Perceptions of the applicability of the Self-Medication Hypothesis: an Interpretivist study

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DECLARATION

I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary institution.

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Frederick Richard HOWIE
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ABSTRACT

This thesis describes a study of individuals' perceptions of the applicability of the Self-Medication Hypothesis as proposed by Edward Khantzian (SMH). In simple terms, the SMH proposes that individuals use alcohol and other drugs in order to alleviate extreme emotional distress, and that they use the substance which is most effective in providing relief.

This research assumed an interpretivist position when eliciting and then interpreting views articulated by individuals accessing counselling and street outreach services directed at providing help to those adversely affected by alcohol and/or other drug use (Clients), and those providing such services (Service Workers). Informants conveyed their perceptions during interactive, unstructured interview conversations.

Clients and Service Workers perceived substance use in terms of complex, intertwined motivations. Clients and Service Workers alike perceived self-medication to be one important motivation for substance use. However, both groups indicated they saw the SMH to be limited in its ambit, as it does not consider relief from physical pain and does not address less extreme emotional distress. Views of the nature of relief sought and obtained varied. Service Workers generally perceived relief as "feeling numb", whereas Clients generally sought to "feel better" in a holistic sense.

Clients and Service Workers identified "having fun" and social and cultural influences as important motivations for substance use, and did not emphasise one as more important than the other. In doing so, Informants identified feeling "numb", "better" and "good" as a continuum. These perceptions are in contrast to Khantzian's view that self-medication is the primary motivation for alcohol and other drug use.

Clients and Service Workers addressed self-medication as an alternative to medically prescribed drugs in ways that reaffirmed the importance of substance use for self-medication. Both groups identified shortcomings in the areas of acquisition and effects of prescribed drugs as key reasons for self-medication.
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CHAPTER 1: INTRODUCTION

OUTLINE OF RESEARCH

Personal motivation for inquiry

I have always been interested in understanding how individuals perceive their own motivations for action and those of others. My prior career in a natural resources industry led me to think about the ways individuals working in large organisations articulated views of themselves and their colleagues. In my more recent work as an alcohol and other drug counsellor and street outreach volunteer I became interested in the juxtaposition between what I was seeing, doing, and experiencing as a provider of services to individuals affected by alcohol and other drug use and academic views of such use. In particular, I became interested in understanding individuals' personal reasons and motivations for using consciousness-altering substances. This interest stemmed from my hearing clients' personal 'life stories' and the explicit and implicit ways they described the ways alcohol and other drugs fitted in their lives.

A number of my clients explicitly or implicitly indicated that they used alcohol and/or other drugs in order to variously feel "better" and "good". A considerable proportion of these clients characterised feeling "good" as not feeling "bad". Others stated they used substances to feel "normal". I interpreted these descriptions of reasons for substance use as reflecting the Self-Medication Hypothesis (SMH) as articulated by Edward Khantzian (inter alia 1974; 1985; 1997; 1999; Khantzian and Albanese 2008). In simple terms the SMH proposes that individuals use alcohol and other drugs in order to alleviate emotional distress, and they use the substance which is most effective in providing relief.

However, not all of my clients indicated they used alcohol and/or other drugs in order to overcome undesirable feelings. Some stated they used substances to enhance positive feelings, while for others substance use was an aspect of participation in desirable social activities. These differing statements of motivation reflect the disparate theories of substance use and addiction presented in the academic literature (discussed further below). I therefore decided to engage in research which set out to explore such divergent views.
Research aim

This research study addresses motivations for use of alcohol and other drugs, and in particular individuals' perceptions of substance use for the purpose of self-medication. It is grounded in views articulated by individuals who are, to varying degrees, affected by the use of such substances and others who provide services to such users. A qualitative, interpretive methodology was employed when conducting this research. The study reflects my interpretation of dialogue with participants informing this study within the social 'worlds' of those individuals at the time they articulated their views.

My research does not seek to review, analyse, or interpret Khantzian's use and discussion of the theories which underpin his development of the SMH. Rather, my starting point has been the meaning of the SMH as understood by me in simple terms, so that it could be conveyed to my informants and reflected upon by them in ways that they could understand in simple terms and relate to their everyday practices.

Research orientation

When conducting this research I adopted an interpretive perspective. Within such a world view, inquiry is directed at understanding individuals' conceptions of their personal social worlds as uniquely constructed by them. Gaining such understanding necessarily requires participation within the personal frames of reference of the given individual and not the frame of reference of the researcher acting in the role of independent observer. An interpretive perspective rejects the positivist notion of a single objective social world which exists independently of any individual and which may be described in terms of universal cause and effect relationships which are analogous to laws of nature proposed in physical science disciplines (Burrell and Morgan 1979; Denzin 1983, 1989; Schwandt 1994; Guba and Lincoln 1994, 2000).

The individuals who participated in this study were "Clients" - i.e. people accessing services which provide assistance and support to individuals adversely affected by the use of alcohol and other drugs - and "Service Workers" - i.e. counsellors and street outreach workers providing services to Clients. I chose these two groups in order to understand whether views between them differed, and what implications they may have. I refer to the Clients and Service Workers participating in this study collectively as "Informants".

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Field work for this research study involved interactive one-on-one interview conversations with Informants. I asked Informants to articulate their perceptions of the applicability of the SMH. In doing so I sought to understand their intrinsic personal understandings of substance use. To realise this aim I did not ask multiple, detailed, predefined questions addressing specific aspects of theories of substance use presented in the academic literature. Rather, I sought to understand how the individuals informing this study considered substance use from within their own contexts through open-ended dialogue. My aim was to fathom their personal conceptions of substances and motivations for their use.

Analysis of interviews involved me interpreting dialogue as an informed and active participant in those conversations. I was guided by the methodological principles proposed by Denzin (1989) in his articulation of Interpretive Interactionism, and Glaser and Strauss (1967) when describing their "discovery" of Grounded Theory. I sought to follow Denzin's (1989) six "steps" of the "interpretive process" and Glaser's and Strauss' (1967) principles of concurrent "theoretical sampling" and "constant comparison".

**Research questions**

In simple terms, the SMH proposes that individuals use substances to alleviate emotional distress, and that they use the particular substance which (for them) provides the most effective relief.

My review of relevant academic literature suggests the SMH is a prominent but contested theory seeking to explain motivation for alcohol and other drug use. I therefore anchored my inquiry on perceptions of the applicability of the proposition that the use of alcohol and other drugs is to a considerable extent motivated by desire for self-medication, and that substances used are selected on the basis that they are felt to most effectively provide relief.

This led to my initial development of the following research questions:

(1) How do people accessing services which provide assistance and support to individuals adversely affected by alcohol and other drug use - i.e. Clients - perceive the applicability of the Self-Medication Hypothesis? Do they see it applicable to themselves and/or others?
(2) How do people providing counselling and street outreach services to Clients - i.e. Service Workers - perceive the applicability of the Self-Medication Hypothesis? Do they see it as applicable to:

(i) recipients of their services; and/or

(ii) themselves as individuals, who may also use alcohol and other drugs?

(3) How do similarities and differences in perceptions of the applicability of the Self-Medication Hypothesis manifest themselves, and what implications do they raise for individuals accessing and providing services?

At the outset I acknowledged it was likely Informants would address issues beyond the SMH itself. I anticipated they might identify motivations for using alcohol and other drugs which do not involve relief of emotional distress, and might identify alternative criteria for selecting substances of choice. I reasoned such perceptions, if articulated, could serve to illuminate contexts in which the SMH might be seen.

My conduct and interpretation of interview conversations confirmed my earlier prediction that Informants would convey perceptions beyond those specifically pertaining to the applicability of the SMH. Consequently, I recast my original research questions to address wider views and the ways in which they inter-related to more specific perceptions of the SMH. Recasting of research questions is addressed in a following chapter.

**SIGNIFICANCE**

Alcohol and other drug use was a contentious subject in the twentieth century and continues to be in the second decade of the twenty first century. Prohibition in the United States of America in the 1920s-30s, the progressive liberalisation of trading hours for outlets selling alcoholic beverages in Australia, the "war on drugs", recent legalisation of cannabis use for recreational purposes in parts of the United States of America, and Australian Government studies addressing alcohol and other drug use serve as but few examples of the ongoing tensions between temperance and liberalism (Szasz 1992; Reinarman 2005; Roffman 2016; Kilmer and Pacula 2017; Commonwealth of Australia 2015, 2017).
In the case of alcohol, this tension may be seen to be reflected in characterisations of 'moderate' consumption. The *Australian Guidelines: To Reduce Health Risks from Drinking Alcohol* (2009) published by the Australian Government National Health and Medical Research Council presents the levels of alcohol consumption recommended in 23 OECD countries in the first decade of the twenty first century. Consumption levels for men vary by a factor of two to one, while for women the variation is four to one (i.e. one Australian standard drink per day to four per day). Such variance suggests the definition of "moderate" alcohol consumption is contentious. Eighteen countries recommend consumption levels which are greater than those recommended in Australia. It is apparent that Australia's position regarding "moderate" alcohol use is more conservative than many other developed nations.

The use of illicit drugs is widely identified as a social problem. The *Final Report of the National Ice Taskforce*, led by Ken Lay APM, a former Commissioner of Victoria Police (Lay et al 2015) reports investigation of crystalline methamphetamine (i.e. "ice") use in Australia. In their executive summary, Lay et al (2015, iii-v) state that use of ice creates a "distinct problem for society". They identify (*inter alia*) that the use of ice is increasing, the market for the drug is complex, users need support, demand must be curtailed and supply must be reduced. This focus on ice suggests it is perceived as the illicit drug which is currently of most social concern in Australia.

Reinarman (2005, 2) refers to the "drug du jour". In doing so, he suggests different illicit drugs have been identified as being of primary concern at different times. Lay et al (2015) identify "ice" as the single most problematic illicit drug in Australia in the second decade of the 21st century. Degenhardt et al (2006) and Jiggens (2008) identify heroin use in Australia as having increased substantially through the 1990s, suggesting it was the "drug du jour" at that time. Reinarman and Levine (2004) cite a television news report broadcast in the USA in 1986 which proposed that crack cocaine was "America's drug of choice" at that time. Nearly one century ago alcohol was seen as the "drug du jour" in the USA, culminating in Prohibition (Gitlin 2011; Szasz 1992). It is therefore apparent that different drugs have been seen as being of most social concern over the past 100 years.

