjustifiable reasons to consume drugs,

But why are we always going back to prison? The problem always lies with friends... I always tell them. I say, we are a group of people that cannot be too rich, cannot be too poor, cannot be too free, cannot be too busy. Because why? Too rich, too much money, will buy drugs, too poor will deal with drugs, too free will take drugs, too busy will take drugs. So we will find 101 reasons to take drugs. Because, that's what we used to be.

Another piece of advice from Participant 5 was about the danger of becoming bored, especially when they did not hold any job when they were released from prison. He commented,

That means we cannot be bored la. We must always engage ourselves with. The moment when we are bored, we begin to think... to find thrill, in life. Ya. So that is where is always our downfall la. Ya. So like uh when I was released from DRC, ya, the first thing is, I go back to my old friends la. So that's where I continued with my addiction again because I don't work. Ya, so if I don't work, I will not be able to stay at home for whole days one. So when I woke up, I go back to my friends already.

Participant 7 experienced many challenging moments, and he always reminded himself to remain on guard and focused on the people around him. He described,

So it was not easy task for me... along the circle (of friends) there is 99 people of them with uh negative and so you know the energy level you need to overcome it, you see, not to get corrupted by them, you know. Definitely you will be stained. Right? But it's how you accept it and watch yourself.

Participants 8 encountered discouragements and pressures to return to his old habits when his friends met him. He explained his experience,

Some of them will gossip ah, will gossip, say about you behind your back everything, you just need to take their words lor... After that sometimes we saw each other, wah why you become like that, wah like that ah. Then you just take it lorh, just don't care ah... I walk away.

Having Spiritual Faith. There were six Christians and two Muslims in my sample. Based on the individual's belief, each relied on their god and prayed to stay free from drug influence as the journey of abstinence was very difficult and full of challenges and temptations. Seven of the participants described that following the religious teaching and depending on God for strength could help them overcome their fear, weaknesses, and temptations and remain committed to the recovery path.

Subtheme 'Spirituality' (ST3e) highlighted the participants' experiences regarding their spiritual reliance to desist from crime and drugs. Some of them became believers of their faith inside the prison, while others followed their parents' faith. For example, Participant 2, who became a Christian during his imprisonment, testified how he depended on God after his release,

...sometimes we listen to certain songs, or go to certain place like the toilet that we think of like last time we used to take drugs in this toilet, or there's some of the thing that trigger you. Ya. I think we shouldn't even entertain those thoughts la. Ya that is something that I told myself ya, once I have these thoughts, I will cut off, like for me, usually I will pray, or I will walk away, I will immediately walk away and I will pray.

Participant 3 also testified that God helped him through his prayers to overcome his weaknesses,

Now la, on my own I cannot, I got God to help me. I realise I pray. To me I pray for strength because I don't have the strength and I pray for renewing of my mind because my mindset is corrupted already, to me I pray for new mind, I pray that new mindset, I pray that God would help me see into His perspective. So I believe that from seeing from my God's perspective right, I would definitely not go back to my own way... God definitely want me to go back to the correct way according to His way what.

Participant 5 gave the following remark about his experience about how his self-esteem had increased because of God's work in his life.

So that's the difference where our past life, we always live a life of defeat and disappointment, so we don't really dare to look at people eyeball to eyeball la because of our low self-esteem. But right now no. Ya, I have a bad records, I have a bad past, but thank be to God, God transform my life. And not only that, God give me a new purpose of life.

Participant 7 had his inspiration from the Bible, which taught him the way to lasting change, and he continued to depend on God's word to give him the wisdom and strength to stay drug free. He asserted,

So the only thing I found in my hand was a scripture, a bible which I take, I study it and then, I sense that the words really spoke to me and I pray to the Almighty, and I ask myself what should I do. And I heard voices was telling me. It's easy. Whatever you will learn in negative, turn it over to positive... So what I did is that, whatever negative activities that I had learned, I learn to unlearn that and learn to learn the unlearn. That was a positive.

Addressing Research Question 2 (RQ2)

The second research question was 'What are the meaning-making processes involved in the motivation to remain drug free for these ex-addicts?' This question was indirectly asked via the semistructured questions in the protocol interview. The participants made sense of their experiences and gave their perspectives about their successful journey from drug abstinence. Every participant gave their meaning to journeying forward in life without the continuation of illicit drugs. The meanings derived from the narratives were: (a) building relationships that support change, (b) creating a better future, (c) finding a purpose and meaning in life, (d) giving back to society, (e) journey of abstention brings new life, and (f) staying clean with motivations.

Result 1 of RQ2—Building Relationships That Support Change

Having most of the participants incarcerated multiple times, the sensate experiences framed the importance of each of them learning from their mistakes that reverted them to the addictive lifestyle. For example, influences from peers and friends, especially during the participants' upbringing and childhood years (subtheme 'Childhood influences', ST1a), led them to gangsterism and drug-related activities. They also developed many emotional, psychological, social, and family issues. For example, Participant 3 did not have a good relationship with his mother when he was young and suffered from a lack of parental love. Many years later, he understood the meaning of love at the halfway house and subsequently reconciled with his mother. He shared,

I have started going to boys home and prison since at a very young age so my mum has always been visiting me. So she's, I think she, they lost hope la...

They are just very helpless, hopeful yet hopeless.... My family is, we are always doing our own things so I think from young I quite lack of this love because my mum is always working but down here (the halfway house) our leaders always care for us, like the children lor, I feel a lot of love which used to lack in the past.

Participants desired to build a close relationship with their family members because the latter had always been the former's true supporters. For example, Participant 4 managed to rehabilitate in time to take care of his mother before passing on since he had always been a burden to her. He shared,

You see at least before my mum passed away right, I manage to support her with a lot of things. I managed to support her with medication, I manage to give her a maid, I managed, even through I didn't manage to buy a house for her la, but I still manage to rent a house for her to stay.

Participant 7 mentioned how he spent his free time with his wife to enrich their marriage,

That's my free time. Now and then I will bring my wife go for dinner. That's another one activity. So ya. She's the pillar for me a lot of time and thank God for giving me a understanding and beautiful wife who is really pillar supportive for me all these while.

Participant 5 viewed his previous friendship with the fellow addicts as not genuine, honest, and lasting. He advised those who did not want to alienate from their previous network of friends that the continuation of such a relationship was harmful as they would influence them to commit crimes and consume drugs. He asserted,

Because drug addict don't have close friend on la... you take drugs together, ya, although you can have the sense of belonging but it won't last one.

Because we are all very selfish la. We always take care of ourselves first. Uh.

Ya we have that small amount of drugs we always tell differently, "I don't have", "I no more already". That one is keep for my own consumption. So it's very selfish one. We were always very inward looking. So you will never have close friends. It's all very superficial.

Result 2 of RQ2—Creating a Better Future

The participants related the future that they could have with the abstinence compared to the life of the past when drugs dominated them. They saw the progress they had made (subtheme 'Progress,' ST3b) and a future for themselves (superordinate theme 'Motivation,' SOT1). Before the recovery, they could not believe that they could have a future living a normal life because of their involvement in criminal activities that fed their addiction. Participant 1 gave an account of the offenses that he had, which were related to his drug usage, "The first offenses was selling of ahhh... illegal VCD. The second one was possession of drugs, consumption of drugs and illegal weapon, possession of illegal weapon. Then the third one was consumption of drugs, the fourth one was trafficking of drugs." However, now that they had better control over the addiction, they could visualize a future as they worked towards their goals. Participant 3 insisted,

I see that I have hope lor. I see that, like, I start to realize that the self-esteem is build up there. There are times that I feel that way, but it's build up now that I know that I have a future I know that I can do it. I know that that means like

I'm not useless, I'm not hopeless, there's hope I can still do it, I can even be a resident and even help others. So this builds up my self-esteem what.

Participant 4 received the Small Medium Enterprises (SME) Honorary Award for the innovative ways of doing his catering business, which he started in the year 2004. At that time, he knew nothing about the business and how to run a business but persevered to achieve success. He recounted,

So from there I do that business from the year 2004, I do. I restarted the business as a part time business... So from there is really hard work la... I work in the catering company the one that I work, come back from work, I will continue my work at home for my own business. So from there I learn slowly. How people run their business, how they, people take care a lot of things in business. So everything I learn from the hard way. That's how I achieve they give me the SME honorary award and they give me uh, the innovation award, because I always believe, you can do, you can do wonders if you want to.

Participant 8 did not possess as much money as before when he was selling drugs, yet he was motivated to remain drug free and worked hard to fulfill his dream of owning his own gym, although he had to do other part-time jobs to survive the moment. He disclosed,

I give up on drugs ah, I feel that cannot earn a lot of money lorh. Last time because dealing keep sell drugs what, earn a lot of money. Then now work, normal life, now do part time... I work as personal trainer after I am release from prison. I work in the mega gyms... After that, I come out to do my own freelance training. After that I broke my leg, then my business collapse... after

that I restart back then now slowly take back my students. Now very hard la, under the COVID-19, some of the student want to come back, some don't want... then I go and take course la, get course and do some other part time job.

Result 3 of RQ2—Finding a Purpose and Meaning in Life

One of the meanings the participants found when they were pursuing recovery was that they discovered a purpose and meaning in life for themselves. The purpose and meaning that they found became their motivations (superordinate theme 'Motivations', SOT4) to remain drug free. The participants were satisfied with the new way of living as compared to the life of an addict. Participant 1 said,

Mm, I don't see a sacrifice because, I used to think that ya, wah, I sacrifice a lot, I cannot go clubbing, cannot go here. But right now as I look back, it's not a sacrifice because I'm not supposed to have them. I realize that all these will just pull me back again, ... it's not that I cannot drink, but I choose not to drink. I think that is the difference between I choose not to, and I cannot. Even if it is given to me, I don't want. Even you give me a drug right now, I choose not to take it. It's no longer a I cannot, but I don't want.

Participant 2 had no purpose in life when he was a drug addict. However, he was rewarded with a purposeful life when he chose to recover from his addiction. He reflected,

Uh because I think that last time to me, there's no purpose in life. I also don't know (laugh) I also don't know why I exist la (laughs)... So I just want to take drug, I just want to enjoy, I think that I'm still young, I don't need purpose, like I just let day pass by la. Because there's nothing for me to look forward, I also

don't know what is my purpose (take deep breath). But right now I think purpose is very important because purpose can give you direction. Purpose can motivate you and purpose will lead you to something that you see that there's something more for you there's hope, there is, life have meaning, have purpose. It's not everyday like take drugs, sleep, hide in the house. Ya. So I feel that purpose is very good.

Participant 3 shared he had found a meaning in life that would keep him pursuing it,

I want to live a life that is purposeful... I have no hope in life last time. That's
why going back to prison doesn't surprises me in the past, but it surprises me
now. I cannot go back to prison anymore because I know that I have too much
to lose now. My life is back in shape, I reconnected with my family, I got
something to look forward to. My life start to bear fruits, I start to see purpose
in my life eh.

Participant 5 also spoke about his meaningless life when he was involved in drugs. However, he found the answer to it and was happy to assume responsibility towards his family.

I didn't want to go back to my old life because it's so meaningless, right.

Everyday you're thinking about money. After you have money, you're thinking where to get drugs, after drugs, you're thinking about money again. This cycle continue lorh... So that's why right now you live a meaningful life that you can see yourself in your life you can be of help to others. Then you live life differently la. Ya. That's the difference... I think my past life I don't live a life urm, that I don't want to hold responsibility ya. But right now cannot. As a husband, as a father, ur, I need to hold on to many responsibility la. I need to

provide, I need to be a good father to my daughter, all these are my responsibility.

Participants also believed that God had given them a new purpose in life, and He was enabling them with drug cessation as they followed the instructions of the divine word. Participant 7 was grateful that God had forgiven his sins, and he had decided to live his life with a new purpose that was based on the Bible. He narrated,

Therefore for sure by God's grace I can see (believers), the God like Man in front of me, that really you know embrace me and really forgive me for what nonsense I have been through. When I look at them I really was inspired by their roles... So whenever it's been sowed with me, I take the Book and pass it to someone. That's why I think until now, continuously I am doing that, ya.

A Muslim believer, Participant 6, also attributed God for his newfound purpose in life. He had been giving talks and helping prisoners to find hope and ways to overcome their addictions. He explained,

... I really wanted to change, and I really want to achieve something in life. I don't want to be a ex- uh I mean drug addict forever. I don't want to be a secret society member forever. I don't want that. I mean, God give me a chance to change means I will need to change. So that is why I, I am somebody today, I've been recognised by Singapore prison uh police, now I come back to prison to give a talk, to give a motivational sharing to the inmate, and I've been doing all the positive things every day in life. Whenever I have a talk in school, been invited by the institution, been invited by local company, been invited by Ministry of Home Affair, I feel proud.

Result 4 of RQ2—Giving Back to Society

The participants were glad that they could give back to society, which had considered them useless and trouble-making citizens in the past. Seven of the eight participants remained active in volunteer works after they had left prison. Five of the participants also become volunteer counselors inside prison or halfway houses.

Participant 1 gave an account of how he felt wanted and trusted by those whom he served.

Uh because last time we are being cast out. We have no hope, there's no way we can give back to society. We cannot think of ourselves as contributors. We are what people call "scum of the society", the "bad rats". But right now, we are able to contribute. We go to the elderly ministry... The elderly know that of our background and they are more than happy to accept us, open their doors to us. Even some of them told us where they keep their gold. I said "okay stop, don't tell us". Ya. this type of trust we have with the elderly.

Participant 2 found himself able to contribute to the youth and elderly who needed help. He said,

So I find that uh, actually, I thought that I cannot do anything, but actually I can do a lot. I serve the elderly in Ang Mo Kio and Chai Chee to help them to maintain the home condition, to talk to them. Urm, to hear them out, just to show concern to them la. I also go to school to speak to the youth, hope that through my life experience, they don't have to go through what I gone through and help them to find the purpose of life la.

Participant 3 also spent every Wednesday serving the elderly at the elderly home while pursuing his education, "Now I am studying, in the school of theology.

So my day to day is just study lor then I rest exercise ... Then on Wednesday I have elderly, I go and help the elderly in Ang Mo Kio, so called befriender la." Participant 4 shared his business knowledge as a volunteer to help business owners to succeed,

... I want to give back to the community. Like do my part in the community work. That's why now even as the board of director... it's a community work leh, it's not paid directorship. It's a volunteer to help the community business, business people.

Result 5 of RQ2—Journey of Abstention Brings New Life

Each of the participants' progressive steps (subtheme 'Progress,' ST3b) had brought many encouragements to their drug cessation journey. For example, Participant 1 could not believe the decision to admit into the halfway house and then followed the rehabilitation programs benefitted him so much in his recovery process, a decision to which his family initially objected. He entered the halfway house with meager expectations, but he realized how wrong he was when he was given the opportunity to study and travel to many countries due to his work, when he became a staff in the halfway house. Participant 1 illustrated,

they actually sent me for upgrading, basic counseling in diploma, school of theology, bring me overseas then, I get to enjoy a lot of things that I did not enjoy before. I always thought that by coming to a halfway house... I would lose more than I gain. But little did I know, so many years here, I gain more. I have never imagined myself going to London... and our pay is not a lot... I have been travelling. And I don't know how I travelled, so I always tell them that it's a joy la. Ya so right now, even after 11 years....

Participant 7 learned to work hard and inculcate discipline and commitment by fulfilling any assigned tasks inside the halfway house. He believed by working hard, he would train his mind to become accustomed to earning a living by having proper employment instead of selling drugs. He explained his perspective,

Basically you need to do the job. Whatever job they are given to you, do that. Because why, because my brain do not, my mind do not want to work. If I don't want to work, when I release from the halfway house, I will tend I not want to work then it will, chances are a lot therefore, to go back into the wrong way...Where can you find the easy money? ...find some any illegal activities... So I need to let my brain, train my brain to work, no matter how much they pay never mind. Put the commitment there be responsibility because they entrusted the job to you. So build that up, a commitment that's it.

When Participant 4 looked at his children, he found new life to provide for his family even though it was very tough for him. He did not want his children to follow in his footsteps. He worked hard so that they could have a future. He mentioned,

So my vein is all spoil already (due to intravenous injection)... my hand will get cramped easily. I even now cannot carry heavy load. So my wife and my children is the one who drive me you see, to put in a lot of effort. You imagine ah, my children is only 14 and 11 and I don't want my children to be like me, I want my children to have a better education. I want them to go into university. But if I don't work hard, how am I going to bring them to university?