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1 France, Poland, Slovenia, and Sweden recommend alcohol consumption levels which are the same as or lower than Australian levels. Canada, Denmark, Italy, Japan, Singapore, and the United Kingdom
Theories addressing motivation for alcohol and other drug use are similarly disparate. Having 'fun', response to social and cultural influences, deviant behaviour, mental disorder, and self-medication are prominent explanations, and are discussed in the following chapter.

It is apparent that the issue of substance use is broad, complex and multi-faceted. Therefore, for current purposes it is appropriate to focus on one somewhat contentious aspect of alcohol and other drug use - self-medication - which is central to consideration of wider contexts.

Studies examining the SMH, which I review in the next chapter, have reached divergent conclusions, suggesting the SMH is somewhat controversial. The majority of previous research studies addressing the applicability of the SMH employed quantitative research methodologies and methods. A small number employed qualitative methodologies, making the latter exceptions rather than the rule. Hence, this research, which employs a qualitative approach based on in-depth interviews, offers the potential for insight that is difficult to gain using quantitative methodologies.

Alcohol and other drug use is a topical social issue. Hence, this research offers the potential for gaining further understanding in a relevant field. The anchor point of this inquiry is the SMH, which may be seen as a somewhat controversial explanation for alcohol and other drug use. Investigating perceptions of its applicability offers the opportunity to promote dialogue which may lead to further understanding of a field which is not understood in terms of a single, universally accepted concept of substance use. The qualitative, interpretivist methodology employed in this research has not been widely used in existing studies addressing the applicability of the SMH, as such studies predominantly employ quantitative analysis of survey questionnaire data. The use in this research of unconstrained interviews eliciting Informants' perceptions in their terms rather than my preconceived terms offers epistemological insight which is not provided by quantitative, positivist methodologies and methods which reflect predetermined constructs selected by the researcher. Consequently, this research offers the potential for providing further insight into a topical and somewhat vexed social issue.

(among others) recommend higher limits.
THESIS ORGANISATION

This thesis contains eight chapters, arranged in a conventional manner. They are intended to identify and discuss the major issues relevant to the conduct of this research study and the outcomes flowing from it.

Following this introductory chapter, Chapter 2 presents a discussion of literature relevant to this study. It provides a brief overview of the SMH, identifies selected research studies addressing the applicability of the SMH, discusses the manner in which the SMH has been characterised by different researchers, identifies and briefly discusses alternative theories addressing reasons for alcohol and other drug use, and discusses the diverse approaches taken by researchers addressing alcohol and other drug use.

Chapter 3 addresses research methodologies and methods. It provides an overview of qualitative research methods, identifies Interpretive Interactionism as articulated by Denzin (1983; 1989) and Grounded Theory as originally proposed by Glaser and Strauss (1967) as providing guidance for this study, addresses wider methodological issues, and describes the ways in which I prepared for, conducted, and interpreted field interviews.

Chapter 4 discusses evolution of my original research questions. It identifies key themes which progressively emerged as successive interview conversations were completed, which lead to consequent recasting of the original research questions.

Chapter 5 discusses my interpretation of Informants' perceptions of the applicability of the SMH and the ambit of self-medication as compared to the SMH. It discusses Informants' specific perceptions of the SMH having a limited ambit regarding what constitutes distress, divergent perceptions of what constitutes desirable relief, and constraints on acquisition of substances for the purpose of self-medication.

Chapter 6 discusses my interpretation of Informants' perceptions of motivations for substance use other than self-medication. These include "having fun", cultural and social influences, and experimentation. These alternative motivations were perceived in generally common terms.

Chapter 7 discusses my interpretation of Informants' perceptions of the shortcomings of medically prescribed drugs. Inadequate and undesirable effects of such drugs,
difficulties associated with their prescription and acquisition, and emotional issues were identified as problems. These themes emerged progressively as successive interview conversations were conducted.

Chapter 8 presents conclusions regarding perceptions of the applicability and ambit of the SMH, alternative motivations for substance use, and problems with medically prescribed drugs. It then discusses strengths and limitations of this study, and provides suggestions for further research.

Appendix B contains the Information Letter and Consent Form used when conducting interview conversations.
CHAPTER 2: LITERATURE REVIEW

INTRODUCTION

This research set out to gain an understanding of the ways in which individuals perceive self-medication as a motivation for alcohol and other drug use. It has been informed by Clients (i.e. people accessing services to individuals adversely affected by the use of alcohol and other drugs) and Service Workers (i.e. counsellors and street outreach workers). Informants' perceptions of the applicability of the Self-Medication Hypothesis were elicited in order to gain understanding of the ways this important but somewhat controversial theory is viewed.

This chapter initially provides a brief overview of the SMH, and then identifies selected research studies addressing its applicability. Research which variously supports, rejects, and delivers mixed conclusions is discussed. Looking beyond the SMH, this chapter identifies and briefly discusses alternative theories addressing reasons for alcohol and other drug use and addiction. These include medical, social, policy, diffusion, biopsychosocial, and cybernetic perspectives.

The SMH is not the only theory addressing motivation for alcohol and other drug use. Such alternative theories consider factors which are not within the ambit of the SMH. Hence, these factors may or may not be inconsistent with the SMH, as discussed below.

This chapter concludes with a brief discussion of perspectives under which substance use and addiction may be considered, including self determination, social values, and researchers' perspectives.

THE SELF-MEDICATION HYPOTHESIS

Khantzian's articulation of the Self-Medication Hypothesis

Edward Khantzian has (individually and with co-authors) published numerous journal articles and contributed to several books on substance use and self-medication from a clinical psychiatric perspective. In particular, much of his analysis and discussion is couched in terms of psychodynamic concepts (i.e. human functioning as the product of interacting conscious and unconscious forces).
The SMH as proposed by Khantzian does not reflect a single statement at a single point of time. Rather, the SMH evolved over a long time - initially foreshadowed in the mid-1970s and developed progressively since (*inter alia* Khantzian 1974; 1985; 1997; 1999; Khantzian et al 1974; Khantzian and Albanese 2008). Khantzian extended the scope of its applicability from initially being restricted to users of heroin and cocaine to later covering all drugs (including alcohol) and subsequently other addictive behaviours including gambling and sexual activities.

For the purposes of this research I have followed selected works of Edward Khantzian and his colleagues when characterising the SMH for practical use in interview conversations and in my subsequent discussion of my interpretation of those conversations. In particular, I have selected salient publications from the mid-1970s (Khantzian 1974; Khantzian et al 1974), mid-1980s (Khantzian 1985), late 1990s (Khantzian 1997; 1999), and late 2000s (Khantzian and Albanese 2008). These works reflect the progressive development of the SMH over three decades.

I have based my characterisation of the SMH on the following more recent (2008, 2) statement by Khantzian and Albanese:

> The [Self-Medication Hypothesis] has two important aspects to it. First, addictive drugs become addicting because they have the powerful effect of alleviating, removing, or changing human psychological suffering. A second important aspect is that there is a considerable degree of specificity in a person's choice of drug. Addictive drugs are not universally appealing. Although a person might experiment and use a number of addictive substances, individuals navigate towards a certain drug because of what it does for them.

I have selected this articulation of the SMH on the basis that it represents Khantzian's consideration of substance use and consequent reflection over more than thirty years of academic and clinical practice. However, I have been mindful of Khantzian's earlier works laying the groundwork for the SMH and the ways in which he subsequently extended the ambit of the Hypothesis.

For the purposes of conducting this research I describe the Self-Medication Hypothesis in simple terms as proposing that individuals use alcohol and other drugs
to alleviate emotional distress, and that the substances used are chosen for their perceived effectiveness in providing relief.

Khantzian's publications prior to 1985 do not explicitly articulate the SMH. Rather, they provide his views regarding issues associated with drug addiction, with particular focus on heroin use.

Khantzian (1974) addresses opiate addiction in terms of relationships between "theory" and "treatment approaches". He discusses theories of addiction spanning a variety of perspectives, summarised as "pharmacologic" (emphasising chemical and other physiological factors), and "psychodynamic" (emphasising emotional and psychological factors). Within this discussion, Khantzian identifies authors who propose that rage and aggression - i.e. emotional feelings - are significant factors in the development of morphine and heroin addiction. He then discusses methadone maintenance programs and self-help activities such as encounter groups as "treatment approaches", and proposes that methadone treatment is successful because it provides relief from unwanted feelings of aggression. Khantzian concludes there is "surprisingly little" in the literature covering psychiatry or psychoanalysis which links "theory" to the treatment of "narcotic addiction" at the time of his writing. In doing so, he suggests treatment of opiate addiction should focus on understanding the reasons why individuals use such drugs, and that relief from unpleasant emotional states provides an explanation (1974, 64-69). In this context he states (1974, 60) "I hope to show how a significant number of individuals become addicted to opiates because they learn that the drug helps [them] to cope by relieving dysphoric states".

Khantzian et al (1974) extend Khantzian's (1974) view that heroin use is an attempt to cope with feelings of rage and aggression. They propose (1974, 160-164) that opiate use is a "unique and characteristic" way of dealing with wider "emotional pains, stress, and dysphoria". In their conclusions, Khantzian et al (1974) state that people addicted to opiates have "failed to develop effective ... solutions in response to developmental crises, stress, deprivation, and other forms of emotional pain". This conclusion reflects Khantzian's concurrent (1974) foreshadowing of the SMH. Individuals use substances in order to obtain relief from emotional distress. The SMH is again not explicitly stated, but considerations underpinning it are identified in terms which are later used for the purposes of formal definition.
A decade after proposing that a significant number of heroin users sought to relieve emotional distress by using that drug, Khantzian (1985) formally proposed the SMH. He introduces the concept of the SMH when stating:

…the specific psychotropic effects of [heroin and cocaine in particular] interact with psychiatric disturbances and painful affect states to make them compelling in susceptible individuals (1985, 1259).

In making this statement, Khantzian is proposing the first component of the SMH - individuals use substances in order to alleviate emotional distress.

Khantzian then states:

... the drug an individual comes to rely on is not a random choice. Although addicts experiment with multiple substances, most prefer one drug ... I have called it the 'self selection' process (1985, 1261-1262).