The participants' meaning associated with the effect after their mindset and values changed was best expressed by Participant 5. He was convinced drugs would

harm his life and those he loved compared to how he viewed drugs as enjoyment in the past. He was not willing to give away all he had now in exchange for drugs.

Their mindset never change. But the moment where our mindset change, then you look at it... Drug really destroy me lor. For example if right now, I fall back to drugs ah, it destroy my family, it destroy my career, I cannot continue to work here, right, it destroy my relationship with people. I definitely destroy my health... That's why I didn't want to go back. Even right now you put in front of me I also don't want to take already.

Result 6 of RQ2—Staying Clean With Motivations

A unanimous point all the participants raised was they did not want to return to prison because of the lack of autonomy as a prisoner, and it was also wasting their life away while serving time. Participant 1 recounted his conversation with other exoffenders as he was determined not to spend the rest of his life as a prisoner,

Cause me want to be to not in prison. Actually, it's the boredom.... Erm, that's why when I actually went out and talk to people who have the same background, we are out of prison, there is this Hokkien phrase we always use la. We always say "zei kak kia" means that we sit until scared, don't know what to do, we do not want this type of life to go on especially when we see people who are 90 years old, 70 years old, who are still in prison, going through the same thing. Then I ask myself, do I want to be like them?

Participant 3 shared, "Sick and tired of going to prison in and out again." Despite feeling this way, it was not sufficient to bring permanent change to their addictive behavior. One of the motivations they mentioned was the autonomy the participants

enjoyed now as recovering addicts. The following was how Participant 5 interpreted the freedom that he had as compared to the past as an addict,

Because when I'm on drugs, I always live in fear. Fear of no money, fear of no drugs, fear of the law catch up with me, ya there's many fear. You know la, if you live in fear, you can live a life of miserably. But right now, I don't. Ur, I am not fearful of anything right now, because there's nothing to fear. I live a upright life. You know I don't bother about whether am I committing a crime or a, I don't.

Participant 8 concurred with Participant 5 on what he meant, "But now, it's good. Now lead a new life, you go coffee shop sit for a while, chit chat with your friend, police come, see see, everything never mind, just relax, ya."

Their ability to live a normal life within the society and enjoy a meaningful relationship with others meant a lot to them. For example, Participant 7 said addicts were perceived negatively in society. He described,

Negative means, taking drugs, doing illegal activities, stealing, you know. You got these kind of thought on molest, so everything, whatever against the law.

Right. So these are the thoughts that, these are kind of people have been get caught by the authority because it's not safe for these people to be in the society so they caught them...

Participant 5 thought he could only have a relationship and marry someone as lowly educated as him. However, his change in behaviors and attitudes towards drugs had attracted a lovely and educate woman to marry him. His close relationship with his wife and daughter continued to spur him to remain drug free. He related,

I last time I think ah, maybe I only, because my highest standard only primary 6 so I thought maybe my the other half most likely ah lian or ah huey la. But not true la. God bless me with a beautiful wife, she's a graduate, she's an accountant and she's willing to commit her life with me... She supported me fully, uh, in the areas of my work and also partner in doing ministry together that we can help the younger couple in their relationship journey, in their marriage life, ya. Then ya, my daughter come to the halfway house is like her house la.

Participant 6 disclosed how he felt after making his mother proud because he was a changed person, and he enjoyed having a wonderful relationship with his mother.

Of course I feel happy. Now I'm talking to you about my mother I feel like I wanted to cry. I feel so emotional. When I talk to you about my mother, my mind, there's a picture of my mother now... Why I feel happy because I can make my mother happy... And she is now very proud to tell my everyone uh that uh that "my son has changed; my son has changed" you see.... I'm proud to say that. From a hooligan, from a I mean drug trafficking, uh trafficker, I change to be a motivational speaker.

Participant 7 became more motivated to prove his ability to those who doubted he could change due to his years of addiction and violence. He commented,

So whenever people give me negative remarks or negative words or whatever, whatever negative they give me, I took that as a steppingstone to build up myself, a motivation factor, too put in positivity...When other people say no, you can't do it, you are just bullshit, you are just cheating ah, so when you say

I can't do it, I will look at you, you mean I move forward you say I can't do it.

Ya. I will prove to myself that I can do it.

Finally, when the participants could visualize their goals and work towards a meaningful and purposeful life, they would want to pursue their dreams. Participant 2 managed to graduate from a seminary which he used to think that he did not have the intellectual ability. He narrated,

And urm, in 2017, I graduated from the school of theology, urm, which I thought that I cannot do well in study, I thought that I'm not a good student, ya and right now currently, I'm pursuing a, I'm pursuing towards a degree in theological study in uh VCA. Ya. So (now) I have a full time job...

Participant 3 wanted to become a professional counselor,

Uh I want to be a counselor in the future, so I want to help other's just like how I needed help. I want to do it like others now. I have a goal, I have a purpose I have something to look forward to I have a vision. Last time nothing what just come out prison, okay, go back to drugs, earn a lot of money lor, through illegal ways lor. These type of things no purpose what. I live day by day but now I can see my life 3 years later, 5 years later?

Summary

The data collected formed a substantial database for data analysis and construction of themes to understand the lived experience and meaning making processes of the participants to remain motivated to stay free from drugs. The eight participants of two religious beliefs and three different ethnic groups provided comprehensive data to the study. The interviewing format via video calls resulted in little impact on the collection of data as compared to face to face interview. The five

superordinate themes and 10 subthemes constructed from the raw data contributed sufficiently to answer the two research questions. The themes and their respective quotations from the participants' narratives gave sufficient insights into the lived experiences of male ex-addicts and how they made sense of their motivation to stay drug free after their incarceration. The results showed that the participants had similar experiences and perspectives on how to remain successful on drug cessation journeys. They also described the different types of motivations associated with the things and concerns that caused them to remain clean from drugs when they answered the research questions and the follow up questions. No discrepant cases were identified that needed to be accounted for and factored into the analysis. I had also listed the evidence of trustworthiness, including credibility, transferability, dependability, and confirmability, to demonstrate the rigor of the study. Chapter 5 contains sections that include interpreting the findings, limitations of the study, and recommendations for future research. The chapter will end with a section to discuss the implications of the study for positive social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

In this study, I aimed to explore the lived experiences of male ex-addicts who had left prison and how they made sense of their motivation to stay drug free thereafter. I used IPA as the research approach to understand the lived experiences and meaning-making processes of those remaining motivated to stay off drugs (Pietkiewicz & Smith, 2014; Smith, 2011). The participants were doing well in the recovery process, and all of them spoke of the new life that they were living without a sign of wishing for the old addicted habitual life. They participated in the interview because they hoped that the research could give clinical practitioners better insight into managing drug addiction cases. There were seven findings analyzed from the data collected from the participants' interviews. They were (a) addict's core issues hinder recovery, (b) negative peer influence among inmates, (c) addiction might not be absolutely a chronic disease, (d) triggering event as a good catalyst to cause permanent change, (e) preference for quality of life over addiction, (f) growing in motivation, and (g) spirituality and religion are essential for successful abstinence. The section also covers positive social change implications and some practical suggestions for enhancing prison rehabilitation programs and for clinical practitioners.

Interpretation of the Findings

Based on the data collected from the eight participants, there are seven findings interpreted from the data, namely (a) addict's core issues hinder recovery, (b) negative peer influence among inmates, (c) addiction might not be absolutely a chronic disease, (d) triggering event as a good catalyst to cause permanent change, (e) preference for quality of life over addiction, (f) growing in motivation, and (g)

spirituality and religion are essential for successful abstinence. I analyzed these findings from the superordinate themes listed in Table 2: (a) relapse (SOT1), (b) change (SOT2), (c) recovery journey (SOT3), (d) motivation (SOT4), and (e) relapse prevention (SOT5). I associated the data with existing literature in Chapter 2 to establish whether it confirmed, disconfirmed, or extended knowledge from the existing literature.

Finding 1—Addict's Core Issues Hinder Recovery

Six of the eight participants grew up in a dysfunctional family in which they did not receive proper parental supervision and care and also received negative influences in their developing years from their circles of friends (Hsieh et al., 2020). Without proper parental upbringing, children will learn the wrong values and receive negative influences outside their homes that will eventually lead to exposure to illicit substances and crimes in their teenage years. According to Badie et al. (2020), parents can provide necessary teaching regarding attitudes, values, and coping skills to control cravings. Lack of parental love, care, and supervision could leave children to enter adulthood with issues leading to antisocial behaviors and criminal paths (Gucwa-Porębska, 2019) as they seek satisfaction elsewhere than in their family (Firdausi et al., 2020). Each of the participants had personal issues caused by a lack of an environment that helped them to feel worthwhile and valuable in their developing years. These issues could be why they consumed drugs to escape from the disappointment, hurt, and pain they suffered in their family (Ersche et al., 2016).

Firdausi and colleagues (2020) also posited that children from a broken home who do not receive parental supervision, guidance, and care are likely to exhibit developmental psychological, social behavior, and academic problems resulting in

becoming rude, immoral, irresponsible, and attention seeking; falling into the wrong associations; lacking in self-esteem; and displaying unhealthy personalities. From the adolescent stage, such individuals experience doubts about the words and promises of the people around them and lack social trust (Liu et al., 2018). Parental responsiveness is associated with a child's self-esteem (Ryan et al., 2016), and high self-esteem in childhood is essential to gaining powerful motivation for a rewarding life (Oshri et al., 2017).

The absence of parenting is likely to make children experience abandonment, rejection, humiliation, abuse, loss, and betrayal. The use of drugs to numb feelings and moods may be the escape that makes the most sense. Such individuals may find their existence meaningless and boring, and they may remain vulnerable to addiction (Thompson, 2018). Unless these personal adverse events are addressed, they may become core issues leading individuals to engage in high-risk criminal activities and drugs (Gucwa-Porebska, 2019; Hsieh et al., 2020; Rotărescu & Sleath, 2016). Taipale (2017) postulated that addiction to substances might not be merely a self-centered hedonistic behavior but may also involve self-harm or self-destruction, as long-term addicts do not necessarily gain pleasure from substance consumption. Given Taipale's perspective, having a comprehensive insight into the underlying unresolved personal issues that addicts possess seems rational and becomes critical. These unresolved issues may also remain as factors that draw addicts who are keen to abstain from drugs to relapse when putting in efforts to stop the behavior. The core issues of recovering ex-addicts become one of the main factors that will make or break a habit because they are the determining factors in effecting change (Lavallee, 2020; Wong et al., 2020). Addicts who realize that they have multifaceted problems are likely to

address their issues, especially when interventions are introduced during counseling (Prochaska et al., 2013). The desire to change becomes the intrinsic motivation, and the intervention will focus on addressing the core issues and strengthening the internal locus of control (Maynard et al., 2019).

While Chan and Boer (2016a) postulated that a personal decision to change is one factor that leads addicted prisoners in Singapore to cease a drug abuse habit, the participants in my study had made several attempts to change and failed despite having determination. Prochaska and colleagues (2013) posited that 20% of the addicts who come for treatment are prepared for change, while about 35% to 40% are in the contemplation stage and the rest are in the precontemplation stage. Chan and Boer's argument might be referring to those who are already in the change category (that is the 20%). When ex-addicts attend an aftercare program, practitioners should not assume that action-oriented treatment and self-help programs work for all those who take part in them. There are times when addicts avoid drugs only for a period but do not have the motivation for abstinence. They are likely to look for utility maximization, but when the attractions of pseudo life become more appealing than working on the spiral of changes, they relapse.

According to Kougiali and colleagues (2017), researchers have argued that treatment ineffectiveness is one reason that relapse occurs. However, Kougiali et al. contended that relapse is not a consequence of a problem or failure of treatment; rather, they perceived it as an intrinsic part of the process to understand the underlying core issues of the addicts to better comprehend the topic of recovery. To increase the probability of success above 20%, it is advisable for practitioners to give attention to the reasons for relapse, such as exploring core issues and addressing them.

The intervention should expand to the individuals in the contemplation and precontemplation stages.

Finding 2—Negative Peer Influence Among Inmates

The Singapore prison has rehabilitation programs that aim to reform prisoners' criminal behaviors (Koman, 2018); however, it does not have an encouraging recidivism rate (Chin & Iyer, 2018). Koman (2018) disclosed that the programs included treatment, rehabilitation, counseling, aftercare, and integration of reformed addicts into society. These programs were necessary to reform inmates and promote change from their criminal activities and behaviors. The prison authority also makes efforts to segregate hardcore addicts to minimize the spread of negative influence among inmates.

Despite the effort of segregation and program implementations, the participants' experiences during incarceration showed that many of them continued to receive negative influences that impinged on the reformation process when they socialized with other inmates. Such an environment is toxic as it forms the prison climate, which significantly influences recidivism and whether the prisoners will rehabilitate (Haviv & Hasisi, 2019).

There is a prisoner segregation policy to isolate prisoners who are likely to influence other prisoners (Koman, 2019) negatively, and the Singapore prison operates by segregating the hardcore and nonhardcore addicts (Koman, 2018). However, it is apparent the negative influence persists even though minimal contact time is allowed between prisoners from other cells. Contamination of mindset is difficult to prevent with the current system, and one way to improve the situation without significant modification is to provide a more rigorous segregation approach to

further filter the addicts into different groups according to their readiness for change (Prochaska et al., 2013) in their respective hardcore and nonhardcore categories. In this way, the prisoners can attend programs suitable to their level of motivation for rehabilitation.

The suggestion to filter the prisoners into more categories may address the current phenomenon of prisoners participating in the prison programs for boredom and social reasons. The study showed that the participants took part in the programs because they offered opportunities to leave their cells besides yard time, in that the programs were held outside their cells; they used the program time to interact with other cellmates. There is a lack of self-determination to change, which is amotivation in the continuum of SDT. Individuals' flawed intentions and attitudes diluted the purposes of the rehabilitation and reintegration programs, and many of those who participated in the programs considered them to be useless and not beneficial. In prison, programs were deemed ineffective in bringing reform to individuals because "the program doesn't help unless you want it to help" (Davidson & Young, 2019, p. 37). Such a perspective is similar to the subtheme "negative prison environment and disinterest in programs" (ST1b) in my study, and it is a common problem in prison programs around the world. However, prison rehabilitation programs are still relevant to those who are seeking help.

Finding 3—Addiction Might Not Be Absolutely a Chronic Disease

Addiction affects the brain's signal transmitter mechanisms, impairing addicts' inhibitory control and decision making (Markie-Frost, 2016; Rogers, 2017). The brain is unable to forewarn the multifaceted challenges an addict faces if one wants to stop the addiction problem. The participants in the study had at least 3 to 20

years of successful abstinence. Their success contradicts the postulation that Markie-Frost (2016) and Rogers (2017) made that addiction is a chronic brain disease.

However, Alaei and colleagues (2017) contended that substance abuse may be treated to help addicts live a normal life, despite scientific claims that it is a mental disease.

According to James and Jowza (2019), psychological and physiological challenges render the addicts to seek treatments. The psychological challenges of increased desire to consume drugs will significantly reduce the interest in alternative rewards and increase in delay discounting (Wakefield, 2017a). These physiological challenges cause disorder to the brain, and they include (a) difficulty in sustaining stimuli, (b) difficulty in decreasing negative emotions, (c) addictive activity activating the pleasure centers in the brain, (d) addictive activity increasing adrenaline levels in the blood, and (e) indifference to social and family duties (Babić et al., 2018). The preponderance of challenges creates a pronounced tendency for individuals to relapse despite having the intention to stay drug free. However, the participants in this study who managed to abstain from using drugs were evidence that addiction that purportedly caused brain changes (Markie-Frost, 2016; Rogers, 2017) was not impossible to reverse to restore the normal functioning of an ordinary person. Another example involves the case of the Vietnam War, where 20% of returning soldiers were addicted to heroin but about 95% were remitted (Lavallee, 2020). A benefit of having insight into structural changes is that it helps to explain the vast challenges that an addict faces in overcoming antisocial behavior through the exercise of determination or willpower.

Lewis (2017) took the perspective that brain changes in addiction are similar to the process whereby ordinary people who encounter recurrent in highly motivated

goal seeking outcomes that develop into strong habits, classical conditioning Pavlovian learning, and prefrontal disengagement. For instance, brain activation patterns in addictions to food, porn, cybersex, gambling, and the internet are similar to those captured in drug addiction brain images (Zilberman et al., 2019).