This statement proposes the second component of the SMH - individuals use the substance that works most effectively for them.

Khantzian then summarises the Self-Medication Hypothesis as follows:

Rather than simply seeking escape, euphoria, or self-destruction, addicts are attempting to medicate themselves for a range of psychiatric problems and painful emotional states ... addicts discover that the short-term effects of their drugs of choice help them to cope with distressful subjective states and an external reality otherwise experienced as unmanageable or overwhelming (1985, 1263; emphasis added).

Khantzian (1997) broadens the ambit of the SMH to encompass a wider selection of drugs (including alcohol) and proposes that self-medication is practiced not only by individuals who have not been diagnosed with a mental disorder but also by those who are "severely mentally ill". Further, he provides insight into the way he delivered treatment to his clients. He states (1997, 232) he used "supportive" techniques and a "semistructured treatment relationship" when dealing with clients. This approach resulted in greater levels of interaction with clients compared to the use of "classical" psychiatric techniques. Khantzian identifies the importance of such closer involvement when stating that greater interpersonal contact provided "better access" to a client's "inner life". In turn, this more interactive approach allowed clients to
better understand how use of their drug of choice affected their "suffering, defences, avoidances, and separation from their feelings" (ibid). This approach to the treatment of clients is further described in Khantzian's later works. He states (1999, 534) that "effective" treatment must "respond creatively and imaginatively". Correspondingly, Khantzian and Albanese (2008, xvi) describe the SMH and its use in the treatment of addiction as a "humanistic and understandable explanation as to why addictions are so compelling".

Khantzian and Albanese (2008) expand the ambit of the SMH to include other "behaviors", including sex, gambling, shopping, and eating. They propose these behaviours are endeavours to "control human psychological suffering", and people with "behavioral" addictions have experiences similar to those addicted to drugs (2008, 94-95). However, this increase in scope of applicability of the SMH does not imply that its original focus on consciousness-altering substances is in any way diminished. As well as addressing opiates, cocaine, and alcohol, Khantzian and Albanese devote an entire chapter (2008, chapter 10) to nicotine and cannabis use.

Khantzian's development of the SMH over more than three decades reflects a progressive broadening of its proposed applicability. Khantzian confined his early (1974) consideration of drug use to opiate and cocaine addiction. Two decades later, Khantzian's (1997) "reconsideration" of the SMH and his subsequent (1999) reflective discussion of the SMH expanded its ambit to a wider section of the population and a wider selection of drugs. A further decade later, Khantzian and Albanese (2008) proposed the SMH is relevant to not only drug use, but also a variety of other behaviours such as "sexual addiction" and gambling. However, the central thrust of the SMH remains unchanged over time. It proposes that individuals engage in behaviour (including but not limited to use of alcohol and other drugs) in order to alleviate emotional distress, and such behaviour (in this case the use of a particular substance) is pursued on the basis of its effectiveness in providing relief.

**Other theories of substance use**

When proposing and discussing the SMH, Khantzian identifies that self-medication is not the only motivation for substance use. When initially proposing the SMH, he states that "there are other determinants of addiction" (1985, 1263). His later works
(1997, 232; 1999, 1-2; Khantzian and Albanese 2008, 3-5, 7-11, 118) make similar statements and identify other theories explaining addiction.

However, Khantzian confers particular status on the SMH as an explanation for addiction. He (and his co-authors) consistently identify relief from emotional distress as a particularly important motivation for substance use which leads to dependence. For example, Khantzian et al (1974, 163-164) describe relief from emotional distress as the primary motivation for heroin use and subsequent addiction. In complementary terms, Khantzian (1974, 68-69) discusses heroin use as motivated principally by desire for relief of emotional distress deriving from social factors. When discussing motivations for substance use in comparative terms, Khantzian (1985, 1263) identifies self-medication as "one of the more compelling reasons" for substance use, but does not identify other equally compelling motivations. In subsequent discussion addressing the SMH, Khantzian (1997, 231, 237; 1999, 18, 121-122) similarly identifies self-medication as a primary reason for using alcohol and other drugs.

Khantzian and Albanese (2008, xvi) state that there are "few if any" theories which provide "meaningful" understanding of addictive behaviour, but advance the SMH as providing such understanding. They state (2008, 49) that "others besides us consider the SMH a good idea", and conclude their book (2008, 121-126) by proposing that the SMH is a "proven approach to understanding addiction".

This view of self-medication as a particularly important motivation for substance use is challenged by others, as discussed below.

**EVALUATION OF THE SELF-MEDICATION HYPOTHESIS**

Khantzian's Self-Medication Hypothesis has attracted considerable interest since its initial articulation in 1985. Some researchers report findings support the SMH, others indicate the SMH is not supported, and yet others offer mixed conclusions. The majority of these studies addressed the use of alcohol and illicit drugs, but a minority considered self-medication through the use of 'over the counter' pharmaceutical products and, at a wider level, behaviours such as eating.
Support for the SMH

Consideration of relief from emotional distress deriving from traumatic experiences provided the starting point for several studies investigating the applicability of the SMH. Garland et al (2013) undertook quantitative analysis of responses obtained from structured interviews which sought to identify relationships between trauma and substance use by young people undergoing treatment for "antisocial behavior". They conclude (2013, 180-181):

... in an attempt to self medicate psychological distress resulting from exposure to violent and terrifying events, traumatized youth in this study may have engaged in comparatively frequent use of alcohol and marijuana, sought intoxication from a wide array of psychoactive substances, and experienced serious substance related problems in psychosocial functioning.

This conclusion provides direct support for the first proposition provided by the SMH. The researchers concluded that the people they studied used alcohol and other drugs to alleviate emotional distress. However, the second component of the SMH - the criterion for choice of substance - is not addressed. In a similar vein, an earlier study by Miranda et al (2002) explored the association between sexual abuse and alcohol use. Quantitative analysis of survey questionnaires completed by students at a large university in the United States led to the conclusion that women who have experienced sexual assault were likely to be motivated to use alcohol to "cope with negative affect" (2002, 212). A similar, later, study by Fossos et al (2011) reached similar conclusions. In a wider but corresponding context, Fletcher et al (2015) discuss the treatment of addiction when providing a review of relevant literature. In doing so, they identify the SMH as proposed by Khantzian to be consistent with attachment theory (which addresses bonds between children and caregivers), and, in this context, propose that children exposed to "trauma and neglect" in the early years of their life are more likely to develop a "substance abuse problem" in later life (2015, 112-114).

Not all research supporting the SMH investigated emotional distress deriving from abusive and traumatic experiences. Lewis et al (2011) undertook quantitative research analysing public health data in the United Kingdom. They investigated the relationship between cigarette smoking and depression in pregnant women, and
conclude their research does not indicate that smoking causes depressed mood. Instead, their results are identified as supporting a "self-medication explanation" for the correlation they observed between cigarette use and depression. In other words, the women they studied used tobacco to deal with depression, regardless of its causes.

Other research has focused on an aspect of Khantzian's (1997) broader articulation of the SMH which proposes people with diagnosed mental disorders self-medicate. Pettersen et al (2013) sought to investigate the perceptions of individuals with "severe mental illness" regarding their reasons for substance use. Their qualitative research employed semi-structured interviews. Its findings "mainly support the traditional SMH", but also indicate alternative theories of reasons for substance use are applicable. In another qualitative study employing semi-structured interviews, Nehlin et al (2015) investigated perceptions of the role of alcohol and drugs in the lives of people suffering from Attention Deficit Hyperactivity Disorder. They conclude their informants used alcohol and other drugs in order to "feel normal", and hence experience social "belongingness" as distinct from social "alienation" and social "rejection" (2015, 347-348). This conclusion is consistent with the first component of the SMH (i.e. reason for substance use), as feelings of "alienation" and "rejection" are generally seen to be unpleasant.

Not all studies of self-medication have been directed at the use of alcohol and illicit drugs. Saeed et al (2014) investigated self-medication by university students using "non-prescription" and "over the counter" drugs. Statistical analysis of survey questionnaires indicated a "high level" of self-medication. In another study of university students similarly implemented using survey questionnaires and statistical analysis, Lukovic et al (2014) found self-medication to be widespread among medical students and mainly confined to drugs obtained legitimately but not prescribed by qualified medical practitioners.

Addressing Khantzian's and Albanese's (2008) further expansion of the ambit of the SMH to include behaviours other than alcohol and other drug use, Christensen and Brooks (2006) investigated relationships between events, resulting mood, and food consumption in the context of the SMH. Statistical analysis of data obtained from survey questionnaires indicate a relationship between food (and alcohol) consumption and mood. Christensen and Brooks (2006, 303-304) state their results reflect those of
other studies and provide "further evidence indicating that mood state directly influences food selection".

The conclusions drawn by the research identified above reflect a common theme across a variety of settings and people studied. In all cases, people engaged in behaviour - principally the use of alcohol and other drugs - in order to alleviate emotional distress. The causes of such distress were varied, but a common approach to mitigation of discomfort was taken.

However, this research has addressed the second component of the SMH to a lesser extent. It did not seek to identify the reasons why individuals selected specific substances (primarily alcohol and other drugs, but in one case food) to mitigate their painful emotional states. This omission is reflected in the following discussion identifying research where SMH has not been supported.

**Rejection of the SMH**

Other research has lead to conclusions that the SMH does not provide a satisfactory explanation of alcohol and other drug use.

Studies seeking explanations for addiction have addressed the applicability of the SMH. In an empirical study Danny Hall and Queener (2007) tested Khantzian's SMH using statistical methods to analyse responses to questionnaires completed by participants in a methadone program. They conclude drug use and "negative affect" such as depression and anxiety were not directly correlated, indicating the SMH did not explain substance use (2007, 156). Reasons for selecting the initial drug of choice were not investigated. In a later, similarly quantitative study, Newton et al (2009) conducted research seeking to identify the applicability of "theories of addiction" through statistical analysis of responses to survey questionnaires completed by methamphetamine users. The former conclude "pleasure seeking" was the most commonly reported reason for drug use, and "pain avoidance" was less common (2009, 297-298). In reaching this conclusion, Newton et al (2009) reflect conclusions reached from research conducted in the 1950s and 1960s discussed by Khantzian (1985, 1260). The latter proposes this research has been supplanted by the SMH.

In another empirical study examining the wider population Damphousse and Kaplan (1998) investigated the applicability of the SMH by using structural equation
modelling to analyse data obtained from questionnaires completed by adolescents attending schools in the United States and subsequent structured interviews with selected respondents. They conclude psychological distress did not lead to drug use in later life (1998, 127). This conclusion is in opposition to the results of comparable research subsequently conducted by Fletcher et al (2015).

Reflecting the direction taken by research supporting the SMH discussed above, other studies rejecting the SMH have addressed self-medication by individuals diagnosed with mental disorders. Wayne Hall (2006) reviewed literature addressing the association between cannabis use and psychosis, and concludes the SMH was not supported by the studies he considered. This conclusion is somewhat at odds with his earlier collaboration with Teesson and Degenhardt, which identifies "self-regulation" - i.e. achieving "physical and psychological balance" - as an "important factor" in the development of addiction (Teesson et al 2002, 41-42). Employing a different research methodology Hahn et al (2013) administered laboratory tests to individuals diagnosed as suffering from schizophrenia, and compared the cognitive capabilities of cigarette smokers either given access to or deprived of tobacco. They conclude their conception of the SMH focusing on cognitive capabilities is not supported (2013, 442). In similar research involving laboratory testing, Drusch et al (2013) investigated the effects of cigarette smoking on individuals diagnosed with schizophrenia and on healthy controls regarding "social cognition", "social competence", and stress. They conclude that contrary to the SMH, nicotine use showed "no significant effects on the dependent variables" (2013, 519).

Mixed conclusions regarding the SMH

The preceding discussion identifies research studies that arrived at opposite conclusions regarding the applicability of the SMH. However, other research draws mixed conclusions. The contexts of some of these studies reflected those investigated by the research discussed above.

In an Australian study involving statistical analysis of survey questionnaires completed by individuals participating in a methadone maintenance program, Villagonzalo et al (2011) found a relationship between Post Traumatic Stress Disorder ("PTSD") and cannabis use, but no relationship between PTSD and opiate,
amphetamine, and benzodiazepine use. This conclusion is partially consistent with that of Hall and Queener (2007), who report no relationship between emotional state and opioid use when studying people taking methadone. However, Hall and Queener (2007) did not investigate the use of other substances. In another quantitative study of PTSD affecting military personnel involved in the Persian Gulf War, Shipherd et al (2005) analysed survey questionnaire data and found positive correlation between the use of both alcohol and other drugs and PTSD. However, other factors, including age and level of education were also identified as relevant. In a similar vein, Gradus et al (2008) investigated motivations for "harmful" alcohol use by military personnel through the statistical analysis of data from telephone interviews. They conclude women are likely to use alcohol to alleviate emotional distress deriving from sexual harassment, but men's use is more likely motivated by social expectation. Their conclusion regarding alcohol use by women as self-medication is reflective of the earlier study by Miranda et al (2002) investigating the relationship between sexual assault and alcohol use.

In a study addressing substance use and mental disorders, Glass and Flory (2010) undertook a review of literature addressing reasons why people suffering from Attention Deficit Hyperactivity Disorder ("ADHD") have comparatively higher rates of cigarette smoking. They conclude:

    Overall, the literature on the self-medication hypothesis suggests that this theory may have some utility; however, much additional research is needed to clarify whether individuals with ADHD smoke cigarettes in order to self-medicate (2011, 300).

In another literature review addressing tobacco use, schizophrenia, and the SMH, deBeaurepaire (2012) indicates limited support for the SMH.

Several studies have addressed the SMH in the context of compulsive use. Maremmani et al (2012) conducted statistical analysis of the medical records of individuals registered as heroin addicts and diagnosed with bipolar disorder. They conclude (2012, 3-4, 6-7) individuals use different substances depending on whether they were "up" or "down". Depressants were used during "down" times, stimulants were used during both "up" and "down" times, and substance use while "up" was
intended to maintain pleasurable emotional states. The latter conclusion is consistent with that of Newton et al (2009).

In the specific case of alcohol, use was seen to be more applicable to relief of anxiety and less applicable to other "mood disorders", reflecting the SMH. In a more focused study, Arendt et al (2007) assessed the applicability of the SMH by employing statistical analysis of survey questionnaire data when investigating depression and aggression among "cannabis-dependent" individuals. The former report the latter used cannabis to reduce aggression, but did not use cannabis to alleviate depression (2007, 941). This finding regarding cannabis use is reflective of Khantzian's (1974) initial exploration of the relationship between opiate and cocaine use to reduce feelings of anger which lead to his subsequent articulation of the SMH. In a later study of cannabis use by young people, Gill et al (2015) conclude self-medication is a reason for cannabis use, but "enhancement of mood" is a more common motive.

Taking a broader view, Boys et al (2001) investigated the reasons why young people use drugs. Statistical analysis of data obtained through structured interviews conducted with members of the general population identified eighteen "functions" provided by drug use, with the five most common being "relax", become "intoxicated", "keep going", "enhance activity", and "feel better". The "functions" "relax" and "feel better" are arguably consistent with the SMH, and were cited by 97% and 87% of respondents respectively (2001, 465-466). However, other "functions" suggest theories emphasising enjoyment and social interaction are relevant.

Segarra et al (2011) investigated relationships between cognitive ability and tobacco use through results of laboratory tests administered to individuals diagnosed with psychosis, and drew mixed conclusions. In doing so, Segarra et al (2011) provide a partial contradiction to the findings of Hahn et al (2013) and Drusch et al (2013).

In contrast to research that either supports or rejects the SMH, the research identified immediately above indicates qualified support for the SMH. Notably, some studies involved individuals who had been diagnosed with a mental disorder. However, other motivations for substance use, particularly enjoyment, are identified.
Implicit discussion of the SMH

The preceding discussion identifies research which specifically addresses the applicability of the SMH. As such, explicit conclusions were reached regarding its applicability. However, other studies implicitly address the SMH.

Creighton et al (2016) describe research investigating alcohol use by young men intended to "dull the pain" and "purge sadness" resulting from the death of a male friend. Drinking specifically to get drunk is identified as a desire by some informants to "anesthetize" feelings of grief and loss (2016, 56). Other informants indicated that being drunk facilitated articulation of their distress and in doing so reduced discomfort (2016, 57-58). While not explicitly considering the SMH, this study nevertheless identifies substance use as being directed at relieving emotional distress.

In a study addressing prevention of addiction, Moos (2007) identifies four "common social processes" that protect individuals against the development of "substance use disorders". When discussing these "processes" Moos identifies theories which he considers applicable to the understanding of addiction. One of the four theories is described as "stress and coping theory". According to this theory, individuals who experience stress at school, in the workplace, and in family and other social situations use substances "in response to" these "stressors" (2007, 110-111). This proposition effectively reflects the first component of the SMH, but does not address the second component.

Other studies not specifically directed at validation of the SMH similarly address relief of emotional distress. Caiata-Zufferey (2012) addresses substance use as "positive practice" by people who are not considered to be "addicts". When providing examples of such "positive" use, she reports part of an interview conversation where her informant stated that heroin use was an effective means of dealing with stress (2012, 435). Edwards and Loeb (2011) conducted research into the effectiveness of counselling services provided to clients who used drugs and were on low incomes. The researchers conclude use of drugs, particularly heroin, was perceived to be a "lifeline" by some clients because of the resultant reduction of personal distress.

These examples of research which did not explicitly seek to address the applicability of the SMH indicate the concepts embodied in the SMH - alleviation of distress and selection of substance - were nevertheless reflected in both research questions and
consequent findings. Hence, the SMH has in some cases been seen as applicable in an implicit rather than explicit way.

The Self-Medication Hypothesis: a somewhat controversial theory

The existence of research findings that variously support, reject, or partially support the SMH indicates the Hypothesis is neither universally accepted nor rejected. This diversity of conclusions spans studies of the use of many substances, including tobacco, alcohol, cannabis, cocaine, methamphetamine, and heroin. It is therefore apparent that there is disagreement over the applicability of the SMH.

Glass and Flory (2011, 293, 299) state that "one major limitation" of research addressing the SMH is the "inconsistent conceptualization" of the theory. This lack of a "clear" definition makes such research "difficult to interpret". In a similar vein, Henwood and Padgett (2007, 160) observe that "problems in the SMH’s conceptualization may explain part of the confusing and inconsistent research findings".


Each of the authors identified immediately above appear to have assumed the meaning of the "Self-Medication Hypothesis" is commonly understood. However, consideration of selected relevant literature suggests this is by no means the case.

Segarra et al (2011), Drusch et al (2013), and Hahn et al (2013) investigated their conceptions of the SMH in terms of cognition and treatment of side effects of medication rather than relief from emotional distress. They performed laboratory experiments to measure the effects of tobacco use on the cognitive performance of their subjects when performing test exercises. They did not investigate relief of
emotional distress or preference of substance. Hahn et al (2013, 436, emphasis added) explicitly state their study tested the "cognitive self-medication hypothesis".

It is apparent the conceptions of the SMH held by Segarra et al (2011), Drusch et al (2013), and Hahn et al (2013) do not coincide with Khantzian's. This suggests the "Self-Medication Hypothesis" has assumed a meaning in some quarters which diverges from that articulated by Khantzian. This further suggests the 'common' meaning of the SMH provided by Khantzian is by no means commonly held, and hence not consistently addressed.

Many studies addressing the applicability of the SMH focus on its first component - i.e. individuals use alcohol and other drugs to alleviate emotional distress. However, the second component - i.e. individuals select a specific 'drug of choice' on the basis of its effectiveness in alleviating emotional distress - is generally not addressed. Such omission in research supporting the SMH may be seen as providing only partial validation of the Hypothesis. Correspondingly, research refuting the SMH generally does not refute the Hypothesis in its entirety. Only some research reporting mixed support for the SMH addresses the two propositions advanced by the SMH. Arendt et al (2007) and Maremmani et al (2012) explicitly considered drugs of choice, but other researchers reporting mixed conclusions did not focus on the issue.

At a wider level, the conception of the SMH is by no means fully consistent between different researchers, and in some cases does not address either relief of emotional distress or personal selection of substance used.