Neuroscientific evidence also indicates that love has a degree of similarity to addiction (Lewis, 2017). Lewis (2017) viewed addiction as an outcome of learning, a developmental learning model, that becomes "accelerated and/or entrenched through the recurrent pursuit of highly attractive goals" (p. 14)—a vastly different view from the disease model. Other researchers have doubted that neurological dysfunction is caused by substance addiction and have not regarded addiction as severe enough to term a disease (Holtzhausen, 2017; Pickark et al., 2015).

Given Lewis's (2017) belief that addiction is an outcome of learning, it is possible to posit that an ex-addict can relearn to focus on progress and growth despite the restructuring of the brain. The activities and education that the participants took part in became the relearning process. According to Wakefield (2017b), learning has merit from a pragmatic treatment strategy perspective only. When every experience repeats substantially enough, the brain will induce rewiring within its neurological structure to revive normal functioning in the addict's brain (Miller et al., 2020). If exaddicts are encouraged to repeat positive social behaviors and given many opportunities to repeat positive experiences, the probability of recovery success may increase. The participants reported that they had remained actively involved in meaningful activities since their release from halfway house programs. The accomplishment of the activities built the participants' self-esteem and motivated them to do good for themselves and others in areas such as volunteerism.

Finding 4—Triggering Event as a Good Catalyst to Cause Permanent Change

External regulation and introjection motivation are both identified as controlled motivations that may prompt a major decision to pursue change. Triggered events or crises (superordinate theme "change" [SOT2]) due to the use of drugs may form the introjected regulation to bring an avalanche of impact to cause addicts to come to their senses. The six participants who encountered the events that triggered permanent change had created a deep impression in their lives. The events acted like a catalyst that effected the directionality of change; the participants had failed to carry out the change on many occasions. These events served as sudden and vivid moments of realization that motivated the participants to do something drastic about their addictive habits. However, two participants decided to make the drastic change after reflection and assessed the harm that drugs had caused in their lives. Pettersen and colleagues (2018) posited that reasons for long-term abusers to quit addiction include the harmful consequences of substance abuse; consistent care, concern, and pressure from family members; countering of prolonged doubt and hesitation that they can change; having hope for a different life; and being aware of possible treatment options. In this study, Superordinate Theme 2 ("change") highlighted the possibility of profound conversion of an addict to a permanent ex-addict.

There could be many incidents and situations that mooted the idea for an addict to live a normal life without the influence of drugs, but none of them could be as impactful as the triggering event for total abstinence. There were a sense of helplessness, deep shame, and regrets that the participants felt when a triggering event occurred. Their conscience unveiled the damaged personal, family, and social identity that had clouded them for years (Shamsalinia et al., 2018). The revelation initiates a

desistance and recovery process that includes a determination to rebuild and protect what they have lost (Chen, 2018). Chen (2018) added that this is the moment when individuals are willing to seek help.

The triggering event is a salient point in the journey to a new life because there is too much that the individual has lost by the time they hit bottom (Chen, 2018). It was the "rock bottom" feeling that the participants had as they realized the culmination of adverse outcomes of substance abuse (Stokes et al., 2018). For example, a participant said, "I divorce before. I seat my 7 years; my ex-wife married another guy. She go for another guy, she run away, hahaha. She run away. No choice la."

The other finding related to the triggering event involved participants feeling "sick and tired of going to prison in and out again" (Participant 3). The prison life experience and the deprivation of freedom became a motivation not to return to drugs because the prisoners felt "sick and tired" of becoming prisoners repeatedly (Martín et al., 2019). The participants resolved that they had enough prison experiences, and they perceived how prison affected their self-esteem and self-worth.

Finding 5—Preference for Quality of Life Over Addiction

The participants had borne the offender identity for many years and experienced euphoria with the help of drugs. When they tasted the normalcy of life and lived like any other citizens who observed the laws in the country, they preferred such quality of life over life as an addict. The consequences of living as an addict, such as imprisonment and the harmful effects of life with drugs, were some examples of external regulation that deterred them from wanting the previous life again (Zhang

& Xing, 2020). Other motivations of various regulations must come into play to heighten their sense of self-determination.

According to Bachman et al. (2016), preferences are linked to motivation; when the participants decided to change the offender identity, it implied a change in their preferences. The participants compared the abstention welfare to the state that triggered the decision to abstain (hopelessness, meaningless and purposeless life, and loss of everything). The preference to have the quality of life did not appeal to the participants immediately upon their decision to change. According to Bachman and colleagues, the change to the quality of life requires the individuals to act deliberately and intentionally.

Once the ex-addicts have decided to recover from substance abuse, deploying meaningful activities as a strategy helps them fill the void left by the cessation (Mckee, 2017). These meaningful activities are also resilience-building motivators to the ex-addicts (Harrison et al., 2020). Although the participants faced problems in life, stressors at work, and drained bank accounts, yet the pursuit of meaning had benefits in itself (Thomson, 2018). The autonomous motivations gave them the drive to engage in the activities with more significant commitment, maintain their commitment for a period, and then realized the quality of life compared to externally controlled behavior (Phillips & Johnson, 2018).

Smith and colleagues (2018) postulated that male gender addicts tend to value highly on having a supportive community and a healthy mindset and engaging in meaningful activities. The activities are usually routine and structured, such as employment, volunteering, and recreation (Mckee, 2017). A consideration in implementing these activities in such a strategic manner is to progressively condition

the ex-addicts to take part in them without causing too much stress. The success in committing to the activities will give them the motivation to take on more activities and enjoy the quality of life. The participants found the activities unnatural to their habits initially. Over time, they found meanings in the activities and began to internalize the value and reasons for doing them as they had reached the stage of integrated regulation.

The participants had been freed from drugs for 5 years to 20 years, and they were considered to have a stable recovery (Skogens & von Greiff, 2020). They accepted the state they were in, and there were significant aspects of their life that require them to change, learn, and unlearn to succeed in drug cessation. They took ownership of their lives and felt empowered when they could live without any drug influences and resorting to crime. They gradually leveled up the locus of control, volunteering for aftercare programs, registering for education, learning new skills, receiving counseling, attending support groups, participating in voluntary work at social agencies, and working to earn a living. The ex-addicts will feel a sense of accomplishment and competence if they have a job and can keep the employment, which is essential to help them structure their lives and feel they can be useful and find meaning in life (Chan et al., 2019).

The participants set attainable goals to motivate themselves to move forward (Sukmahidayat et al., 2020). They were committed to voluntary services, such as schools, elderly homes, and helping addicts stay away from drugs. They felt dignified to own properties such as a car and house and managed to travel for work and holidays with their family using their money through employment. In the past, they made easy money from the sales and peddling of drugs, and they would not be able to

travel overseas because their passports were impounded. They would also feel anxious when police officers were around their vicinity because of the criminal activities that they were involving.

As the participants began to reshape the past and noticed the new meaning of life emerged; the lifestyle and behavior in the past became nonsensical and destructive (Moskalewicz, 2016b). Thompson (2018) believed addicts with little attitude towards meaning and purpose would not have the quality of life, and they are likely to succumb to addiction. According to Viktor Frankl's concept of meaning in life (2021), people need an identified life purpose to avoid an existential crisis; otherwise, they tend to cope in maladaptive ways such as engaging in addictive behaviors.

Finding 6—Growing in Motivation

Silverman (2015) stated motivation is key to rehabilitation and a consistent predictor of treatment outcome. Dekkers and colleagues (2016) posited motivation is a significant factor in facilitating long-term positive change. From the participants' lived experience, they managed to keep away from the influence of drugs because of motivation. While there is a lack of knowledge in identifying effective pharmacological treatments to boost motivation in the brain, treating addicts to increase motivation depends entirely on psychological approaches (Pavia et al., 2016). The participants experienced the various types of motivations that contributed to the outcome of abstention. These motivations were related to punishment and fear, relationship, and renewed mindset. Motivation to remain drug free during the recovery is less understood (Korcha et al., 2016), but it is very helpful in influencing the participants to maintain the process of change. Krocha and colleagues (2016) also

asserted the more motivated the ex-addicts are, the more likely they can abstain successfully.

However, motivation only instigates the tendencies toward action while the individual bears the right to decide whether to respond to the drive or not (Baumeister & Nadal, 2017). An individual who spurs into action would mean the energy in motivation (Ryan & Deci, 2000) has a greater charge of driving the individual into action. Motivation is associated with self-efficacy, which is the level of confidence that can influence learning and performance (Phillips & Vince, 2019). The participants' motivation and self-efficacy gave them the confidence to act and behave towards the direction of change, especially in the initial stage. Over time, their motivations also led the participants to achieve goals that showed the progress and success in life. This stage of accepting the value or behavioral goal but has not become the person's core belief is known as the identified regulation in the SDT (Ryan et al., 2016). The participants began to experience the quality of life.

The journey helped the participants to meet the psychological need of competency, which is the confidence in achieving and demonstrating their capacity (Ryan & Deci, 2002). Competence is a significant motivating factor to increase the capacity to achieve ambitions and goals. For example, the participants upgraded their skills and education to become employable and learned to reintegrate and live harmoniously in the community. This process of having the motivation to spur the exaddicts into actions and subsequently achieved goals and then found meaning in their renewed life would inevitably strengthen and increase the will to abstain and succeed. It could also spin into having greater motivation to achieve higher goals when they gain their self-confidence. According to Deci and Ryan (1985), intrinsic motivation

stems from the primary energizer of the psychological needs of competence and selfdetermination.

Although the participants did not mention it, it was observed that they did not have to worry about basic needs such as shelter, food, and water. It was because when they were released from prison, they headed straight to the halfway houses. The basic needs of survival are the physiological motivations in the Maslow's pyramid level one. The halfway houses took care of the physiological needs to facilitate the recovery so that the participants could focus on rehabilitation instead of worrying about the means to survive (Rosales et al., 2017). Meeting physiological needs is the prerequisite to further interventions and treatments before giving to the participants. In the halfway house, they received motivation to learn new skills and obtain education to find employment when they had completed their program, and they worked hard to achieve their goals and purposes. The participants' environment was crucial for recovery. Literature shows that the recovery of the addicted veterans from the Vietnam War was because they were in a positive and supportive environment (Proudfoot, 2019). While McConnell and Snoek (2018) opined that the provision of physiological needs is rarely sufficient to effect permanent abstinence, their finding was different from participants' lived experience. The difference in the findings might be due to the sample were extrinsically motivated, such as those seeking utility maximization, compared to those who were prepared for change and in the contemplation stage.

Ryan and Deci (2000) postulated that SDT characterized motivation in a continuum from activities generated based on the different reasons and goals. The different themes emerged such as 'Change (SOT2),' 'Progress (ST3a),' 'New Mindset

(ST3c), 'Spirituality (ST3e),' and 'Motivations' showed extrinsic motivation and intrinsic motivation playing important roles at different epochs in the recovery journey. Each type of motivation influenced the participant's behavior and decision making. However, it does not mean motivation, such as external regulation, will evolve into intrinsic regulation over time - developing from the near end of the continuum to the opposite end naturally. From the participants' lived experience, having both types of regulations brought success in abstinence (Ryan et al., 1995). Another observation involves a high level of extrinsic motivation coupled with a high level of intrinsic motivation can also become effective in achieving success, as Ryan and colleagues posited (1995). The data also indicated that when the participants had an internal locus of control, such as becoming humble instead of having an inflated ego and having more self-control over aggression, they were happy for the behavioral change and found meaning in them. According to Maynard et al. (2019), extrinsic motivation and intrinsic motivation are essential for recovery, but the latter has the internal locus of control to enable long-term positive change.

The participants' growth in motivation was observed to be in a nonlinear fashion compared to the linear SDT continuum of self-determination regulation. The deduced data showed an empirical motivation relationship that is multidimensional since the participants could experience several different types of regulations at one time. For example, they did not want to be reincarcerated because of the lack of autonomy, wanted to prove to skeptic friends that they could change, and wished to take care of their aged parents. The participants expressed having both extrinsic and intrinsic motivations at the same time in their journey of recovery.

Finding 7-Spirituality and Religion are Essential for Successful Abstinence

Spirituality and some forms of religious involvement play an important role in managing the journey of abstinence and quitting the addictive habit (DiClemente, 2013, De Ruysscher et al., 2017). McClintock et al. (2016) argued that religion is "the beliefs, sacred language and rituals, holy texts, traditions, and institutions which are inextricably contextualized by culture and that hold and cultivate a natural capacity for spirituality" (p. 2). The participants were either Christians or Muslims, and they knew the importance of relying on God for help so that they could change. According to Beraldo et al. (2019), they posited spirituality might be helpful to the addicts to handle relational sociocultural factors like socialization and family relationship. They also believed it enables the addicts to find meaning and purpose in life. Alaei et al. (2017) believed spirituality would change attitudes and motivate people to solve problems and achieve goals. Spirituality is also one of the 10 good lives model's primary goods (Tarpey & Friend, 2016). With spirituality and religion, the addicts are more ready to change and sustain the change and create the foundation for healthy living (DiClemente, 2013).

Participant 7 became convicted he was able to change his drugs and violent behaviors when he was reading the Bible in his cell. The revelation from God through the Bible is an example of spiritual awakening. Rhodes and colleagues (2018) believed that it is one of the two common manners in which addicts attributed the ability to sustain remission. The participants continue to find wisdom, strengths, and guidance in their lives through the study of the Bible. To have a better interpretation of the Bible and learn theology, they studied at the theological seminary as well as received their education. They also depended on God through prayers to help, bless

and give them the ability to live the new life they had pledged. Research has shown a religious and spiritual person is unlikely to associate with drug use and, conversely, substance abuse cases are associated with a person not taking religious practice and belief seriously (Appiah et al., 2018).

The participants experienced the ability to overcome temptations, stigma, social prejudices and discrimination, employment, and financial instability. These were some of the multifaceted issues that they faced. They remained committed to their beliefs to receive spiritual support and peace, which were vital to them psychologically and emotionally to remain clean from drugs.

The faith-based halfway house provides spiritual development and care that embrace the concept of rehabilitation. The religious and case workers at the halfway house would attend to the personal and spiritual needs and provide the support to facilitate change. Participant 2 mentioned how the spiritual leaders at the halfway house helped him, "But somehow or rather the leaders here ah, the staff here have helped me to renew my mind, to change my perspective... and the way I live my life la."

Having a new mindset and attitude is similar to having a new identity from that of an offender identity (Bachman et al., 2016a; Ganapathy, 2018). The identity transformation involves a mindset that regulates the motivational systems to set goals, strive to achieve the goal, and monitor achievement (Burnette et al., 2019). There was a change in the participants' perspectives, such as receiving quick and easy money or inducing drugs to receive the euphoria to more conventional socially acceptable preferences (Bachman et al., 2016b). Retaining the previous mindsets could only lead

to relapse (Årstad et al., 2018), and the hope of stamping the addictive behavior would quickly vanish.

The aim of recovery is more than entailing one not to return to the original, preaddictive stage (Moskalewicz, 2016b). The goal is to create a future, for example, having a career, setting up a family, establishing a positive social network of friends, and contributing to sociality. The spiritual support that the halfway houses and religious institutions provided the needed help to fulfill the goals also nurtured the participants' psychological needs, increasing their intrinsic motivation of abstinence (Chan et al., 2019).

Limitations

The limitations of this study are related to the selected representative of the sample, Singaporean ex-prisoners. The participants were representatives of two religious groups, Christians and Muslims. Their experience may not reflect the long-term successful abstinence of those of other faiths in a multiracial and multireligious Singapore, for instance, Buddhism, Taoism, Hinduism, and no religion. Others were not represented in the study, such as those in other government sponsored aftercare programs other than those in the halfway houses, a controlled environment. Exaddicts who are well-educated and have a professional career are also absent in the study. Sadly, the composition of the sample reduces the ability to generalize the results to a larger population.

The other limitation is the lack of knowledge on the severity of the participants' substance use disorder. As there was no record of any clinical assessment using the Diagnostic and Statistical Manual of Mental Disorder (DSM) to diagnose the participants when they were caught for drugs, these findings cannot claim that all

successful ex-addicts have similar experiences and meaning making senses. The themes emerged from the sample and the absence of the denominator to assess prevalence of the lived experience and meaning adds to the limitations in the study (Green 2015).

Recommendations

Future research investigating whether other religions and forms of spirituality play significant roles in providing the motivations to successfully steer ex-addicts from relapse and recidivism since the participants highlighted religion and spirituality positively impacted them. It should also extend to how religion or how much spirituality is needed to create the intrinsic motivation in an addict to sustain long-term abstinence. Prison might also study the environment of the halfway houses and the working relationship between the staff at the halfway house and the residents since the prison had recently set up a secular halfway house in January 2021 (Iau, 2021), and the aftercare program structure was similar to the participants' halfway houses. For the higher socioeconomic status population, examining the successful long-term recovery in this population is beneficial since the drug users in Singapore are becoming more affluent and highly educated (Lee et al., 2020). Research on a similar topic targeting female ex-drug addicts would also bring a more complete study on the population of ex-drugs addicts in Singapore.