**ALTERNATE THEORIES OF SUBSTANCE USE AND ADDICTION**

The SMH offers an explanation for the reason individuals use alcohol and other drugs, and why some substances are preferred over others. However, the SMH is by no means accepted as the definitive explanation for alcohol and other drug use. The discussion above identifies the SMH as a contested theory. Further, the SMH is but one of several theories addressing the reasons why people use consciousness-altering substances and in some cases become addicted to them.

Denzin (1993, chapter 2) provides a summary overview of several prominent perspectives of alcohol use from notionally separate disciplines when addressing "scientific" theories of alcoholism. While Denzin's discussion is confined to alcohol
use, concepts from the theories he identifies have been applied to the use of other substances, and offer alternative explanations for substance use. "Genetic" theories suggest a "biological predisposition" to alcohol consumption. "Behavioural" theories suggest interaction between the alcohol user and his or her social environment. Of these, "tension-reduction" theories propose that individuals progressively learn to use alcohol in order to reduce anxiety and theories of "pleasure" identify euphoria when intoxicated as motivation to consume alcohol. "Psychoanalytic" theories include "power theory", under which males drink in order to suppress feelings of personal weakness, and "dependency" theories which propose that intoxication recreates feelings of maternal caring and associated comfort. "Anthropological" theories include the concept of "time out", whereby individuals consume alcohol in accordance with social norms permitting temporary and limited relaxation of social conventions, and the "Anxious American thesis", under which alcohol is used in response to social pressure imposed by the wider American society. Finally, a "cybernetic" theory proposes that alcohol consumption is a mechanism to provide self-correction of external pressures and personal loss of control.

At this point it is relevant to observe that Denzin's (1993) description of theories of substance use is comprehensive but not complete. Discussion below addresses yet further perspectives of substance use.

While there is some commonality between certain aspects of alternative theories of addiction, these theories are incommensurate to varying degrees. The following discussion addresses several prominent theories of addiction which offer alternative and conflicting views of compulsive substance use.

**Medical theories of addiction**

Medical disciplines provide explanations for alcohol and other drug use which contrast with the SMH. One such explanation is the Disease Model. Gelkopf et al (2002, 140) suggest the Disease Model and the SMH are the two models which have "most affected theory and practice of addiction medicine". The Disease Model is predicated on the premise that "addiction' fulfils the criteria of a 'disease' entity". These criteria include identifiable symptoms (in particular), predictable progress and
outcome, the need for medical treatment, and "the lack of control an individual has over his/her condition" (2002, 141-142).

Branch reflects this conception of addiction as a disease when stating (2011, 263, *italics* in original):

... the current received view, at least as promulgated by the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA), [is] that drug abuse is a disease, specifically, "Addiction is a chronic, often relapsing brain disease…similar to other chronic, relapsing diseases, such as diabetes, asthma, or heart disease ... "

Karasaki et al (2013, 195) propose the Disease Model is "prevalent" in Australia. Similarly, Satel and Lilienfeld (2014, 1) state the view of addiction as a "brain disease" has become "widespread and rarely challenged", and Suissa (2003, 202) observes the "medical model" plays a "predominant role" in "dominant discourse and ideology" by classifying alcoholism as a disease. Lawrence et al (2013) report the results of a survey of medical practitioners in the United States regarding views regarding addiction. Slightly over half of "primary care physicians" and slightly less than two thirds of psychiatrists considered the disease model explains "a lot" about addiction. Denzin (1993) consistently and explicitly identifies compulsive alcohol use as a "disease". When providing an introduction to his book, he describes alcoholism as a "disease of conduct" (1993, xxvii). Denzin continues in this vein to state that alcoholism is a "disease of emotionality and self-feeling" (1993, 6), and a "disease of time" (1993, 98-99). Discussion of services offered by Alcoholics Anonymous states that "A.A. defines the alcoholic as a sick person" (1993, 53).

The view that addiction is a disease is not new. Conrad and Schneider (1992) identify E. M. Jellinek of the Yale Research Center of Alcohol Studies as "unequivocally" defining alcoholism as a disease. The former state that in 1941, Jellinek, with co-author with Karl Bowman, identified alcoholism as an "addiction to alcohol". In 1946, Jellinek published his "well known phase progression model" of alcoholism, and expanded and refined this model in a 1952 paper (Conrad and Schneider 1992, 90-91). In 1960, Jellinek published *The Disease Concept of Alcoholism*. The following brief discussion of Jellinek's definition of addiction as a disease reflects this later publication.
Jellinek (1960, 35-39) identifies five "species" of alcoholism. "Alpha alcoholism" is "purely psychological" and reflects a desire to "relieve bodily or emotional pain". Alpha Alcoholism does not result in "loss of control" or "inability to abstain". The desire to relieve physical or emotional distress "implies an underlying illness", of which alcohol consumption is a symptom rather than cause. Consequently, Alpha Alcoholism is not an "illness per se". Beta Alcoholism is characterised by damage to bodily functions (e.g. cirrhosis of the liver). Tolerance to alcohol is developed, withdrawal symptoms occur, and "loss of control" is experienced under Gamma Alcoholism. Delta Alcoholism is a combination of the previous three "species" plus the "inability to abstain". Epsilon Alcoholism refers to "periodic alcoholism".

Gamma and Delta Alcoholism are "diseases" because they involve physical changes to the body including adaptation of cell metabolism, tolerance, and withdrawal symptoms. The Alpha and Beta "species" are not diseases because the cellular and metabolic changes (as distinct from organ damage) defining Delta and Gamma are not present. Epsilon Alcoholism is not classified due to insufficient knowledge of that condition (1960, 39-41).

Morphine, heroin, and barbiturate addiction are characterised by changes to body functions which are analogous to those characterising Delta and Gamma Alcoholism. Consequently, addiction to these drugs is a "disease" (1960, 40).

It is evident Jellinek defines addiction as a "disease" on the basis of physical changes to body functions and reactions to such changes. In doing so, he likens addiction to infections of the body caused by organisms such as bacteria and viruses. He explicitly excludes Alpha Alcoholism from being a disease because it does not involve changes to body functions, but identifies "emotional disturbance" as an "illness" (1960, 36-37). In taking this position, Jellinek (1960) takes a narrower view of "illness" compared to that prevailing in the twenty first century.

Madsen (1974) makes extensive references to Jellinek when applying the "nature-nurture controversy" to theories of alcoholism. He proposes that disciplines such as anthropology, sociology, and psychology view alcoholism in different contexts, and concludes that definition of alcoholism is problematic. He continues to discuss alcoholism in terms of "mind" and "body", but considers both predominantly in terms of cognitive and physiological malfunction. Madsen then discusses alcoholism in a
wider cultural context by identifying the "Anxious American". He proposes that alcohol consumption by the non-alcoholic general public is motivated by relief of anxiety. Such anxiety derives from tensions deriving from conflict between social values simultaneously emphasising freedom and equality. His statements that alcoholism is the result of a "stress-laden society" causing "discharge" of "resultant anxiety" (1974, 96), and that alcohol is an "accepted self-administered method of psychotherapy" (1974, 103) are strongly reflective of the SMH. In this context, Madsen indicates the Disease Model is primarily applicable to compulsive rather than moderate alcohol use, but later (1974, 152-153) states that "nonalcoholic [sic] problem drinkers" may be variously neurotic or psychotic. In subsequent chapters, Madsen discusses alcoholism in terms of mental and physical illness. He identifies Jellinek's (1960) gamma and delta alcoholism as most prevalent and in the minority in the United States of America.

Jellinek's (1960) definition of Alpha Alcoholism may be seen to reflect Khantzian's articulation of the SMH some 25 years prior to Khantzian's formal statement of the Hypothesis. Similarly, Madsen's (1974) discussion of "problem drinkers" was published at the same time that Khantzian was identifying motivations for substance use which support his proposal of the SMH. Emotional disturbances may be seen to include emotional distress from which individuals seek relief through the use of alcohol and other drugs.

Jellinek prefaces his description of the five "species" of alcoholism by discussing the way in which "disease" is defined. He states "a disease is what the medical profession recognizes as such" (1960, 12).

Such recognition of disease is provided by the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (2013; cited as "DSM-5" below), which explicitly defines the "mental disorders" it addresses as "medical diseases". It states (in relevant part) that "the DSM, like other medical disease classifications, should accommodate dimensional approaches to mental disorders ... " (2013, 5).

The DSM-5 identifies "Substance-Related Disorders" and "Non-Substance-Related Disorders" (2013, xxv-xxix). The former include (inter alia) "Alcohol-Related Disorders", "Cannabis-Related Disorders", Opioid-Related Disorders", and "Stimulant-Related Disorders" (the latter covering (inter alia) cocaine and
amphetamines). It is evident that the DSM-5 identifies alcohol and other drug addiction as "diseases".

The DSM-5 does not apply Jellinek's (1960) criterion of physical changes to bodily functions when specifying mental disorders and hence "diseases". It states "genetic markers, family traits, temperament, and environmental indicators" are "diagnostic criteria" (2013, 20). This position reflects Jellinek's (1960, 12) proposal that "a disease is what the medical profession recognizes as such".

Notwithstanding the widespread promulgation of the Disease Model, it is by no means accepted uncritically. Satel and Lilienfeld (2014), Branch (2011), and Suissa (2003) question the validity of the Disease Model. Their positions may be summarised by the statements by Satel and Lilienfeld (2014, 1) that the Disease Model does not account for the "dimension of choice in addiction" in the way the SMH does. Further, the Disease Model does not consider how substance-dependent individuals can "choose to recover" and are not "helpless victims" of their own "hijacked brains".

The Disease Model may be seen as a conceptual converse to the SMH. The SMH does not propose that use of alcohol and other drugs is, in itself, a disease. Rather, the SMH proposes that individuals use alcohol and drugs to ameliorate emotional distress which may or may not derive from the effects of psychological "diseases". Consequently, under the SMH addiction derives from the desire to reduce suffering which may be caused by "diseases". In contrast, the Disease Model holds that addiction is a disease in itself, and that use of alcohol and other drugs is a consequence of this illness. The SMH implies personal agency, whereas the Disease Model does not. This difference is exemplified by Denzin's (1993) discussion of services offered by Alcoholics Anonymous. Step One of its Twelve Step process is predicated on the assumption that an alcoholic is powerless to resist desires to drink because alcoholism is a disease of the mind and not a matter of personal choice.

Taking a broader view, research by Lawrence et al (2013) addressing the Disease Model take a view of addiction which extends beyond aetiological considerations. When seeking views on the Disease Model by "primary care physicians" and psychiatrists, Lawrence et al (2013) also asked respondents whether they considered addiction to be explained by a "response to psychological woundedness" and/or a "result of moral failings". They report (2013, 258) that statistical analysis of survey
questionnaire responses indicated both the Disease Model and "psychological woundedness" were seen to explain addiction, with the former seen as the best model of addiction and "moral failings" as the least preferred explanation. In contrast, Conrad and Schneider (1992, 98) report research conducted by Bischoff (1976) which indicated that only a minority of medical practitioners responding to a survey considered the Disease Model to be applicable. Only 28 percent of respondents described alcoholics as "sick", with the majority preferring descriptions such as "morally weak", "weak willed", and "criminals". Sixty percent of respondents considered alcoholics to be "totally" or "mainly" responsible for their condition, while only two percent indicated "not at all". These views are suggestive of addiction being regarded as 'deviance'.

The preceding discussion illustrates consideration of the Disease Model in more than one context. The idea that addiction is the result of an internal disorder is commonly but not universally held. The notion that addiction is a condition which is due to a "hijacked brain" is challenged because it is seen to disregard individuals' capacity to exercise personal choice and consequently recover from addiction. However, the Disease Model is nevertheless seen by researchers as an important and widely accepted explanation for addiction.

**Social theories of addiction and "deviance"**

The SMH and the Disease Model of addiction take a morally non-polarised view of alcohol and other drug use. However, theories addressing acceptance or rejection of social norms, moral conduct, and strength of character are widely represented in earlier literature predating the SMH and the Disease Model, and have found favour in some quarters ever since. The concept of "deviance" underpins many of these approaches.

Merton's (1938; 1957) explanation of what he describes (1938, 672) as "socio-cultural sources of deviate [sic] behavior" is described as being widely cited (Featherstone and Deflem 2003, Murphy and Robinson 2008, Nichols 2010). Merton (1938, 672-675) identifies "culturally defined goals, purposes, and interests" as ends sought by individuals in society. Such "cultural goals" may be achieved by "institutionalised" means which are accepted by members of society, or alternatively by means which are
classed as not being legitimate. "Institutional means" of achieving "cultural goals" are governed by "rules of the game" which are generally known by members of society. Hence, individuals must decide whether the "rules of the game" should be followed when pursuing socially desirable goals. Merton (1938, 675-678) relates achievement of "cultural goals" to "legitimate institutional means" or alternative non-legitimate means when proposing five alternative "modes of adjustment or adaptation".

The following table reflects Merton's (1938, 676) presentation of such adaptation:

<table>
<thead>
<tr>
<th></th>
<th>&quot;Culture goals&quot;</th>
<th>&quot;Institutionalized means&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conformity</td>
<td>accepted</td>
<td>accepted</td>
</tr>
<tr>
<td>Innovation</td>
<td>accepted</td>
<td>rejected</td>
</tr>
<tr>
<td>Ritualism</td>
<td>rejected</td>
<td>accepted</td>
</tr>
<tr>
<td>Retreatism</td>
<td>rejected</td>
<td>rejected</td>
</tr>
<tr>
<td>Rebellion</td>
<td>replaced by alternative(s)</td>
<td>replaced by alternative(s)</td>
</tr>
</tbody>
</table>

Action under these five categories reflects individuals' choices pertaining to specific situations. Merton emphasises that behaviour under consideration does not reflect "personality in toto". Rather, behaviour is influenced by relevant aspects of individuals' personalities and specific cultural backgrounds (1938, 676-678).

"Retreatism" (i.e. rejection of both social means and ends) is uncommon. Merton observes that individuals who "maladjust" in this fashion are "in" society but not "of" society. "Institutionalised means" are seen by relevant individuals as not being available to them, resulting in their rejection of "culture goals". Hence, such individuals "drop out". "Chronic drunkards" and "drug addicts" (inter alia) fall into this category. In taking this path, individuals are employing "escape mechanisms" in order to disassociate themselves from society (1938, 677-678).

Merton's (1938) reference to alcohol and other drug users is made in passing. The primary thrust of his article is directed towards the pursuit of money, power, and social status by legitimate and non-legitimate means. However, elements of Merton's model may be seen to be reflected in later views of alcohol and other drug use as deviance.
More recently, and in the specific context of substance use, Catalano et al (1996, 429) locate their discussion of drug use within the context of "antisocial behavior", and state their approach reflects a "continuing tradition of integrated theory" in the field of criminology. Within this context, Higgins et al (2009) identify "social learning theory" and "self-control theory" as two prominent theories of drug use. They describe "social learning theory" in terms of association with "deviant peers", rewards and sanctions deriving from "criminal behavior", personal attitudes, and modelling of personal "criminal" behaviour on the actions of others. "Self-control theory" is described in terms of "low self-control", being the "inability to resist a temptation when an opportunity for crime or deviant behavior presents itself" (2009, 951-952). Correspondingly, Moos (2007) proposes "social control theory" may explain addiction. He describes it as emphasising social bonding and cohesion, and monitoring and "goal direction" by others (2007, 110-111).

Marcos and Bahr (1988, 397) base their discussion of "control theory" as it applies to adolescent drug use on a model presented by Hirschi (1969). Other authors, including Catalano et al (2006), Moos (2007), Higgins et al (2009), Dollar and Ray (2013), and Dull (1983) cite Hirschi as providing an early and definitive exposition of "control theory". It is therefore relevant to briefly summarise relevant aspects of Hirschi’s (1969) book.

Hirschi (1969) addresses "control theory", but also presents two other models of "deviant" behaviour which are relevant to the current discussion. He identifies three "fundamental perspectives" on "delinquency and deviant behaviour". These are "strain or motivational theories", "control or bond theories", and "cultural deviance theories". He states these three theories are incommensurable, as it is difficult to reconcile the assumptions underpinning them (1969, 3-4).

"Strain theory" holds that "legitimate desires" which cannot be realised through conformity to social norms can "force" a person into "deviance". In other words, motivation to achieve legitimate ends results in the "neutralization of moral constraints" in order to justify socially unacceptable means of achieving acceptable ends. Hirschi emphasises legitimacy of motivation under "strain theories". To illustrate this point, he provides an example of a man who seeks "success" (identified as a "cardinal American virtue") but is unable to achieve it through legitimate means. This person "... in desperation ... turns to deviant behavior or crime to attain that
which he considers rightfully his" (1969, 3-6). This view of "deviant" behaviour is reflective of Merton's (1938) "innovation", whereby legitimate "culture goals" are achieved by means which are deemed to be socially unacceptable.

Hirschi summarises "control" or "bond" theories as holding that a person commits delinquent acts because "his [sic] ties to the conventional order have somehow been broken". Under this view, "variations in morality" are assumed, whereby for some people socially accepted moral considerations and norms are "important", and for others they are not (1969, 3, 11). Such "control" theories have parallels with Merton's (1938) "innovation" or "retreatism", depending on the extent to which legitimate social goals are accepted.

Under the third "fundamental perspective", "cultural deviance" theories are characterised by the assumption of competing moral standards. Hirschi summarises this perspective by proposing that "the deviant" embraces a set of social standards which are not accepted by the "larger or more powerful society" (1969, 3, 11). Here, the issue is not morality or amorality, but rather the form and content of the individual's moral code. Hirschi makes this clear when stating that under "cultural deviance" theories people are not seen to be capable of committing "deviant" acts. Rather, "deviant behavior" reflects conformity to a set of moral standards which are held and enacted by the individual but are in conflict with those of wider society (ibid). This characterisation of "deviant" behaviour is reflective of Merton's (1938) "rebellion", under which conventional aspirations and norms are supplanted by alternative, non-acceptable means and ends.

The notions of decision making criteria and compliance with social norms are central to the three "fundamental perspectives" identified by Hirschi (1969). Under the "strain" and "cultural deviance" models, individuals acknowledge externally imposed standards of social behaviour. They choose to abide by "deviant" codes under the "cultural deviance" model, or not abide by legitimate codes under "strain" theories. The "strain" experienced under the latter model reflects internalisation of the consequences of decision making. In contrast, the "control" model holds that standards of behaviour endorsed or otherwise by wider society are not part of a "deviant's" decision making criteria. By implication, this person's decisions are made on the basis of other considerations.
Self-medication can be seen to reflect Merton's "innovation" and Hirschi's "strain" theory if considered within Merton's and Hirschi's characterisation of "deviant" behaviour. Alleviation of emotional distress may be seen to be a legitimate end, and the use of alcohol and more particularly illicit drugs may be seen as a "deviant" means of achieving a legitimate end.

Alternatively, alcohol and other drug use may be considered to reflect either Hirschi's "control" or "cultural deviance" models. Under the "control" model, individuals consume alcohol and other drugs because they do not consider their actions to be 'wrong'. This view follows Merton's concept of "innovation". Under the "cultural deviance model", alcohol and other drug use may be seen to be 'normal' by those within a particular social setting, meaning that personal use is acceptable and may be expected by others in that specific social setting. However, such action is seen as 'deviant' by other members of wider society.

Merton (1938) and Hirschi (1969) consider deviance from the point of view of decision making by the person exhibiting "deviant" behaviour. Becker (1963) takes an opposite view when proposing that relevant groups within wider society are responsible for the creation of deviance by "making the rules whose infraction constitutes deviance". Under this view, action by an individual becomes deviant when sanctions are applied by others, rendering the individual an "outsider". In other words, "whether an act is deviant, then, depends on how other people react to it" (Becker 1963, 9-10, 11). Becker (1963, 12-18) continues to develop his characterisation of deviance by observing that sanctions are applied to varying degrees and selectively, depending on who has committed given acts. For example, sexual assault and murder are judged in part on the basis of the ethnic origins of the perpetrator and victim. Further, wider society is not homogeneous, and different groups have their own sets of rules which may conflict with each other or be inapplicable. As a consequence, deviance may be seen as part of the "political process of society". Becker (1963) subsequently addresses cannabis use. He discusses "learning the technique" of how to smoke marihuana and subsequently derive pleasurable benefit from its use (1963, chapter 3). In doing so, Becker is proposing a form of social learning described by Bandura (1977a; 1977b; Bandura and Walters 1963).
Bandura and Walters (1963) describe a "socio-behavioristic approach" to social learning under which children and adults imitate others and are influenced to adopt or reject observed behaviours by the responses of others to their actions. In subsequent works, Bandura (1977a, 1977b) proposes that social learning derives from cognitive processes. Under this view, individuals develop positive and negative expectations of the efficacy of behaviour and actions through modelling the "performance accomplishments" of others. These are seen as desirable or 'normal', and include gaining vicarious experience from observation, experiencing "emotional arousal" when confronted by "stressful and taxing" situations, and verbal persuasion.