Further research may also investigate the various emerging themes in this study addressing impinged psychological factors, for example, whether self-recovery addicts suffer from any underlying core issues. Another example is whether addressing the criminal identifying offenders is a prerequisite for the ex-addicts to make sense and purpose in their life. There is also the propensity to relapse caused by

craving, urges, and triggers due to the neurocircuitry modification. Hence, researchers may examine the use of technology to create virtual situations and scenarios for the ex-addicts to experience. The objective is for the ex-addicts to use their motivations to manage the situation and avoid slip to improve the capacity of rejecting the temptation of drug consumption.

Implications

The study highlighted the certainty that incarcerated drug addicts could abstain from using drugs when they are motivated and placed in a structure that promotes transformation, such as the halfway house. With the transformation, there are some positive social implications worth mentioning. This section will end with recommendations to enhance the prison program and review the clinical practitioners' counseling goal.

Positive Social Change

Findings from this study may create potential positive social change stemming from the positive change in the ex-addicts, specifically in the various social sectors such as individual, family, and societal. At the individual level, ex-drug addicts may feel more confident that the substance use disorder, that the clinicians understood from the functional MRI of the brain, can be reversed and addiction habits broken to live a normal life without the influence of drugs. The participants' success stories also show society accepts the coexistence of incarcerated ex-drug addicts if they are keen to change. Ex-addicts need not feel that it is pointless to work hard or feel that they are at a disadvantage because of the past, especially in employment. They are capable of performing as well as any other employee. Currently, the participants were active in helping those who were addicted, and such altruistic behavior increased their base

confidence, self-esteem, and self-efficacy. Ex-drug addicts who are not engaging in voluntary services such as facilitating and supporting recovery among the addicts may not be aware of the benefits of giving their time to community service. They may consider spending some of their time supporting and becoming role models to other struggling addicts since they have successfully abstained from drugs.

The participants described that they had become more responsible towards their family and their parents on the family level. They expected themselves to take care of their loved ones and not to be a burden to them as in the past. They tended to do their best to prevent and amend the past hurts and damages. Ex-addicts can also have a sense of duty and responsibility to do their best to be better husbands and parents in the family and bring happiness to their loved ones. This is important to parenting because offspring of addicted parents face a higher risk of developing relational issues and feeling insecure throughout the lifespan (Wiig et al., 2017).

At the societal level, these findings can support policy makers and researchers in Singapore to gain a deeper understanding of the nuances of successful rehabilitation for addicts in prison, so reducing the current rate of recidivism is possible. Society becomes safer and more secure in terms of fewer criminal activities. The recovering ex-addicts can also join the workforce to improve the workforce shortage situation in Singapore. To encourage employers to hire ex-offenders, the recent 2021 Budget for Singapore included enhancing wage support for employers with a more extended period when they hire ex-offenders than hiring locals (Tang, 2021).

Practical Implications

The revelation about the ex-addicts' lived experience and meaning making process highlighted a few considerations for prison policymakers and clinical practitioners. Currently, Singapore prison segregated the hardcore addicts from nonhardcore addicts, but the issue of contamination persisted as narrated by the participants. Although there were provisions for the first and second time offenders to be sent to a Drug Rehabilitation Center (DRC) with no criminal record and young drug abusers to attend counseling with their parents (Ministry of Home Affairs, 2019a), yet further segregation inside prison is recommended.

Further segregation could be implemented by assessing the inmates in the respective clusters to determine their motivation using SDT assessment tools such as C-RAI (Sheldon et al., 2017). Within the cluster, the inmates could be differentiated into three SDT categories: amotivational, controlled motivation, and autonomous motivation. They will then attend rehabilitation programs that are fitting for them and choose to attend a technical institution designed for offenders to upgrade or hone the skills that are of interest to them. By the time they complete their incarceration, they should have acquired a certificate with industrial or commercial relevance. The autonomy of choice is a way to respect them and gear towards a greater chance of success in the rehabilitation program. This institution is a way to segregate further nonhardcore and the hardcore to gain competence and prevent contamination. The inmates can also establish a network of friends through games and sports. During this period of rehabilitation, they receive counseling and attend support groups also.

Volunteers and staff from the aftercare agencies can provide support in the treatment plans and continue their support after the inmates are released from prison to provide

a seamless transition of support into the community. In this way, the prison program enhances the third psychological need in the SDT, relatedness.

More time and sessions are suggested to allocate clinical practitioners to manage the counseling cases and conduct support groups in prison and halfway house. The counseling goals should extend beyond helping the addicts to manage their addiction, maladaptive behavior, and coping skills. The clinical practitioners should address the personal core issues of the addicts to prevent these issues from creating blockage or hindering the addicts from progressing and sustaining the recovery process. Training for the clinical practitioners is offered to develop their competence since the management of the case includes the goal of resolving internal core issues.

Conclusion

The findings are relevant and contributed to the limited literature concerning ex-addicts who are released from prison and how they can maintain the commitment to stay away from the influence of drugs. The themes in the study revealed a pathway and process in which recovery addicts from prison could successfully become long-term abstainers in Singapore. This study provides a better insight into the struggles that the ex-addicts have to face and how they remain motivated to stay clean and discover meaning in life. It helps to identify more effective strategies to support exdrug addicts who are released from prison into the community and minimize the likelihood of returning to criminal activity.

Motivation is the factor that helps ex-addicts to remain in the recovery journey. The empirical analysis of this study shows that motivation can be fostered and enhanced to keep them away from the drugs for a long period and further reduce

recidivism rates. Having the correct strategy, positive environment, and reliable support to meet the needs of autonomy, relatedness, and competence, the ex-addicts can increase their motivations. Ex-addicts do not need to feel discouraged because they think that drug addiction is a chronic disease. They can overturn the scientific claim by learning and relearning values, employable skills, and social behaviors and direct their motivation into actions to bring permanent change. Ex-addicts who are determined to remain on the road to recovery should nurture and grow their motivation. To reinforce the habit of change, they can participate in meaningful activities to generate confidence and increase their self-esteem. Having a routine and structure schedule is essential at the beginning phase of the recovery journey.

Religion and spirituality have a significant role in changing their mindset and keeping the ex-addicts away from drugs and their related activities.

Ex-addicts are a little different from non addicts, who might not need the intensity of motivation to stay away from crimes. Ex-addicts must always have the motivation to remain in the path of recovery. It does not require the ex-addicts to have all the different regulations to turn into intrinsic motivations before they succeed in abstinence. Literature indicates that there are various pathways to recovery, but this study has captured a critical formula of motivation in a long-term abstainer equation. Without motivation and nurturing the motivation, the recovery will not be successful, and relapse will be quick. Recovery is a journey of possibility where addicts can recover and live like ordinary citizens to pursue the quality of life.

References

- Agawa, T. (2020). A qualitative examination of relatedness needs in Japanese EFL classrooms and task motivation. *Journal for the Psychology of Language*Learning, 2(1), 6-25. http://www.jpll.org/index.php/journal/article/view/agawa
- Alaei, S., Zabihi, R., Ahmadi, A., Doosti, A., & Saberi, S. M. (2017). Emotional intelligence, spiritual intelligence, self-esteem and self-control of substance abuse. *International Neuropsychiatric Disease Journal*, *9*(4), 1-8. https://doi.org/10.9734/INDJ/2017/33461
- Alase, A. (2017). The interpretative phenomenological analysis (IPA): A guide to a good qualitative research approach. *International Journal of Education and Literacy Studies*, 5(2), 9-19. https://doi.org/10.7575/aiac.ijels.v.5n.2p.9
- Amankwaa, L. (2016). Creating protocols for trustworthiness in qualitative research. *Journal of Cultural Diversity*, 23(3), 121–127.
- American Psychological Association. (2016). *Ethical principles of psychologists and code of conduct*. https://www.apa.org/ethics/code/index
- American Society of Addiction Medicine. (2015). *National practice guideline for the use of medications in the treatment of addiction involving opioid use*. https://www.asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/asam-national-practice-guideline-supplement.pdf? sfvrsn=24#search=%22terminology%20related%20to%20addiction%20%20tr eatment%20%20and%20r%22
- Amin, M. E. K., Nørgaard, L. S., Cavaco, A. M., Witry, M. J., Hillman, L., Cernasev, A., & Desselle, S. P. (2020). Establishing trustworthiness and authenticity in

- qualitative pharmacy research. *Research in Social & Administrative Pharmacy*, 16(10), 1472–1482. https://doi.org./10.1016/j.sapharm.2020.02.005
- Anderson, V. (2017). Criteria for evaluating qualitative research. *Human Resource Development Quarterly*, 28(2), 125-133. https://doi.org/10.1002/hrdq.21282
- Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct* (5th ed.). LexisNexis.
- Annaheim, B., Wangmo, T., Bretschneider, W., Vogel, M., & Elger, B. S. (2018).

 Can routine data from prisoners' files be used to estimate prevalence rates of illicit drug use among prisoners? *International Journal of Public Health*, 63(1), 33-40. https://doi.org/10.1007/s00038-017-1030-1
- Appiah, R., Boakye, K. E., Ndaa, P., & Aziato, L. (2018). "Tougher than ever": An exploration of relapse prevention strategies among patients recovering from poly-substance use disorders in Ghana. *Drugs: Education, Prevention and Policy*, 25(6), 467-474. https://doi.org/10.1080/09687637.2017.1337080
- Arsel, Z. (2017). Asking questions with reflexive focus: A tutorial on designing and conducting interviews. *Journal of Consumer Research*, *44*(4), 939-948. https://doi.org/10.1093/jcr/ucx096
- Årstad, J., Nesvåg, S. M., Njå, A. L. M., & Biong, S. N. (2018). How enough becomes enough: Processes of change prior to treatment for substance use disorder. *Journal of Substance Use*, *23*(4), 429-435. https://doi.org/10.1080/14659891.2018.1436608
- Ashford, R. D., Brown, A., Brown, T., Callis, J., Cleveland, H. H., Eisenhart, E., Groover, H., Hayes, N., Johnston, T., Kimball, T., Manteuffel, B, McDaniel,

- J., Montgomery, L., Phillips, S., Polacek, M., Statman, M., & Whitney J. (2018). Defining and operationalizing the phenomena of recovery: A working definition from the Recovery Science Research Collaborative. *Addiction Research & Theory*, 27(3), 1-10.
- https://doi.org/10.1080/16066359.2018.1515352
- Ashford, R. D., Brown, A. M., Ryding, R., & Curtis, B. (2020). Building recovery ready communities: The recovery ready ecosystem model and community framework. *Addiction Research & Theory*, 28(1), 1-11. https://doi.org/10.1080/16066359.2019.1571191
- Ávila, M., & Sanjuán, P. (2018). The joint contribution of motivation and coping to prisoners' well-being. *The Spanish Journal of Psychology*, 21, E46. https://doi.org/10.1017/sjp.2018.45
- Babić, R., Babić, D., Martinac, M., Pavlović, M., Vasilj, I., Miljko, M., & Vasilj, M.(2018). Addictions without drugs contemporary addictions or way of life.Psychiatria Danubina, 30(6), 371-379.
- Bachman, R., Kerrison, E., Paternoster, R., O'Connell, D., & Smith, L. (2016).
 Desistance for a long-term drug-involved sample of adult offenders: The importance of identity transformation. *Criminal Justice and Behavior*, 43(2), 164-186. https://doi.org/10.1177/0093854815604012
- Badie, A., Makvandi, B., Bakhtiarpour, S., & Pasha, P. (2020). Drug cravings and its relationship with family communication patterns and resiliency through the mediatory role of difficulty in cognitive emotion regulation. *Journal of Client-Centered Nursing Care*, 6(2), 125-134.

https://doi.org/10.32598/JCCNC.6.2.329-1

- Baltzer, M. (2018). Redefining drug offences in Southeast Asia. *Singapore Academy of Law Journal*, 30, 776-796.
- Ballester, L., Amer, J., Sánchez-Prieto, L., & Valero de Vicente, M. (2020). Universal family drug prevention programs. A Systematic Review. *Journal of Evidence-Based Social Work*, *18*(2), 1-22. https://doi.org/10.1080/26408066. 2020.1822976
- Barbieri, B., Dal Corso, L., Sipio, D., Maria, A., De Carlo, A., & Benevene, P. (2016). Small opportunities are often the beginning of great enterprises: The role of work engagement in support of people through the recovery process and in preventing relapse in drug and alcohol abuse. *Work*, 55(2), 373-383. https://doi.org/10.3233/wor-162411
- Baumeister, R. F., & Nadal, A. C. (2017). Addiction: Motivation, action control, and habits of pleasure. *Motivation Science*, *3*(3), 179-195. https://doi.org/10.1037/mot0000069
- Becker, J. B., McClellan, M. L., & Reed, B. G. (2017). Sex differences, gender and addiction. *Journal of Neuroscience Research*, 95(1-2), 136-147. https://doi.org/10.1002/jnr.23963
- Becoña, E. (2018). Brain disease or biopsychosocial model in addiction?

 Remembering the Vietnam Veteran Study. *Psicothema*, *30*(3), 270–275.

 https://doi.org/10.7334/psicothema2017.303
- Belenko, S. (2018). The role of drug courts in promoting desistance and recovery: A merging of therapy and accountability. *Addiction Research & Theory*, 27(1), 1-13. https://doi.org/10.1080/16066359.2018.1524882

- Belin-Rauscent, A., Fouyssac, M., Bonci, A., & Belin, D. (2016). How preclinical models evolved to resemble the diagnostic criteria of drug addiction.

 Biological Psychiatry, 79(1), 39-46.

 https://doi.org/10.1016/j.biopsych. 2015.01.004
- Bellamy, K., Ostini, R., Martini, N., & Kairuz, T. (2016). Seeking to understand:

 Using generic qualitative research to explore access to medicines and pharmacy services among resettled refugees. *International Journal of Clinical Pharmacy*, 38(3), 671-675. https://doi.org/10.1007/s11096-016-0261-1
- Best, D., & Colman, C. (2019). Let's celebrate recovery. Inclusive cities working together to support social cohesion. *Addiction Research & Theory*, 27(1), 55-64. https://doi.org/10.1080/16066359.2018.1520223
- Best, D., De Alwis, S. J., & Burdett, D. (2017). The recovery movement and its implications for policy, commissioning and practice. *Nordic Studies on Alcohol and Drugs*, 34(2), 107-111.
 https://doi.org/10.1177/ 1455072517691058
- Best, D., Irving, J., & Albertson, K. (2017). Recovery and desistance: What the emerging recovery movement in the alcohol and drug area can learn from models of desistance from offending. *Addiction Research & Theory*, 25(1), 1-10. https://doi.org/10.1080/16066359.2016.1185661
- Best, D., & Colman, C. (2019). Let's celebrate recovery. Inclusive cities working together to support social cohesion. *Addiction Research & Theory*, 27(1), 55-64. https://doi.org/10.1080/16066359.2018.1520223

- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking:

 A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802-1811.

 https://doi.org/10.1177/ 1049732316654870
- Blanco-Gandía, M. C., Mateos-García, A., García-Pardo, M. P., Montagud-Romero, S., Rodríguez-Arias, M., Miñarro, J., & Aguilar, M. A. (2015). Effect of drugs of abuse on social behaviour: A review of animal models. *Behavioural Pharmacology*, 26(6), 541-570. https://doi.org/10.1097/FBP. 0000000000000162
- Bond, A. J., & Witton, J. (2017). Perspectives on the pharmacological treatment of heroin addiction. *Clinical Medicine Insights: Psychiatry*, 8, 1-10. https://doi.org/10.1177/1179557317737322
- Bosker, J., & Witteman, C. (2016). Finding the right focus: Improving the link between risk/needs assessment and case management in probation.