MacAndrew and Edgerton (1969) develop the concept of "time out" as an explanation for "drunken comportment", or behaviour when intoxicated by alcohol. Alcohol use is seen as a means of achieving "disinhibition" within socially defined limits. Such 'letting go' to an extent which is socially accepted necessarily involves knowledge of social norms and values. This leads to the conclusion (1969, 88) that individuals "learn about drunkenness" from what "society 'knows' about drunkenness", and as a consequence become "living confirmation of their society's teachings".

MacAndrew and Edgerton (1969) consider social learning in broader terms. They commence their discussion by proposing that alcohol consumption reduces personal inhibitions and discuss such "disinhibition" under "conventional" views which hold that alcohol promotes violence, sexual promiscuity, and other socially unacceptable behaviours. They continue to observe that the behaviours of several indigenous peoples in parts of South, Central, and North America, Micronesia, and Japan while intoxicated by alcohol vary from aggression and violence to extreme reservedness and chastity. This variety of effects leads to the authors' proposition that drunken behaviour is tolerated within socially defined limits. In turn, this leads to the development of a concept of "drunkenness as time out". Under this view, drunken behaviour reflects social norms and compliance with them. When drunk, individuals are permitted "time out" from the emotional and behavioural restrictions felt during their lives when sober and are allowed greater behavioural freedom, subject to socially defined and imposed limits. As a consequence, some transgressions while drunk are perceived as more acceptable to varying degrees. This leads to the conclusion (1969, 88) that individuals "learn about drunkenness" from what "society 'knows' about drunkenness", and as a consequence become "living confirmation of
their society's teachings". This proposition is reflective of Becker (1963) (discussed immediately above). The concept of "time out" is also reflective of the SMH insofar as "time out" facilitates relief from the pressures of life. However, "time out" is a general concept covering multiple aspects of an individual's being, whereas the SMH specifically addresses intense emotional distress.

Young (2009; 2011) takes a corresponding broad social view when considering the effects of substance use on the general public who, by implication, are not illicit substance users. He proposes that social perceptions of illegal drug use create "moral panic". Citing Becker (1963), Young (2009, 8-11; 2011, 248-250) identifies "subcultures of youth" as initiating social concern by articulating harsh criticisms of the societies they were entering in the late 1960s. Stereotypes of such subcultures as illicit drug users initially created "moral indignation" as conservative social values were seen to be challenged. Such indignation progressively became "moral panic" as reports of 'deviant' behaviour were promulgated by the mass media. Young (2009, 11-14; 2011, 250-251) identifies such moral panics as being predicated on what he describes as "othering", or the perception of illicit drug users as socially separate from what may be considered the mainstream. Such differentiation results in labelling of illicit drug users as 'deviants' on the basis of their perceived threat to the status quo. In turn, such 'deviant' behaviour results in the wider general population experiencing anguish deriving from fear of the consequences of 'immoral' behaviour by a socially defined minority. Such "moral panic" may be seen as a conceptual inverse to self-medication. "Panic" is the effect rather than the cause of substance use.

The theories of addiction identified above are generally predicated on the concept of "deviance". This position necessarily involves the concept of what is socially 'right' and 'wrong'. Merton (1938) considers actions in terms of socially acceptable means and ends. Hirschi (1969) couches his discussion in terms of social legitimacy, morality, and choice regarding what is socially acceptable and unacceptable. Becker (1963) characterises deviance as a construction by members of social groups. Bandura (1977a; 1977b) proposes social learning mechanisms facilitate the adoption of 'normal' or 'deviant' attitudes and behaviour. MacAndrew and Edgerton (1969) identify drunken behaviour as a product of social learning at a broader level and propose that social norms act to restrict excess behaviour. Young (2009; 2011) similarly takes a wider view when identifying 'deviant' behaviour as creating "panic"
within wider society. This places the social theories under discussion conceptually at odds with "medical" theories exemplified by the Disease Model and the SMH. The two latter theories consider addiction in terms which do not involve judgement of social behaviour and action.

The preceding discussion addresses behaviour which is considered deviant. However, discussion immediately below suggests social norms which characterise deviance evolve over time. In particular, social attitudes regarding legal and illegal substance use have been described in terms of "normalisation".

Measham et al (1998) present statistics which show that the number of people charged with illegal drug use and the number of drug seizures in the United Kingdom increased roughly exponentially in the 20 year period from 1975 to 1994. Results from self-reporting surveys similarly showed a substantial increase in illicit drug use. The authors conclude that the emergence of the 'dance culture' in the late 1980s and the associated use of 'dance drugs' (particularly ecstasy and amphetamines) combined with what they describe (1998, 27-28) as the "fragmenting of traditional differences in socioeconomic class, gender, and race" have lead to "normalisation" of illicit drug use in the United Kingdom. Coomber et al (2013) make similar observations. They propose that "normalisation" is a process of progressive "acceptance or tolerance" of substance use by substance users themselves and members of wider society, reflecting behavioural and cultural "components" of such acceptance (2013, 72-74).

O'Malley (1999) addresses similar 'normalisation' of substance use in Australia. He discusses (1999, 193-198) government policy in the 1990s as shifting from an emphasis on prohibition to a focus of harm minimisation. Policies which sought to address risks associated with use of legal substances such as alcohol and tobacco were similarly applied to illicit drug use. As a consequence, illicit drug use came to be perceived in terms similar to those applicable to use of legal but physically harmful substances. O'Malley continues (1999, 1999-212) to observe that harm reduction policies replace moral considerations of substance use with consideration of risk (often in actuarial terms) and associated decision making. Efforts by governments to inform the general populace of the consequences of substance use implicitly normalises such use through the use of criteria which do not involve moral considerations.
Parker et al (2002) extend the concepts put forward by O'Malley when describing "sensible" recreational drug use. The authors observe (2002, 942-943) that "normalisation" involves removal of stigma associated with illicit drug use and propose that such normalisation is a necessary consequence of implementation of harm minimisation policies. Such policies are predicated on social acceptance of widespread use of illicit drugs and the inability of law enforcement agencies to eradicate such use. The authors present statistics which show trends similar to those reported by Measham et al (1998) and conclude that widespread substance use by young people in the United Kingdom has lead to the emergence of a notion of "sensible" drug use which is widely held. It is therefore evident that the concept of "deviance" is a relative one which evolves with the passage of time and changes in social attitudes.

**Addiction, public policy, and diagnostic "tools"**

The majority of the theories discussed above are predicated on defining addiction through consideration of the individual in one way or another. Medical models focus directly on the individual, and most social models focus on the ways in which an individual interacts with others. However, the individual is not the focus of all conceptions of addiction. Becker (1963) proposes "deviance" is defined by social groups which are able to exercise sanctions against individuals, and the manner in which these groups impose such sanctions. In a complementary way, a more recent perspective advanced by Moore and Fraser (2013) holds that addiction is defined by the ways in which it is identified and treated.

Moore and Fraser (2013) discuss a qualitative, "interpretivist" study conducted in the Australian state of Victoria which involved interviews with policy makers and alcohol and other drug treatment practitioners. The authors propose public policies addressing alcohol and other drug use contribute to creation of concepts of "addiction". They discuss the "episode of care" model underpinning alcohol and other drug treatment in Victoria, under which funding is determined by the number of "episodes" reported as completed. Moore and Fraser observe that under this model outcomes for clients and quality of service provision are not addressed. Further, "gaming" of the system is encouraged, whereby ongoing treatment of one client is reported as multiple "episodes" (2013, 916-917).
Moore and Fraser (2013, 918-922) describe the "episode-of-care" system as "bureaucratization of disease", whereby "addiction" is defined in particular terms. Under such a "bounded" definition, other social and health issues relevant to clients need to become classified as aspects of "addiction" in order for clients to qualify for access to services. Consequently, "addiction" becomes defined by the solutions implementing government policy.

The perspective of addiction articulated by Moore and Fraser (2013) may be seen as subsuming Jellinek’s proposal (1960, 12) that diseases are "what the medical profession recognizes as such". In this case, it is not the "medical profession" which is defining addiction, but rather policy makers' conceptions of what constitutes "addiction" and the subsequent outcomes of implementations of their policies.

Implementation of public policies addressing addiction necessarily involves identification of the physical and mental conditions of individuals seeking services which implement those policies. Dwyer and Fraser (2015) address diagnostic and screening questionnaires ("tools") used to identify 'addicts'. They observe that studies evaluating the "validity" of such tools are contradictory, with some studies identifying one tool as 'best' while other studies identify another tool as 'best' (2015, 1192). They continue to propose that studies from which tools have been developed are not strongly conclusive, incorporate inconsistent methodologies, and employ inconsistent standards against which performance of tools is evaluated (2015, 1192-1194).

Hence, identification of an individual as an 'addict' is dependent on which tool is used for screening and diagnostic purposes. Further, the application of any particular tool in different physical circumstances and during different emotional states of the individual being tested may result in different conclusions regarding addiction. Dwyer and Fraser discuss this aspect of the applicability of diagnostic tools when observing that individuals being tested are "asked to frame their practices and themselves in line with the standards built into the tools" (2015, 1194). In other words, the recipient of the application of a tool is expected to conceptualise "addiction" in the same way as the developer(s) of the tool. It therefore follows that the recipient may be seen as a participant in the definition of "addiction". If the recipient perceives "addiction" in ways which are different to the conceptions underpinning the tool, such differences will be reflected in questionnaire responses and hence the assessment of "addiction".
"Gateway" and "diffusion" theories

In common with Becker (1963), Moore and Fraser (2013), and Dwyer and Fraser (2015), "gateway" and "diffusion" theories of substance use focus on social factors and influences external to the individual rather than personal moral convictions.