 *Psychology, Public Policy, and Law, 22(2), 221–233.

 https://doi.org/10.1037/law0000075
- Braga, L. A. B., Vasconcelos, F. C. W., & Ituassu, C. T. (2018). APAC: Institution for The Resocialization of Prisoners. *Revista Pensamento Contemporâneo Em Administração*, 12(2), 17-30. https://doi.org/10.12712/rpca.v12i1.1157
- Breidenbach, S., & Tse, S. (2016). Exploratory Study: Awakening with natural recovery from alcohol or drug addiction in Hong Kong. *Journal of Humanistic Psychology*, *56*(5), 483-502. https://doi.org/10.1177/0022167815583214

- Brogan, L., Haney-Caron, E., NeMoyer, A., & DeMatteo, D. (2015). Applying the Risk-Needs-Responsivity (RNR) model to juvenile justice. *Criminal Justice Review*, 40(3), 277-302. https://doi.org/10.1177/0734016814567312
- Bruce, R. D. (2018). Opioid addiction, opioid addiction treatment, and HIV infection.

 *Topics in Antiviral Medicine, 26(3), 89-92.

 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6291298/
- Brunelle, N., Bertrand, K., Landry, M., Flores-Aranda, J., Patenaude, C., & Brochu, S. (2015). Recovery from substance use: Drug-dependent people's experiences with sources that motivate them to change. *Drugs: Education, Prevention and Policy*, 22(3), 301-307. https://doi.org/10.3109/09687637.2015.1021665
- Burnette, J. L., Forsyth, R. B., Desmarais, S. L., & Hoyt, C. L. (2019). Mindsets of addiction: Implications for treatment intentions. *Journal of Social and Clinical Psychology*, 38(5), 367-394. https://doi.org/10.1521/jscp.2019.38.5.367
- Casper, W. J., Vaziri, H., Wayne, J. H., DeHauw, S., & Greenhaus, J. (2018). The jingle-jangle of work–nonwork balance: A comprehensive and meta-analytic review of its meaning and measurement. *Journal of Applied Psychology*, 103(2), 182-214. https://doi.org/10.1037/apl0000259
- Castillo-Montoya, M. (2016). Preparing for interview research: The interview protocol refinement framework. *The Qualitative Report, 21*(5), 811-831. https://nsuworks.nova.edu/tqr/vol21/iss5/2
- Castro, E. L. (2018). Racism, the language of reduced recidivism, and higher education in prison: Toward an anti-racist praxis. *Critical Education*, *9*(17), 1–18. https://doi.org/10.14288/ce.v9i17.186357

- Central Narcotics Bureau. (2018, February 5). Overview of Singapore's drug situation in 2017.
 - https://www.cnb.gov.sg/newsandevents/reports-(overview)/drug-report/Index/drug-situation-report-2017
- Cepeda, J. A., Vetrova, M. V., Lyubimova, A. I., Levina, O. S., Heimer, R., & Niccolai, L. M. (2015). Community reentry challenges after release from prison among people who inject drugs in St. Petersburg, Russia. *International Journal of Prisoner Health*, 11(3), 183-192. https://doi.org/10.1108/IJPH-03-2015-0007
- Chan, G. H., Lo, T. W., Tam, C. H., & Lee, G. K. (2019). Intrinsic motivation and psychological connectedness to drug abuse and rehabilitation: The perspective of self-determination. *International journal of environmental research and public health*, *16*(11), 1934-1950. https://doi.org/10.3390/ijerph16111934
- Chan, H. C., Lo, T. W., Zhong, L. Y., & Chui, W. H. (2015). Criminal recidivism of incarcerated male nonviolent offenders in Hong Kong. *International Journal* of Offender Therapy and Comparative Criminology, 59(2), 121-142. https://doi.org/10.1177/0306624X13502965
- Chan, J. P., & Boer, D. P. (2016a). Managing offenders: Establishing the impact of incarceration and what works in Singapore. *Safer Communities*, *15*(1), 33-48. https://doi.org/10.1108/SC-06-2015-0024
- Chan, J. P., & Boer, D. P. (2016b). Managing offenders and what works in Singapore:

 Ten Reintegration Assessment Predictors (TRAP). *Safer Communities*, *15*(3),

 142-159. https://doi.org/10.1108/SC-06-2015-0024

- Chan, W. C. (2016). The death penalty in Singapore: In decline but still too soon for optimism. *Asian Journal of Criminology*, 11(3), 179-206. https://doi.org/10. 1007/s11417-015-9226-x
- Chang, K. C., Lin, C. Y., Chang, C. C., Ting, S. Y., Cheng, C. M., & Wang, J. D.
 (2019). Psychological distress mediated the effects of self-stigma on quality of life in opioid-dependent individuals: A cross-sectional study. *PLOS ONE*,
 14(2), Article e0211033. https://doi.org/10.1371/journal.pone.0211033
- Chang, W. C., Kwong, V. W. Y., Chan, G. H. K., Jim, O. T. T., Lau, E. S. K., Hui, C. L. M., Chan, S. K. W., Lee, E. H. M., & Chen, E. Y. H. (2017). Prediction of motivational impairment: 12-month follow-up of the randomized-controlled trial on extended early intervention for first-episode psychosis. *European Psychiatry*, 41, 37-41. https://doi.org/10.1016/j.eurpsy.2016.09.007
- Chie, Q. T., Tam, C. L., Bonn, G., Dang, H. M., & Khairuddin, R. (2016). substance abuse, relapse, and treatment program evaluation in Malaysia: Perspective of rehab patients and staff using the mixed method approach. *Frontiers in Psychiatry*, 7(90), 1-15. https://doi.org/10.3389/fpsyt.2016.00090
- Chen, G. (2018). Building recovery capital: The role of "hitting bottom" in desistance and recovery from substance abuse and crime. *Journal of Psychoactive Drugs*, 50(5), 420-429. https://doi.org/10.1080/02791072.2018.1517909
- Chen, S. (2015). Discretionary Death Penalty for Convicted Drug Couriers in Singapore: Reflections on High Jurisprudence thus far. *International Islamic University of Malaysia Law Journal*, 23(1), 31-59. https://doi.org/10.31436/iiumlj.v23i1.141

- Chie, Q. T., Tam, C. L., Bonn, G., Hoang Minh Dang, & Khairuddin, R. (2016).
 Substance Abuse, Relapse, and Treatment Program Evaluation in Malaysia:
 Perspective of Rehab Patients and Staff Using the Mixed Method Approach.
 Frontiers in Psychiatry, 7. https://doi.org/10.3389/fpsyt.2016.00090
- Chin, D. K. T., & Iyer, N. (2018). Enhancing corrections, transforming lives: A Singapore perspective. *Asia Pacific Journal of Social Work and Development,* 28(3), 147-153. https://doi.org/10.1080/02185385.2018.1461127
- Chong, S. L. (2019). Making critical connections: How to apply the Analytic Guiding Frame (AGF) and Overall Guiding Frame (OGF) in qualitative data analysis.

 The Qualitative Report, 24(2), 298-306.

 https://nsuworks.nova.edu/tqr/vol24/iss2/8
- Collins, A., & McCamley, A. (2018). Quality of life and better than well: A mixed method study of long-term (post five years) recovery and recovery capital.
 Drugs and Alcohol Today, 18(4), 217-226.
 https://doi.org/10.1108/DAT-11-2017-0059
- Connelly, L. M. (2016). Trustworthiness in qualitative research. *Medsurg Nursing*, 25(6), 435-437.
- Conrod, P. J. (2016). Personality-targeted interventions for substance use and misuse.

 Current Addiction Reports, 3(4), 426-436.

 https://doi.org/10.1007/s40429-016-0127-6
- Corbin, J., & Strauss, A. (2015). Basics of qualitative research: Techniques and procedures for developing grounded theory. Sage.

- Corrigan, P., Schomerus, G., & Smelson, D. (2017). Are some of the stigmas of addictions culturally sanctioned?. *The British Journal of Psychiatry*, 210(3), 180-181. https://doi.org/10.1192/bjp.bp.116.185421
- Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage.
- Davidson, K. M., & Young, J. T. (2019). Treatment engagement in a prison-based therapeutic community: A mixed-methods approach. *Journal of Substance Abuse Treatment*, 103, 33-42. https://doi.org/10.1016/j.jsat.2019.05.011
- De Andrade, D., Ritchie, J., Rowlands, M., Mann, E., & Hides, L. (2018). Substance use and recidivism outcomes for prison-based drug and alcohol interventions. *Epidemiologic Reviews*, 40(1), 121-133. https://doi.org/10.1093/epirev/mxy004
- De Ruysscher, C., Vandevelde, S., Vanderplasschen, W., De Maeyer, J., & Vanheule, S. (2017). The concept of recovery as experienced by persons with dual diagnosis: A systematic review of qualitative research from a first-person perspective. *Journal of Dual Diagnosis*, 13(4), 264–279. https://doi.org/10.1080/15504263.2017.134997
- Deci, E., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer Science & Business Media.
- Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. R. (1994). Facilitating internalization: The self-determination theory perspective. *Journal of Personality*, 62(1), 119-142. https://doi.org/10.1111/j.1467-6494.1994.tb00797.x

- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne*, 49(3), 182-185. https://doi.org/10.1037/a0012801
- De Cruz, N. P., & Duncombe, R. (2016). Qualitative inquiry of the Singapore environment and motivation of elite athletes: A self-determination perspective.

 *Asia Pacific Journal of Sport and Social Science, 5(3), 244-262.

 https://doi.org/10.1080/21640599.2016.1253907
- Dekkers, A., Beerens, J., Wittouck, C., & Vanderplasschen, W. (2016). Recovery through the eyes of drug treatment court clients. *Cahiers Politiestudies*, 40, 191-210. https://www.researchgate.net/publication/309664149
- DiClemente, C. C. (2013). Paths through addiction and recovery: The impact of spirituality and religion. *Substance Use & Misuse*, 48(12), 1260–1261. https://doi.org/10.3109/10826084.2013.808475
- Dolan, K., Worth, H., & Wilson, D. (2015). Compulsory treatment of drug users in Asia: Designed to torture? *International Journal of Prisoner Health*, 11(4), 255-268. https://doi.org/10.1108/IJPH-09-2014-0030
- Drake, E. K. (2018). The monetary benefits and costs of community supervision.

 Journal of Contemporary Criminal Justice, 34(1), 47-68.

 https://doi.org/ 10.1177/1043986217750425
- Durjava, L., Visick, A., & Banbury, S. (2018). Heroin addiction in British prisons: An interpretative phenomenological analysis. *MOJ Addiction Medicine Therapy*, 5(2), 62-67. https://doi.org/10.15406/mojamt.2018.05.00094

- Durnescu, I. (2019). Work as a drama: The experience of former prisoners in the labour market. *European Journal of Criminology*, 18(2), 170-191. https://doi.org/10.1177/1477370819838718
- Eddy, J., & Bustamante, C. (2020). Closing the pre and in-service gap: Perceptions and implementation of the IPA during student teaching. *Foreign Language*Annals, 53(3), 634-656. https://doi.org/10.1111/flan.12481
- Ellefsen, R. (2017). Taking sides? Issues of bias and partisanship when researching socio-political conflict. *Critical Criminology*, *25*(2), 231-244. https://doi.org/ 10.1007/s10612 -017-9355-x
- Ersche, K. D., Gillan, C. M., Jones, P. S., Williams, G. B., Ward, L. H. E., Luijten, M., Wit, S., Sahakian B. J., Bullmore, E. T., & Robbins, T. W. (2016). Carrots and sticks fail to change behavior in cocaine addiction. *Science*, *352*(6292), 1468-1471. https://doi.org/10.1126/science.aaf3700
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11
- Fattore, L., & Melis, M. (2016). Sex differences in impulsive and compulsive behaviors: A focus on drug addiction. *Addiction Biology*, 21(5), 1043-1051. https://doi.org/10.1111/adb.12381
- Fazel, S., & Wolf, A. (2015). A systematic review of criminal recidivism rates worldwide: Current difficulties and recommendations for best practice. *PLOS ONE*, *10*(6), Article e0130390. https://doi.org/10.1371/journal.pone.0130390
- Feng, L. Y., Yu, W. J., Chang, W. T., Han, E., Chung, H., & Li, J. H. (2016).

 Comparison of illegal drug use pattern in Taiwan and Korea from 2006 to

- 2014. *Substance Abuse Treatment, Prevention, and Policy, 11*(1), 34-46. https://doi.org/10.1186/s13011-016-0078-x
- Firdausi, N. I. A., Hotifah, Y., & Simon, I. M. (2020). Psychological dynamics of young people on broken home families. *Acta Counseling and Humanities*, *1*(1), 31-41. https://doi.org/10.46637/ach.v1i1.9
- Frankl, V. E. (2021). Man's search for meaning. Random House.
- Fusch, P. I., & Ness, L. R. (2015). Are We There Yet? Data Saturation in Qualitative Research. *Qualitative Report*, 20(9), 1408–1416. http://nsuworks.nova.edu/tqr/vol20/iss9/3
- Galassi, A., Mpofu, E., & Athanasou, J. (2015). Therapeutic community treatment of an inmate population with substance use disorders: Post-release trends in rearrest, re-incarceration, and drug misuse relapse. *International Journal of Environmental Research and Public Health*, 12(6), 7059-7072. https://doi.org/10.3390/ijerph120607059
- Ganapathy, N. (2018). Rehabilitation, reintegration and recidivism: A theoretical and methodological reflection. *Asia Pacific Journal of Social Work and Development*, 28(3), 154-167. https://doi.org/10.1080/02185385.

 2018.1501416
- George, P., Vicknasingam, B., Thurairajasingam, S., Ramasamy, P., Yusof, H. M., Yasin, M. A. B. M., & Shah, Z. U. B. S. (2018). Methadone complications amongst opioid-dependent patients in Malaysia: A case series. *Drug and Alcohol Review*, 37(1), 147–151. https://doi.org/10.1111/dar.12456

- Gilbert, B., & O'Dowd, K. (2019). Emotion, time, and the voice of women affected by the criminal justice process: Corston and the female offender strategy. *British Journal of Community Justice*, 15(1), 19-30.

 https://www.mmuperu.co.uk/bjcj/articles/emotion-time-and-the-voice-of-
- Goldman, R. N. (2017). Case formulation in emotion-focused therapy. *Person-Centered & Experiential Psychotherapies*, 16(2), 88–105. https://doi.org/10.1080/14779757.2017.1330705

women-affected-by-the-criminal-justice-process

- Gossop, M. (2015). The National Treatment Outcomes Research Study (NTORS) and its influence on addiction treatment policy in the United Kingdom. *Addiction*, 110, 50-53. https://doi.org/10.1111/add.12906
- Green, C. A., Yarborough, M. T., Polen, M. R., Janoff, S. L., & Yarborough, B. J. (2015). Dual recovery among people with serious mental illnesses and substance problems: A qualitative analysis. *Journal of Dual Diagnosis*, *11*(1), 33–41. https://doi.org/10.1080/15504263.2014.975004
- Greenwood, M., Kendrick, T., Davies, H., & Gill, F. J. (2017). Hearing voices:

 Comparing two methods for analysis of focus group data. *Applied Nursing Research*, 35, 90-93. https://doi.org/10.1016/j.apnr.2017.02.024
- Gucwa-Porębska, K. (2019). Dysfunctionality of the family environment as one of the reasonss for recidivism. *Acta Universitatis Lodziensis*. *Folia Sociologica*, 71, 41-50. https://doi.org/10.18778/0208-600X.71.04
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*(1), 59-82. https://doi.org/10.1177/1525822X05279903

- Hampson, M., Watt, B., & Hicks, R. (2019). Understanding the recovery process in psychosis. *Journal of Recovery in Mental Health*, 2(2/3), 35-44. https://jps.library.utoronto.ca/index.php/rmh/article/view/32742
- Harrison, R., Van Hout, M. C., Cochrane, M., Eckley, L., Noonan, R., Timpson, H.,
 & Sumnall, H. (2020). Experiences of sustainable abstinence-based recovery:
 An exploratory study of three recovery communities (RC) in England.
 International Journal of Mental Health and Addiction, 18(3), 640-657.
 https://doi.org/10.1007/s11469-018-9967-8
- Haviv, N., & Hasisi, B. (2019). Prison Addiction Program and the Role of Integrative

 Treatment and Program Completion on Recidivism. *International Journal of Offender Therapy & Comparative Criminology*, 63(15/16), 2741–2770.

 https://doi.org/10.1177/0306624X19871650
- Herdener, M., Dürsteler, K. M., Seifritz, E., & Nordt, C. (2017). Changes in substance use in patients receiving opioid substitution therapy and resulting clinical challenges: a 17-year treatment case register analysis. *The Lancet Psychiatry*, 4(4), 302-309. https://doi.org/10.1016/S2215-0366(17)30080-9
- Hill, P. C., & Pargament, K. I. (2008). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *Psychology of Religion and Spirituality*, S(1), 3–17. https://doi.org/10.1037/0003-066X.58.1.64
- Holtzhausen, L. (2017). Addiction—a brain disorder or a spiritual disorder. *Mental Health and Addiction Research*, 2(1), 1-7. https://doi.org/10.15761/MHAR.1000128

- Hsieh, Y. P., Shen, A. C. T., Hwa, H. L., Wei, H. S., Feng, J. Y., & Huang, S. C. Y.
 (2020). Associations Between Child Maltreatment, Dysfunctional Family
 Environment, Post-Traumatic Stress Disorder and Children's Bullying
 Perpetration in a National Representative Sample in Taiwan. *Journal of Family Violence*, 36, 27-36. doi.org/10.1007/s10896-020-00144-6
- Huckans, M., Fuller, B. E., Chalker, A. L., Adams, M., & Loftis, J. M. (2015). Plasma inflammatory factors are associated with anxiety, depression, and cognitive problems in adults with and without methamphetamine dependence: An exploratory protein array study. *Frontiers in Psychiatry*, *6*(178), 1-13. https://doi.org/10.3389/fpsyt.2015.00178
- Hunter, B. A., Lanza, A. S., Lawlor, M., Dyson, W., & Gordon, D. M. (2016). A strengths-based approach to prisoner reentry: The fresh start prisoner reentry program. *International Journal of Offender Therapy and Comparative Criminology*, 60(11), 1298-1314. https://doi.org/10.1177/0306624X15576501
- Iau, J. (2021 Marc 24). Halfway house now takes in offenders on community-based programmes to start real-world rehab early. *The Straits Times*. https://www.straitstimes.com/singapore/halfway-house-now-takes-in-offenders-serving-community-based-programmes-to-start-real
- James, D. L., & Jowza, M. (2019). Treating opioid dependence: Pain medicine physiology of tolerance and addiction. *Clinical Obstetrics and Gynecology*, 62(1), 87-97. https://doi.org/10.1097/GRF.00000000000000022
- Jang, S. J., Johnson, B. R., Hays, J., Hallett, M., & Duwe, G. (2020). Prisoners

 Helping Prisoners Change: A Study of Inmate Field Ministers Within Texas

- Prisons. International Journal of Offender Therapy and Comparative

 Criminology, 64(5), 470-497. https://doi.org/10.1177/0306624X19872966
- Jertfelt, Gustafsson, I. H., Blanchin, A., & Li, S. (2016). Cultural perspective in openended interviews—The importance of being adaptable. *Culture & Psychology*, 22(4), 483-501. https://doi.org/10.1177/1354067X16650809
- Jochems, E. C., Duivenvoorden, H. J., van Dam, A., van der Feltz-Cornelis, C. M., & Mulder, C. L. (2017). Motivation, treatment engagement and psychosocial outcomes in outpatients with severe mental illness: A test of Self-Determination Theory. *International Journal of Methods in Psychiatric Research*, 26(3), e1537. https://doi.org/10.1002/mpr.1537
- Johnson, S., & Rasulova, S. (2017). Qualitative research and the evaluation of development impact: Incorporating authenticity into the assessment of rigour.

 Journal of Development Effectiveness, 9(2), 263-276.

 https://doi.org/10.1080/19439342.2017.1306577
- Kassai, S., Pintér, J., Rácz, J., Erdősi, D., Milibák, R., & Gyarmathy, V. (2017). Using interpretative phenomenological analysis to assess identity formation among users of synthetic cannabinoids. *International Journal of Mental Health & Addiction*, 15(5), 1047–1054. https://doi.org/10.1007/s11469-017-9733-3
- Kåven, A. S., Maack, J. K., Flåm, A. M., & Nivison, M. (2019). "It's My Responsibility, But..." A Qualitative Study of Perpetrators' Understanding of Child Sexual Abuse. *Journal of Child Sexual Abuse*, 28(2), 240-258. https://doi.org/10.1080/10538712.2018.1523815

- Kekez, A. (2019). Qualitative data analysis in implementation and street-level bureaucracy research (pp. 317-335). In P. Hupe (Ed.), *Research Handbook on Street-Level Bureaucracy*. Edward Elgar Publishing.
- Kelly, J. F., Greene, M. C., & Bergman, B. G. (2016a). Recovery benefits of the "therapeutic alliance" among 12-step mutual-help organization attendees and their sponsors. *Drug and Alcohol Dependence*, 162, 64-71. https://doi.org/10.1016/j.drugalcdep.2016.02.028
- Kelly, J. F., Greene, M. C., Bergman, B., Hoeppner, B. B., & Slaymaker, V. (2016b).
 The sponsor alliance inventory: Assessing the therapeutic bond between 12-step attendees and their sponsors. *Alcohol and Alcoholism*, 51(1), 32-39.
 https://doi.org/10.1093/alcalc/agv071
- Kelly, J. F., Greene, M. C., & Bergman, B. G. (2018a). Is recovery from cannabis use problems different from alcohol and other drugs? Results from a national probability-based sample of the United States adult population. *International Journal of Drug Policy*, *53*, 55-64. https://doi.org/10.1016/j.drugpo. 2017.12.007
- Kelly, P., Hegarty, J., Barry, J., Dyer, K. R., & Horgan, A. (2018b). The relationship between staff perceptions of organizational readiness to change and client outcomes in substance misuse treatment programmes: A systematic review. *Journal of Substance Use*, 23(3), 223-239.

 https://doi.org/10.1080/14659891 .2017.1394385
- Kendall, S., Redshaw, S., Ward, S., Wayland, S., & Sullivan, E. (2018). Systematic review of qualitative evaluations of reentry programs addressing problematic

- drug use and mental health disorders amongst people transitioning from prison to communities. *Health & Justice*, *6*(1), 4-15. https://doi.org/10.1186/s40352-018-0063-8
- Kolind, T., & Bjønness, J. (2019). 'The right way to be a woman': Negotiating femininity in a prison-based drug treatment programme. *Punishment & Society*, 21(1), 107-124. https://doi.org/10.1177/1462474517749049
- Koman, R. N. (2018). It Is Not about the Drugs. A comparative and contextual analysis of Singapore and European drug approaches. *Beijing Law Review*, 9, 439-459. https://doi.org/10.4236/blr.2018.93027
- Koman, R. N. (2019). Sustaining the Development goals in drug approaches in Europe, Norway and Singapore. *Beijing Law Review*, 10(4), 882-912https://doi.org/10.4236/blr.2019.104048
- Koob, G. F., & Volkow, N. D. (2016). Neurobiology of addiction: A neurocircuitry analysis. *The Lancet Psychiatry*, *3*(8), 760-773. https://doi.org/10.1016/S2215-0366 (16)00104-8
- Korcha, R. A., Polcin, D., & Bond, J. (2016). Interaction of motivation and social support on abstinence among recovery home residents. *Journal of Drug Issues*, 46(3), 164-177. https://doi.org/10.1177/0022042616629514
- Korman, R. N. (2018). It is not about the drugs: A comparative and contextual analysis of Singapore and European approach to drug issues. *Beijing Law Review*, *9*(3), 439-459. https://doi.org/10.4236/blr.2018.93027
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research.

 Part 4: Trustworthiness and publishing. *European Journal of General*Practice, 24(1), 120-124. https://doi.org/10.1080/13814788.2017.1375092

- Kougiali, Z. G., Fasulo, A., Needs, A., & Van Laar, D. (2017). Planting the seeds of change: Directionality in the narrative construction of recovery from addiction. *Psychology & Health*, 32(6), 639–664.
 https://doi.org/10.1080/08870446.2017.1293053
- Kushner, J., & Philipson, T. (2018, November 19). Criminal justice reform: We can improve expensive, ineffective system by lowering recidivism. *Law & Justice*. https://www.whitehouse.gov/briefings-statements/kushner-philipson-criminal-justice-reform-can-improve-expensive-ineffective-system-lowering-recidivism/
- Laing, S. (2016). Understanding the "rrring" female: A literature review exploring the evolution of the criminalized female offender. *Journal of Undergraduate*Studies at Trent (JUST), 4(1): 1-11.

 http://ojs.trentu.ca/ojs/index.php/just /article/view/72
- Landrum, B., & Garza, G. (2015). Mending fences: Defining the domains and approaches of quantitative and qualitative research. *Qualitative Psychology*, 2(2), 199–209. https://doi.org/10.1037/qup0000030
- Larkin, M., Watts, S., & Clifton, E. (2006). Giving voice and making sense in interpretative phenomenological analysis. *Qualitative Research in Psychology*, 3(2), 102-120. https://doi.org/10.1191/1478088706qp062oa
- Larkin, M., Shaw, R., & Flowers, P. (2019). Multiperspectival designs and processes in interpretative phenomenological analysis research. *Qualitative Research in Psychology*, 16(2), 182-198. https://doi.org/10.1080/14780887.2018.1540655

- Laudet, A., & Hill, T. (2015). Life experiences in active addiction and in recovery among treated and untreated persons: A national study. *Journal of Addictive Diseases*, 34(1), 18-35. https://doi.org/10.1080/10550887.2014.975615
- Lavallee, Z. (2020). Addictive craving: There's more to wanting more. *Philosophy, Psychiatry, & Psychology, 27*(3), 227-238. https://doi.org/ 10.1353/ppp.2020.0028
- Lazarus, J. V., Safreed-Harmon, K., Hetherington, K. L., Bromberg, D. J., Ocampo, D., Graf, N., Dichtl, A., Stöver, H., & Wolff, H. (2018). Health outcomes for clients of needle and syringe programs in prisons. *Epidemiologic Reviews*, 40(1), 96-104. https://doi.org/10.1093/epirev/mxx019
- Lee, A. W. (2016). Institutional dilemmas: The difficulty of making a turning point in residential drug treatment. *Journal of Drug Issues*, 46(4), 354-372. https://doi.org/ 10.1177/0022042616659756
- Lee, J. D., Friedmann, P. D., Kinlock, T. W., Nunes, E. V., Boney, T. Y., Hoskinson
 Jr., R. A., Wilson, D., McDonald, R., Rotrosen, J., Gourevitch, M. N., Gordon,
 M., Fishman, M., Chen, D. T., Bonnie, R. J., Cornish, J. W., Murphy, S. M., &
 O'Brien, C. P. (2016). Extended-release naltrexone to prevent opioid relapse
 in criminal justice offenders. *New England Journal of Medicine*, 374(13),
 1232-1242. https://doi.org/10.1056/NEJMoa1505409
- Lee, J., Yu, F., Auyong, H., & Chok, S. (2020). Community-Based approaches to the prevention, rehabilitation and reintegration of drug offenders.

 ScholarBank@NUS Repository*, 1-74.

 https://scholarbank.nus.edu.sg/handle/ 10635/171790

- Leichsenring, F., Luyten, P., Hilsenroth, M. J., Abbass, A., Barber, J. P., Keefe, J. R., Leweke, F., Rabung, S., & Steinert, C. (2015). Psychodynamic therapy meets evidence-based medicine: A systematic review using updated criteria. *The Lancet Psychiatry*, *2*(7), 648-660. https://doi.org/10.1016/S2215-0366(15)00155-8
- Lewis, M. (2017). Addiction and the brain: development, not disease. *Neuroethics*, 10, 7–18. https://doi.org/10.1007/s12152-016-9293-4
- Li, Q., Li, W., Wang, H., Wang, Y., Zhang, Y., Zhu, J., Zheng, Y., Zhang, D., Wang,
 L., Li, Y., Yan, X., Chang, H., Fan, M., Li, Z., Tian, J., Gold, M. S., Wang,
 W., & Liu, Y. (2015). Predicting subsequent relapse by drug-related cue-induced brain activation in heroin addiction: An event-related functional
 magnetic resonance imaging study. *Addiction Biology*, 20(5), 968-978.
 https://doi.org/10.1111/adb.12182
- Lin, A. L., Ong, G., Yeo, C. Z., Chia, D. X., & Kaur, J. (2018). Effective rehabilitation through evidence-based corrections. *Development*, 6(2). https://www.corrections.govt.nz/resources/research_and_statistics/journal/volume_6_issue_1_july_2018/effective_rehabilitation_through_evidence-based corrections.html
- Lin, C. C. (2019). The effects of gratitude on suicidal ideation among late adolescence: A mediational chain. Current Psychology: Research and Review. https://doi.org/10.1007/s12144-019-0159-x
- Link, N. W., & Hamilton, L. K. (2017). The reciprocal lagged effects of substance use and recidivism in a prisoner reentry context. *Health & Justice*, *5*(8), 1-14. https://doi.org/10.1186/s40352-017-0053-2

- Liu, Y., Fei, L., Sun, X., Wei, C., Luo, F., Li, Z., Shen, L., Xue, G., & Lin, X. (2018).

 Parental rearing behaviors and adolescent's social trust: roles of adolescent self-esteem and class justice climate. *Journal of Child & Family Studies*, 27(5), 1415–1427. https://doi.org/10.1007/s10826-017-1010-3
- Liu, P., Song, R., Zhang, Y., Liu, C., Cai, B., Liu, X., Li, J., Chen, X., Ke, J., Lou, J.,
 Chen, W., Zhu, B., Zou, L., Yang, Y. Zhu, Y., Gong, Y., Zhong, R., & Miao,
 X. (2018). Educational and behavioral counseling in a methadone maintenance
 treatment program in China: A randomized controlled trial. *Frontiers in Psychiatry*, 9(113), 1-9. https://doi.org/10.3389/fpsyt.2018.00113
- Loewenstein, G. (2005). Hot-cold empathy gaps and medical decision making. *Health Psychology*, 24(4, Suppl), S49–S56. https://doi.org/10.1037/0278-6133.24.4.S49
- Lune, H., & Berg, B. L. (2017). *Qualitative research methods for the social sciences* (9th ed.). Pearson Education Limited.
- Lunze, K., Idrisov, B., Golichenko, M., & Kamarulzaman, A. (2016). Mandatory addiction treatment for people who use drugs: Global health and human rights analysis. *Bmj*, 353(i2943): 1-5. https://doi.org/10.1136/bmj.i2943
- Lunze, K., Lermet, O., Andreeva, V., & Hariga, F. (2018). Compulsory treatment of drug use in Southeast Asian countries. *International Journal of Drug Policy*, 59, 10-15. https://doi.org/10.1108/IJPH-09-2014-0030
- Maguire, M., & Raynor, P. (2017). Offender management in and after prison: The end of 'end to end'? *Criminology & Criminal Justice*, 17(2), 138-157. https://doi.org/10.1177/1748895816665435

- Mairaje, A. V. B., Prabhu, P., & Kamath, J. V. (2016). Recent Advances in Cannabis Addiction and Rehabilitation: A Review. *Critical Reviews* TM *in Physical and Rehabilitation Medicine*, *28*(1-2). 57-76.

 https://doi.org/10.1615/ CritRevPhysRehabilMed.2016019200
- Mandal, P. C. (2018). Saturation in qualitative research: Considerations and limitations. *International Journal of Academic Research and Development,* 3(2), 624-628.
- Markie-Frost, K. (2016). Rethinking addiction: Challenging the mindsets.

 *International Journal of Disability, Development & Education, 63(4), 484–487. https://doi.org/10.1080/1034912X.2016.1207340
- Markman, J. A., Durose, M. R., Rantala, R. R., & Tiedt, A. D. (2016). Recidivism of offenders placed on federal community supervision in 2005: Patterns from 2005 to 2010. *Bureau of Justice Statistics*, 1-16.
 https://www.bjs.gov/content/pub/pdf/ropfcs05p0510.pdf
- Martín, A. M., Padrón, F., & Redondo, S. (2019). Early narratives of desistance from crime in different prison regimes. *European Journal of Psychology Applied to Legal Context*, 11(2), 71–79. https://doi.org/10.5093/ejpalc2019a2
- Mason, M. (2010, August). Sample size and saturation in PhD studies using qualitative interviews. Forum Qualitative Sozialforschung/Forum: Qualitative Social Research, 11(3).
 - https://www.qualitative-research.net/index.php/fqs/article/view/1428
- Maynard, E., Pycroft, A., & Spiers, J. (2019). "They say 'yes, I'm doing it.... and I'm fine'": The lived experience of supporting teenagers who misuse drugs.

 **Journal of Social Work Practice, 35(2), 143-157.

- https://doi.org/10.1080/02650533.2019.1697868
- McConnell, D., & Snoek, A. (2018). The importance of self-narration in recovery from addiction. *Philosophy, Psychiatry, & Psychology*, 25(3), E-31-E-44. https://doi.org/10.1353/ppp.2018.0022
- McGrath, C., Palmgren, P. J., & Liljedahl, M. (2019). Twelve tips for conducting qualitative research interviews. *Medical Teacher*, 41(9), 1002-1006. https://doi.org/10.1080/0142159X.2018.1497149
- Mckee, Shari A. (2017). Concurrent substance use disorders and mental illness:

 Bridging the gap between research and treatment. *Canadian Psychology/Psychologie Canadienne*, *58*(1), 50–57.

 https://doi.org/10.1037/cap0000093
- McPherson, C., Collins, E., Boyne, H., Kirkaldy, E., & Waseem, R. (2017). Self-reported chronic pain as a predictor of relapse post residential addiction treatment: A 6-month follow-up pilot study. *International Journal of Mental Health & Addiction*, 15(5), 1069–1079.

 https://doi.org/10.1007/s11469-017-9751-1
- Meneses, R. W., & Larkin, M. (2017). The experience of empathy: Intuitive, sympathetic, and intellectual aspects of social understanding. *Journal of Humanistic Psychology*, *57*(1), 3-32. https://doi.org/10.1177/0022167815581552
- Mericle, A. A., Miles, J., & Way, F. (2015). Recovery residences and providing safe and supportive housing for individuals overcoming addiction. *Journal of Drug Issues*, 45(4), 368-384. https://doi.org/10.1177/0022042615602924

- Ministry of Justice. (2018, January 25). *Proven reoffending statistics quarterly*bulletin, January 2016 to March 2016. https://assets.publishing.service.gov.uk

 /government/ uploads/system/uploads/ attachment_data/file/676431/provenreoffending-bulletin-jan16-mar16.pdf
- Ministry of Home Affairs. (2019a, January 15). Second reading speech for Misuse of Drugs Act Amendment Bill Speech by Mr K Shanmugam, Minister for Home Affairs and Minister for Law. https://www.mha.gov.sg/newsroom/in-parliament/parliamentary-speeches/news/second-reading-speech-for-misuse-of-drugs-act-amendment-bill-speech-by-mr-k-shanmugam-minister-for-home-affairs-and-minister-for-law
- Ministry of Home Affairs (2019b, January 19). *Three things you should know about the enhanced drug rehabilitation regime*. https://www.mha.gov.sg/hometeamnews/on-assignment/ViewArticle/three-things-you-should-know-about-the-enhanced-drug-rehabilitation-regime.
- Miller, H. V., Miller, J. M., & Barnes, J. C. (2016). Reentry programming for opioid and opiate involved female offenders: Findings from a mixed methods evaluation. *Journal of Criminal Justice*, 46, 129-136. https://doi.org/10.1016/j.jcrimjus.2016.04.001
- Miller, M., Kiverstein, J., & Rietveld, E. (2020). Embodying addiction: A predictive processing account. *Brain and Cognition*, *138*. 1-10. https://doi.org/10.1016/j.bandc.2019.105495
- Miller, R. M., Chan, C. D., & Farmer, L. B. (2018). Interpretative phenomenological analysis: A contemporary qualitative approach. *Counselor Education & Supervision*, *57*(4), 240–254. https://doi.org/10.1002/ceas.12114

- Mitchell, O., Cochran, J. C., Mears, D. P., & Bales, W. D. (2017). Examining prison effects on recidivism: A regression discontinuity approach. *Justice Quarterly*, 34(4), 571-596. https://doi.org/10.1080/07418825.2016.1219762
- Moazen, B., Saeedi Moghaddam, S., Silbernagl, M. A., Lotfizadeh, M., Bosworth, R.
 J., Alammehrjerdi, Z., Kinner, S. A., Wirtz, A. L., Bärnighausen, T. W.,
 Stöver, H. J., & Dolan, K. A. (2018). Prevalence of drug injection, sexual activity, tattooing, and piercing among prison inmates. *Epidemiologic Reviews*, 40(1), 58-69. https://doi.org/10.1093/epirev/mxy002
- Mokoena, Andile G., Poggenpoel, Marie, Myburgh, Chris, & Temane, Annie. (2019).

 Lived experiences of couples in a relationship where one partner is diagnosed with a mental illness. *Curationis*, 42(1), 1-7.

 https://doi.org/10.4102/curationis.v42i1.2015
- Montgomery, M., & Zeng, Z. (2016). Gender perceptions of female criminality in China and the United States. *Review of Social Sciences*, 1(8), 1-14. https://doi.org/10.18533/rss.v1i8.52
- Morash, M., Kashy, D. A., Bohmert, M. N., Cobbina, J. E., & Smith, S. W. (2017).

 Women at the nexus of correctional and social policies: Implications for recidivism risk. *The British Journal of Criminology*, *57*(2), 441-462. https://doi.org/10.1093/bjc/azv124
- Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research.

 Part 3: Sampling, data collection and analysis. *European Journal of General Practice*, 24 (1), 9-18. https://doi.org/10.1080/13814788.2017.1375091
- Moskalewicz, M. (2016a). Lived time disturbances of drug addiction therapy newcomers. a qualitative, field phenomenology case study at Monar-Markot

- Center in Poland. *International Journal of Mental Health Addiction, 14*, 1023–1038. https://doi.org/10.1007/s11469-016-9680-4
- Moskalewicz, M. (2016b). Three modes of distorted temporal experience in addiction:

 Daily life, drug ecstasy, and recovery. A phenomenological perspective.

 Archiwum Historii Filozofii i Myśli Społecznej, (61supl.), 197-212.

 https://www.ceeol.com/search/article-detail?id=715998
- Mudry, T., Nepustil, P., & Ness, O. (2018). The relational essence of natural recovery: Natural recovery as relational practice. *International Journal of Mental Health and Addiction*, *17*(2), 191-205. https://doi.org/10.1007/s11469-018-0010-x
- Myers, C. E., Sheynin, J., Balsdon, T., Luzardo, A., Beck, K. D., Hogarth, L., Haber,
 P., & Moustafa, A. A. (2016). Probabilistic reward-and punishment-based
 learning in opioid addiction: Experimental and computational data.
 Behavioural Brain Research, 296, 240-248.
 https://doi.org/10.1016/j.bbr.2015.09.018
- National Academies of Sciences, Engineering, and Medicine. (2016). *Measuring*recovery from substance use or mental disorders: Workshop summary.

 National Academies Press.
- Neale, J., Tompkins, C., Wheeler, C., Finch, E., Marsden, J., Mitcheson, L., Rose, D., Wykes, T., & Strang, J. (2015). "You're all going to hate the word 'recovery' by the end of this": Service users' views of measuring addiction recovery. Drugs: Education, Prevention and Policy, 22(1), 26-34. https://doi.org/10.3109/09687637.2014.947564

- Newsome, J., & Cullen, F. T. (2017). The risk-need-responsivity model revisited:

 Using biosocial criminology to enhance offender rehabilitation. *Criminal Justice and Behavior*, 44(8), 1030-1049.

 https://doi.org/10.1177/0093854817715289
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1): 1-13. https://doi.org/10.1177/1609406917733847
- O'Hagan, A., & Hardwick, R. (2017). Behind bars: The truth about drugs in prisons.

 Forensic Research & Criminology International Journal, 5(3): 1-12.

 https://doi.org/10.15406/frcij.2017.05.00158
- Oshri, A., Carlson, M., Kwon, J., Zeichner, A., & Wickrama, K. (2017).

 Developmental growth trajectories of self-esteem in adolescence: Associations with child neglect and drug use and abuse in young adulthood. *Journal of Youth & Adolescence*, 46(1), 151–164.

 https://doi.org/10.1007/s10964-016-0483-5
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health*, 42(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y
- Parker, C., Scott, S., & Geddes, A. (2019). Snowball sampling. SAGE Research

 Methods Foundations. 1-14. https://doi.org/10.4135/9781526421036831710
- Pastor, A., O'Brien, C. L., Teng, J., Conn, J., Loh, M., Collins, L., MacIsaac, R. J., & Bonomo, Y. (2018). Experiences of young adults with type 1 diabetes while using alcohol and recreational drugs: An interpretative phenomenological

- analysis (IPA) of semistructured interviews. *Diabetes Research and Clinical Practice*, *141*, 47-55. https://doi.org/10.1016/j.diabres.2018.04.029
- Patton, M. Q. (2015). Qualitative evaluation and research methods. Sage.
- Paule, M., & Alexandre, C. (2017). Integrated Regulation, Behavior Consistency, and Physical Activity Maintenance. *Motivation Science*, *3*(1), 76–90. https://doi.org/10.1037/mot0000049
- Pavia, L., Di Blasi, M., Cinquegrana, A., Scioti, E., Bussola, T., Pasinelli, A., & Cavani, P. (2016). The influence of retention, turnover, and alliance on process and outcomes in rolling group psychotherapy for cocaine disorder.
 International Journal of Group Psychotherapy, 66(4), 526-550.
 https://doi.org/10.1080/00207284.2016.1176491
- Perry, A., Woodhouse, R., Neilson, M., Martyn St James, M., Glanville, J., Hewitt, C., & Trépel, D. (2016). Are nonpharmacological interventions effective in reducing drug use and criminality? A systematic and meta-analytical review with an economic appraisal of these interventions. *International Journal of Environmental Research and Public Health*, 13(10), 966-985. https://doi.org/10.3390/ijerph13100966
- Pettersen, H., Landheim, A., Skeie, I., Biong, S., Brodahl, M., Benson, V., & Davidson, L. (2018). Why do those with long-term substance use disorders stop abusing substances? A qualitative study. *Substance Abuse: Research and Treatment, 12.* 1-8. https://doi.org/10.1177/1178221817752678
- Pettersen, H., Landheim, A., Skeie, I., Biong, S., Brodahl, M., Oute, J., & Davidson, L. (2019). How social relationships influence substance use disorder recovery:

- A collaborative narrative study. *Substance Abuse: Research and Treatment,* 13, 1-8. https://doi.org/10.1177/1178221819833379
- Phillips, L. A., & Johnson, M. A. (2018). Interdependent effects of autonomous and controlled regulation on exercise behavior. *Personality and Social Psychology Bulletin*, 44(1), 49-62. https://doi.org/10.1177/0146167217733068
- Phillips, W. J., & Vince, A. J. (2019). Dual-process cognitive profiles associated with substance abuse and treatment outcomes. *Australian Psychologist*, *54*(5), 372–381. https://doi.org/10.1111/ap.12394
- Pickard, H., Ahmed, S. H., & Foddy, B. (2015). Alternative models of addiction. Frontiers in Psychiatry, 6, 1-2. https://doi.org/10.3389/ fpsyt.2015.00020
- Pietkiewicz, I., & Smith, J. A. (2014). A practical guide to using interpretative phenomenological analysis in qualitative research psychology. *Psychological Journal*, 20(1), 7-14. https://doi.org/10.14691/cppj.20.1.7
- Piškur, B., Meuser, S., Jongmans, M. J., Ketelaar, M., Smeets, R. J., Casparie, B. M., Haarsma, F. A., & Beurskens, A. J. (2016). The lived experience of parents enabling participation of their child with a physical disability at home, at school and in the community. *Disability and Rehabilitation*, *38*(8), 803-812. https://doi.org/10.3109/09638288.2015.1061612
- Prime Minister's Office Singapore (2018, Dec 24). *Prime Minister Lee Hsien Loong's National Day rally 2011 speech (English)*. https://www.pmo.gov.sg/
 Newsroom/prime-minister-lee-hsien-loongs-national-day-rally-2011-speechenglish

- Prochaska, J. O., & DiClemente, C. C. (1986). Toward a comprehensive model of change. In W. R. Miller & N. Heather (Eds.), *Treating addictive behaviors:*Process of change (pp. 3-28). Plenum Press.
- Prochaska, J. O., Norcross, J. C., & DiClemente, C. C. (2013). Applying the stages of change. *Psychotherapy in Australia, 19*(2), 10-15.

 https://search.informit.com.au/documentSummary;dn=254435778545597;res=
 IELHEA> ISSN: 1323-0921
- Proudfoot, J. (2019). Traumatic landscapes: Two geographies of addiction. *Social Science & Medicine*, 228, 194–201.

 https://doi-org.org/10.1016/j.socscimed.2019.03.020
- Quitasol, M. N., Fournier, M. A., Di Domenico, S. I., Bagby, R. M., & Quilty, L. C. (2018). Changes in psychological need fulfillment over the course of treatment for major depressive disorder. *Journal of Social and Clinical Psychology*, 37(5), 381-404. https://doi.org/10.1521/jscp.2018.37.5.381
- Rafful, C., Orozco, R., Rangel, G., Davidson, P., Werb, D., Beletsky, L., & Strathdee, S. A. (2018). Increased non-fatal overdose risk associated with involuntary drug treatment in a longitudinal study with people who inject drugs. *Addiction*, 113(6), 1056–1063. https://doi.org/10.1111/add.14159
- Rayburn, R. L., & Wright, J. D. (2018). "I Stopped Shooting Up When I got

 Married": Desistance, crime, and love. *Deviant Behavior*, 39(10), 1294–1304.

 https://doi.org/10.1080/01639625.2017.1410610
- Rebgetz, S., Kavanagh, D. J., & Hides, L. (2015). Can exploring natural recovery from substance misuse in psychosis assist with treatment? A review of current research. *Addictive Behaviors*, 46, 106-112.

- https://doi.org/10.1016/j.addbeh.2015.03.006
- Roddy, E., & Dewar, B. (2016). A reflective account on becoming reflexive: The 7 Cs of caring conversations as a framework for reflexive questioning.

 *International Practice Development Journal, 6(1), 1-8. https://doi.org/10.19043/ipdj.61.008
- Rodham, K., Fox, F., & Doran, N. (2015). Exploring analytical trustworthiness and the process of reaching consensus in interpretative phenomenological analysis:

 Lost in transcription. *International Journal of Social Research Methodology*,

 18(1), 59-71. https://doi.org/10.1080/13645579.2013.852368
- Rogers, P. J. (2017). Food and drug addictions: Similarities and differences.

 *Pharmacology Biochemistry and Behavior, 153, 182-190.

 https://doi.org/10.1016/j.pbb.2017.01.001
- Rhodes, B. E., Gottfredson, N. C., & Hill, L. M. (2018). Desistance and treatment seeking among women with substance use disorders. *Qualitative Health Research*, 28(8), 1330–1341. https://doi.org/10.1177/1049732318767637
- Rosales, J.-H., Zamarripa, M. S., Ramos, F., & Ramos, M. (2017). Automatic reward system for virtual creatures, emergent processes of emotions and physiological motivation. *Biologically Inspired Cognitive Architectures*, *22*, 51–66. https://doi.org/10.1016/j.bica.2017.09.003
- Rosino, M. L., & Hughey, M. W. (2018). The war on drugs, racial meanings, and structural racism: A holistic and reproductive approach. *American Journal of Economics and Sociology*, 77(3-4), 849-892. https://doi.org/10.1111/ajes.12228

- Rotărescu, O & Sleath, E. (2016). The lived experience of five clients in recovery from drug addiction, *Social Work Review/Revista de Asistență Socială*, 15(3), 19–36.
 - https://searchebscohostcom.ezp.waldenulibrary.org/login.aspx?direct=true&db = sih&AN= 118366147&site=eds-live&scope=site
- Runell, L. L. (2018). Becoming a social work professional after incarceration. *Journal of Social Work*, 20(3), 307-320. https://doi.org/10.1177/1468017318815293
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-68-78. https://doi.org/10.1006/ceps.1999.1020
- Ryan, R. M., & Deci, E. L. (2002). Overview of self-determination theory: All organisms' dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.),

 Handbook of self-determination research (pp. 3–27). University of Rochester
 Press.
- Ryan, R. M., & Deci, E. L. (2013). Toward a social psychology of assimilation: Self-determination theory in cognitive development and education. In B. W. Sokol, F. M. E. Grouzet, & U. Muller (Eds.), Self-regulation and autonomy: Social and developmental dimensions of human conduct (pp. 191–207). Cambridge University Press.
- Ryan, R. M., Deci, E. L., & Vansteenkiste, M. (2016). Autonomy and autonomy disturbances in self-development and psychopathology: Research on motivation, attachment, and clinical process. *Developmental Psychopathology*, 1-54. https://doi.org/10.1002/9781119125556.devpsy109

- Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford.
- Ryan, R. M., Plant, R. W., & O'Malley, S. (1995). Initial motivations for alcohol treatment: Relations with patient characteristics, treatment involvement, and dropout. *Addictive behaviors*, 20(3), 279-297.
 https://doi.org/10.1016/0306-4603(94)00072-7
- Ryan, R. M., Soenens, B., & Vansteenkiste, M. (2019). Reflections on self-determination theory as an organizing framework for personality psychology:

 Interfaces, integrations, issues, and unfinished business. *Journal of Personality*, 87(1), 115-145. https://doi.org/10.1111/jopy.12440
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68
- Saha, M. (2019). Perceptions about learners' roles and functions in online higher education: A qualitative research required. *Journal of Teaching and Teacher Education*, 7(01), 1-13. https://doi.org/10.12785/jtte/070101
- Saldaña, J. (2015). The coding manual for qualitative researchers (3rd ed.). Sage.
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality & Quantity*, *52*(4), 1893-1907. https://doi.org/10.1007/s11135-017-0574-8
- Scott, C. K., Grella, C. E., Dennis, M. L., & Nicholson, L. (2018). Linking individuals with substance use disorders (SUDs) in primary care to SUD treatment: The recovery management checkups—primary care (RMC-PC) pilot study. *The*

- *Journal of Behavioral Health Services & Research*, *45*(2), 160-173. https://doi.org/10.1007/s11414-017-9576-5
- Selvam, S. G. (2015). Positive psychology's character strengths in addiction-spirituality research: A qualitative systematic literature review. *The Qualitative Report*, 20(4), 376-405.

 https://nsuworks.nova.edu/tqr/vol20 /iss4/2
- Shamsalinia, A., Ghaffari, F., Khayeri, F., & Masoudi, R. (2018). Helplessness and the need to withdraw from drugs: The beginning of the path to recovery.

 Addictive Disorders & Their Treatment, 17(2), 76-85.

 https://doi.org/10.1097/ADT.000000000000122
- Sheldon, K. M., Osin, E. N., Gordeeva, T. O., Suchkov, D. D., & Sychev, O. A. (2017). Evaluating the dimensionality of self-determination theory's relative autonomy continuum. *Personality and Social Psychology Bulletin, 43*(9), 1215-1238. https://doi.org/10.1177/0146167217711915
- Sikes, E. M., Richardson, E. V., & Motl, R. W. (2019). A qualitative study of exercise and physical activity in adolescents with pediatric-onset multiple sclerosis.

 International Journal of MS Care, 21(2), 81-91.

 https://doi.org/10.7224/1537-2073.2018-033
- Silverman, M. J. (2015). Effects of lyric analysis interventions on treatment motivation in patients on a detoxification unit: A randomized effectiveness study. *Journal of Music Therapy*, *52*(1), 117-134. https://doi.org/10.1093/jmt/ thu057

- Singapore Prison Service. (2017a, February 14). *News release: Enhancing inmates' employability to prevent reoffending*. https://www.sps.gov.sg/docs/defaultsource/stats-release/sps-annual-stats-release-for-2016_404kb.pdf
- Singapore Prison Service. (2017b, November 30). *Connect with us.* http://www.sps.gov.sg/connect-us/rehabilitation-process.
- Singapore Prison Service. (2019). Singapore prison service annual statistic release for 2018. https://www.sps.gov.sg/news-about-us/in-the-news/singapore-prison-service-annual-statistic-release-for 2018
- Singapore Statutes Online (1998, July 17). *Misuse of drugs (amendment) bill 1998*(No 17 of 1998). https://sso.agc.gov.sg/Bills-Supp/17-1998/Published
 /19980421?DocDate=19980421
- Skogens, L., & von Greiff, N. (2020). Recovery processes among young adults treated for alcohol and other drug problems: A five-year follow-up. *Nordic Studies on Alcohol and Drugs*, *37*(4), 338-351. https://doi.org/10.1177/ 1455072520936814
- Smith, J. A. (2011). Evaluating the contribution of interpretative phenomenological analysis. *Health Psychology Review*, *5*(1), 9-27. https://doi.org/10.1080/17437199.2010.510659
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research.* Sage.
- Smith, J. A., & Osborn, M. (2008). Chapter 4: Interpretive phenomenological analysis. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (pp. 53-80). Sage.

- Smith, J. A., Franklin, S., Asikis, C., Knudsen, S., Woodruff, A., & Kimball, T. (2018). Social support and gender as correlates of relapse risk in collegiate recovery programs. *Alcoholism Treatment Quarterly*, 36(3), 354–365. https://doi.org/10.1080/07347324.2018.1437372
- Sofuoglu, M., DeVito, E. E., & Carroll, K. M. (2018). Pharmacological and behavioral treatment of opioid use disorder. *Psychiatric Research and Clinical Practice*, *I*(1), 4-15. https://doi.org/10.1176/appi.prcp.20180006
- Solinas, M., Chauvet, C., Lafay-Chebassier, C., Jaafari, N., & Thiriet, N. (2021).

 Environmental enrichment-inspired pharmacological tools for the treatment of addiction. *Current Opinion in Pharmacology*, *56*, 22-28.

 https://doi.org/ 10.1016/j.coph.2020.09.001
- Statistics Singapore (2019). *Population trends*. https://www.singstat.gov.sg/-/media/files/publications/population/population2018.pdf
- Stokes, M., Schultz, P., & Alpaslan, A. (2018). Narrating the journey of sustained recovery from substance use disorder. *Substance Abuse Treatment,**Prevention, And Policy, 13(1), 1-12.

 https://doi.org/10.1186/s13011-018-0167-0
- Stöver, H., & Hariga, F. (2016). Prison-based needle and syringe programmes (PNSP)–still highly controversial after all these years. *Drugs: Education, Prevention and Policy*, 23(2), 103-112. https://doi.org/10.3109/09687637. 2016. 1148117
- Strang, J., Volkow, N. D., Degenhardt, L., Hickman, M., Johnson, K., Koob, G. F., Marshall, B. D. L., Tyndall, M., & Walsh, S. L. (2020). Opioid use disorder.

 Nature Reviews Disease Primers, 6(1), 1-28.

- https://doi.org/10.1038/s41572-019-0137-5
- Substance Abuse and Mental Health Services Administration. (2019). *Medications for opioid use disorder: TIP series 63* (HHS Publication No. (SMA) 19-5063). https://store.samhsa.gov/product/TIP-63-Medications-for-Opioid-Use-Disorder-Full-Document/PEP20-02-01-006
- Sukmahidayat, R. L. A., Prasetyo, A. W., & Ismayadhani, N. (2020). The correlation between adversity quotient (AQ) with the intention to recover in addiction residents at the Drug Dependency Hospital Cibubur, East Jakarta, Indonesia.

 *European Journal of Public Health Studies, 2(2). http://dx.doi.org/10.46827/ejphs.v2i2.64
- Sun, H. M., Li, X. Y., Chow, E. P., Li, T., Xian, Y., Lu, Y. H., Tian, T., Zhuang, X., & Zhang, L. (2015). Methadone maintenance treatment programme reduces criminal activity and improves social well-being of drug users in China: A systematic review and meta-analysis. *BMJ Open*, 5(1), 1-11. https://doi.org/10. 1136/bmjopen-2014-005997
- Sundler, A. J., Lindberg, E., Nilsson, C., & Palmér, L. (2019). Qualitative thematic analysis based on descriptive phenomenology. *Nursing Open, 6*(3), 733-739. https://doi.org/10.1002/nop2.275
- Sykes, B. L., & Pettit, B. (2015). Severe deprivation and system inclusion among children of incarcerated parents in the United States after the Great Recession.

 *RSF: The Russell Sage Foundation Journal of the Social Sciences, 1(2), 108-132. https://doi.org/10.7758/RSF.2015.1.2.06

- Taipale, J. (2017). Controlling the uncontrollable. Self-regulation and the dynamics of addiction. *The Scandinavian Psychoanalytic Review*, 40(1), 29-42.
 https://doi.org/10.1080/01062301.2017.1343546
- Tait, G. R., Bates, J., LaDonna, K. A., Schulz, V. N., Strachan, P. H., McDougall, A., & Lingard, L. (2015). Adaptive practices in heart failure care teams:
 Implications for patient-centered care in the context of complexity. *Journal of Multidisciplinary Healthcare*, 8, 365- 375.
 https://doi.org/10.2147/ JMDH.S85817
- Tang, S. K. (2021, February 16). Budget 2021: S\$5.4 billion boost to SGUnited to support hiring of 200,000 locals. CNA. https://www.channelnewsasia.com/ news/singapore/budget-2021-sgunited-jobs-skills-package-hire-locals-14208648
- Tarpey, E., & Friend, H. (2016). A place to call home: Perspectives on offender community reintegration. *Journal of Forensic Practice*, 18(4), 283-291. https://doi.org/10.1108/JFP-06-2016-0027
- The Economist Intelligence Unit. (2017). *Safe cities index 2017: Security in a rapidly urbanising world.* http://safecities.economist.com/ safe-cities-index-2017
- Thompson, G. R. (2018). Addiction treatment through the lens of meaning:

 Observations on a program developed in a residential facility. *International Journal of Existential Psychology and Psychotherapy*, 7(2), 1-13.

 http://journal.existentialpsychology.org/index.php/ExPsy/article/view/232
- Tran, B. X., Vu, P. B., Nguyen, L. H., Latkin, S. K., Nguyen, C. T., Phan, H. T., & Latkin, C. A. (2016). Drug addiction stigma in relation to methadone

- maintenance treatment by different service delivery models in Vietnam. *BMC Public Health*, 16(1), 1-9. https://doi.org/10.1186/s12889-016-2897-0
- Tuapawa, K. (2017). Interpreting experiences of students using educational online technologies to interact with teachers in blended tertiary environments: A phenomenological study. *Australasian Journal of Educational Technology*, 33(1), 163-175. https://doi.org/10.14742/ajet.2964
- Tupas, R. (2018). Singlish in the classroom: Is Singapore ready for additive bidialectalism?. *International Journal of Bilingual Education and Bilingualism*, 21(8), 982-993. https://doi.org/10.1080/13670050.2016.1226757
- Tyler, E. T., & Brockmann, B. (2017). Returning home: Incarceration, reentry, stigma and the perpetuation of racial and socioeconomic health inequity. *The Journal of Law, Medicine & Ethics, 45*(4), 545-557. https://doi.org/10.1177/1073110517750595
- Uhl, G. R., Koob, G. F., & Cable, J. (2019). The neurobiology of addiction. *Annals of the New York Academy of Sciences*. 1-24. https://doi.org/10.1111/nyas.13989
- United Nations Office on Drugs and Crime. (2015). A handbook for starting and managing needle and syringe programmes in prisons and other closed settings. https://www.unodc.org/documents/hiv-aids/2017/ADV_PNSP_REV_FEB2015 with cover1.pdf
- United Nations Office on Drugs and Crime (2016). World drug report 2016.

 https://www.unodc.org/doc/wdr2016/WORLD_DRUG_REPORT_2016_web.
 pdf
- United Nations Office on Drugs and Crime. (2019). HIV prevention, treatment, care and support for people who use stimulant drugs.

- https://www.unodc.org/documents/hivaids/publications/People_who_use_drug s/19-04568 HIV Prevention Guide ebook.pdf
- Volkow, N., & Morales, M. (2015). The brain on drugs: From reward to addiction. *Cell*, 162(4), 712-725. https://doi.org/10.1016/j.cell.2015.07.046
- Volkow, N. D., & Boyle, M. (2018). Neuroscience of addiction: Relevance to prevention and treatment. *American Journal of Psychiatry*, 175(8), 729-740. https://doi.org/10.1176/appi.ajp.2018.17101174
- Wakefield, J. C. (2017a). Addiction and the concept of disorder, Part 1: Why addiction is a medical disorder. *Neuroethics*, 10(1), 39–53. https://doi.org/10. 1007/s12152-016-9300-9
- Wakefield, J. C. (2017b). Addiction and the concept of disorder, part 2: Is every mental disorder a brain disorder? *Neuroethics*, 10(1), 55-67. http://doi.org./10.1007/s12152-016-9301-8
- Ward, T., & Stewart, C. (2003). Criminogenic needs and human needs: A theoretical model. *Psychology, Crime, and Law, 9*(2), 125-143. https://doi.org/10.1080/1068316031000116247
- Wasserman, E., & Zwebner, Y. (2017). Communication between teachers and parents using the WhatsApp application. *International Journal of Learning, Teaching and Educational Research*, 16(12), 1-12. https://doi.org/10.26803/ijlter.16.12.1
- Watson, A. (2017). An enlarged role for probation in Japan to reduce drug offending.

 *Journal of Japanese Law, 22(43), 175-203. https://www.zjapanr.de/index.php

 /zjapanr/article/view/1138

- Weegmann, M. (2017). Life after addiction: Understanding recovery. *Psychodynamic Practice*, 23(3), 293–304. https://doi.org/10.1080/14753634.2017.1333588
- Wendt, D. C., Hallgren, K. A., Daley, D. C., & Donovan, D. M. (2017). Predictors and outcomes of twelve-step sponsorship of stimulant users: Secondary analyses of a multisite randomized clinical trial. *Journal of Studies on Alcohol and Drugs*, 78(2), 287-295. https://doi.org/10.15288/jsad.2017.78.287
- Werb, D., Kamarulzaman, A., Meacham, M. C., Rafful, C., Fischer, B., Strathdee, S. A., & Wood, E. (2016). The effectiveness of compulsory drug treatment: A systematic review. *International Journal of Drug Policy*, 28, 1-9. https://doi.org/10.1016/j.drugpo.2015.12.005
- Wiig, E. M., Haugland, B. S. M., Halsa, A., & Myhra, S. M. (2017). Substance-dependent women becoming mothers: Breaking the cycle of adverse childhood experiences. *Child & Family Social Work*, 22(1), 26-35. https://doi.org/10.1111/cfs.12190
- Wild, T. C., Yuan, Y., Rush, B. R., & Urbanoski, K. A. (2016). Client engagement in legally-mandated addiction treatment: A prospective study using self-determination theory. *Journal of Substance Abuse Treatment*, 69, 35-43. https://doi.org/10.1016/j.jsat.2016.06.006
- Willmott, L., & Bentley, E. (2015). Exploring the lived-experience of limerence: A journey toward authenticity. *The Qualitative Report*, 20(1), 20-38. https://nsuworks.nova.edu/tqr/vol20/iss1/2
- Wo, M. C. M., Lim, K. S., Choo, W. Y., & Tan, C. T. (2015). Employability among people with uncontrolled seizures: An interpretative phenomenological approach. *Epilepsy & Behavior*, 45, 21-30.

- https://doi.org/10.1016/j.yebeh. 2015.02.016
- Wong, D. F. K., Zhuang, X. Y., & Ng, T. K. (2020). Effectiveness of a culturally-attuned integrated cognitive behavioural therapy for Chinese young people with drug abuse in Hong Kong. *Children and Youth Services Review*, 113. https://doi.org/10.1016/j.childyouth.2020.104970
- Worley, M. J., Shoptaw, S. J., Bickel, W. K., & Ling, W. (2015). Using behavioral economics to predict opioid use during prescription opioid dependence treatment. *Drug and Alcohol Dependence*, *148*, 62-68.

 https://doi.org/10.1016/j.drugalcdep.2014.12.018
- Yitayih, Y., Abera, M., Tesfaye, E., Mamaru, A., Soboka, M., & Adorjan, K. (2018).

 Substance use disorder and associated factors among prisoners in a correctional institution in Jimma, Southwest Ethiopia: A cross-sectional study.

 BMC Psychiatry, 18(1), 314-322. https://doi.org/10.1186/s12888-018-1901-x
- Zhang, L. & Xing Y. F. (2020). Stability analysis of a reaction-diffusion heroin epidemic model. *Complexity*, 2020. https://doi.org/10.1155/2020/3781425
- Zilberman, N., Lavidor, M., Yadid, G., & Rassovsky, Y. (2019). Qualitative review and quantitative effect size meta-analyses in brain regions identified by cuereactivity addiction studies. *Neuropsychology*, *33*(3), 319–334. https://doi.org/10.1037/neu0000526
- Zhou, Y., Zhao, M., Zhou, C., & Li, R. (2016). Sex differences in drug addiction and response to exercise intervention: From human to animal studies. *Frontiers in Neuroendocrinology*, 40, 24-41. https://doi.org/10.1016/j.yfrne.2015.07.001
- Zschau, T., Collins, C., Lee, H., & Hatch, D. L. (2016). The hidden challenge:

 Limited recovery capital of drug court participants' support networks. *Journal*

of Applied Social Science, 10(1), 22-43.

https://doi.org/10.1177/ 1936724415589633