The "gateway theory" advanced by Kandel (1975) was developed from statistical analysis of survey questionnaire data obtained from high school students in the state of New York (USA) and implicitly reflects Bandura's (1977a; 1977b) concepts of social learning. Kandel's theory depicts users of illicit drugs progressing through four "stages" of substance use (1975, 912). Stage 1 involves "non users" using "beer/wine". In stage 2, individuals use cigarettes and "hard liquor" as a progression from "beer/wine". Use of cannabis follows in stage 3, and culminates in use of "other illicit drugs" in stage 4. Kandel (1975, 913) describes this process succinctly when stating "progression follows the sequence from nonuse [sic] to legal drugs to cannabis to pills to psychedelics to cocaine to heroin". She continues to emphasise that the four "stages" necessarily follow in strict sequence when stating (1975, 913) that "a direct progression from nonuse to illegal drug use practically never occurs".

Kandel (1975) does not explicitly couch her theory in terms of social learning. However, the proposition that young people progress from use of one set of substances to another set of substances may be seen to be generally consistent with the ideas advanced by Bandura (1977a; 1977b). Social learning is a progressive process which builds upon previous experience.

In a related context, Kandel (1975) does not present her theory in morally polarised terms. However, the Gateway Theory has been widely considered in terms of "deviance" (Rebellon and Van Gundy 2006) and consequently influencing public policy (Bretteville-Jensen et al 2008).

Ferrence (2001) provides a view which may be seen as an extension of the "gateway theory". She proposes (2001, 165-166) that "diffusion theory", which holds that new innovations displace older products or practices and is generally applicable in society, applies to drug use. Ferrence states (2001, 171) that diffusion theory has been widely applied, ranging from "studies of agricultural techniques" to studies of the "diffusion of health promotion and public education programmes". Hence, application of the
The diffusion model does not explicitly apply standards of social behaviour. However, it considers addiction in terms of sub-groups within wider society rather than from the point of view of the individual. Consequently, the diffusion model could facilitate judgemental comparison between behaviour of these groups, no matter how implicitly.

**Biopsychosocial models**

The preceding review has briefly discussed contrasting theories of addiction. These approaches are seen by some authors to be addressing only parts of the nature of addiction. Donovan (2005) proposes that neither a "naive disease model" nor a "naive behavioral model" can adequately explain addiction. Rather, he proposes that at the time of writing an "integrative" "biopsychosocial" model was no longer "emergent", but rather had already emerged. A number of other authors propose that biological, psychological and social factors may be combined into a unified Biopsychosocial model of addiction.

The Biopsychosocial model has been reported as guiding the understanding and treatment of *(inter alia)* tobacco addiction, opioid addiction, alcohol addiction, and compulsive sexual activity. For example, Fernander et al (2007) identify tobacco use as the greatest preventable cause of illness and death in the world, and observe that in the USA African-Americans and Latinos have higher tobacco-related illness and death rates than European-Americans. The former report the results of a literature review which considered diet and nutrition, obesity, alcohol use, stress, exposure to disease, and occupational and social environments, as factors relevant to understanding tobacco use within "racially classified" social groups. These factors address each of those underpinning the Biopsychosocial model. Martin (2014) examined plain packaging of cigarettes and consequent effects on smokers by considering brain function along with psychological and social factors. Stanos (2007) discusses pain management through the use of opioids in terms of a "biopsychosocial" model. In a similar vein, Ditre et al (2011) conducted research examining the inter-relationship between chronic pain and tobacco addiction. Focusing on alcohol
addiction, Garland et al (2011) propose a model linking stress to cognitive processes and physiological process within the brain. Highland et al (2013) report complementary research addressing alcohol use by young people. Their model (developed quantitatively using structural equation modelling) considers childhood abuse leading to difficulties in identifying and describing feelings and hence leading to use of alcohol as a coping mechanism, which in turn leads to "alcohol problems" at personal and social levels. Samenow (2010) discusses compulsive sexual activity in terms of biological, psychological, and social "determinants". These studies are representative of a body of literature which considers addiction in terms of biological, psychological, and social factors.

The initial articulation of a Biopsychosocial model is generally attributed to Engel (1977) (Pilgrim et al 2008, Mender 2010, Samenow 2010, Brenner 2016). When developing his Biopsychosocial model, Engel (1977, 129-131) identifies the "biomedical model" as "dominant" at the time of his writing. Under the latter model, "disease" is defined as the situation where the states of "measurable biological variables" deviate from what is considered normal (ibid). This view is reflective of Jellinek's (1960) earlier proposal. Engel then considers diabetes a "disease" which meets the criterion of "derangement of biological processes", and observes that lifestyle is a contributing factor to the development of the ailment. Consequently, psychological and social factors should be considered when addressing ill health (1977, 131-134). Within this context, Engel (1977, 132, 134-135) proposes that "disease" should be considered in terms of the "general systems theory perspective" advanced by von Bertalanffy. Under such theory, a holistic view of "disease" recognises factors beyond malfunctions of cells and organs, and includes "the person, the family, the society, [and] the biosphere". Further, the inter-relationships between body, mind, social group, wider society, and those providing medical care must be considered and assessed in order to provide care for those with illnesses (ibid).

factors" are identified as including "antisocial behaviour", association with peers, family influences, and socioeconomic background (2002, 44-46). Teesson et al conclude the Biopsychosocial model "forms the basis of most treatment responses to addictions", and describe addiction as a "complex behaviour pattern" involving the subjective experiences of affected individuals (2002, 47). While not referencing him explicitly, Teesson's et al (2002) discussion reflects the salient aspects of Engel's (1977) model.

Other authors provide comparable and complementary discussions of the Biopsychosocial model. Griffiths (2005) asks whether addiction is "socially constructed" or "physiologically based". He proposes addiction may be considered in terms of "salience", being the importance of an action (e.g. gambling, drug use) in an individual's life, with particular reference to mood modification, tolerance, withdrawal, conflict, and relapse. In identifying these factors, Griffiths is proposing that both social environment and personal physiological state explain compulsive behaviour. Coomber et al (2013, chapter 3) answer the question: "why do people take drugs" by identifying "biological", "psychological" and "environmental" "explanations", but suggest taking drugs for "function, fun, and pleasure" as further explanations. Coomber et al (2013) continue to propose that addiction is not a disease or the result of substance use alone, and question whether addiction is a collection of "symptoms" which "form something that has been classified as addiction", or rather as a "mostly psychosocial" phenomenon (2013, 22). Brenner (2016) identifies "neuroscience", social factors, and the individual's own subjective experience as factors comprising the Biopsychosocial model. Levounis (2016) discusses shortcomings in traditional views of brain chemistry as a primary cause of addiction, and identifies that "psychosocial" explanations correspondingly do not provide adequate explanations of addiction.

The authors identified immediately above identify motivations for substance use as complex and multi-faceted. They embrace aspects of medical, psychological, and sociological theories in order to explain why individuals use alcohol and other drugs. However, in doing so these authors generally acknowledge difficulties in identifying the details of the interrelationships and feedback mechanisms between physical, mental, and environmental factors.
A "cybernetic" analogy

Biopsychosocial models provide explanations of substance use and addiction by considering a person as a complex, multi-faceted entity operating in a wider society, and acknowledge complex inter-relationships between the elements of the model. In a somewhat similar vein Bateson (1987) proposes that addiction should be considered in terms of "cybernetics and systems theory". Consideration of alcoholism is then related to the Twelve Step process used by Alcoholics Anonymous ("AA") to overcome addiction.

Prior to discussing his "cybernetic" model, Bateson proposes that "many people" experience emotional discomfort and physical pain and consequently use alcohol as an "anesthetic" [sic] to gain relief (1987, 310-311). In doing so, people seek intoxication as a preferred alternative to sobriety. In simple terms, this proposition closely reflects the SMH.

Bateson then proposes that an "epistemology of cybernetics" (1987, 315-320) applied to alcoholism offers insight beyond self-medication. He describes the operation of a control system governing the speed of a steam engine and observes that the action of the control system in maintaining a set speed is determined by other parts of the wider system in which the controller operates. Further, the controller's current action is a function of the controller's actions in the past (which influence the state of the other parts of the system). This behaviour is described (1987, 317) as the transformation of "input differences" (in this case variations from desired speed) into "output differences" (control action to increase or decrease the supply of steam to the engine).

This description of a physical system is then used as an analogy for a person living in a social world. Sense organs provide data to the brain which then initiates behaviour. Such behaviour is characterised in terms of input and output "differences" analogous to the operation of the steam engine. Intoxication serves to return to normal personal feelings which have been adversely affected by influences from the external social environment and fear of loss of personal control.

Bateson (1987, 320-331) frames personal action regarding alcohol consumption in terms of "symmetrical" and "complementary" relationships. Symmetrical relationships are defined as those where action by one entity initiates the same action by another. Complementary relationships exist where action by one entity initiates a
separate action by another entity which encourages the first. Bateson proposes that consumption of alcohol in Western societies is symmetrical behaviour, as people tend to drink as others do. In analogous fashion, an alcoholic maintains a symmetrical relationship with personal self-belief, maintaining that "he" [sic] is the "captain of his soul" (1987, 325-326). As consumption progressively increases as alcoholism becomes more pronounced, so does the person's self-belief and "pride". Drinking provides correction to feelings of weakness and self-revulsion. This continues until an alcoholic "hits rock bottom". Then a complementary relationship with alcohol is possible, under which the alcoholic acknowledges the first of AA's Twelve Steps - that the person is powerless to resist alcohol and the person's life has become unmanageable (1987, 327-331).

Bateson (1987) reflects on several of the concepts underpinning theories of substance use and addiction. He begins his discussion by in effect stating the SMH. He then seeks to provide deeper understanding by considering a person as an actor within a given social environment. This proposition is reflective of social theories of addiction and biopsychosocial models. For example, Engel (1977, 134-135) explicitly discusses a "general systems theory perspective". However, in contrast to these models he characterises alcoholism in terms of a "hijacked brain" when identifying recovery from alcoholism as predicated on an unequivocal acknowledgement of complete powerlessness over alcohol use.

**Pleasure and enjoyment**

The preceding discussion of the SMH and alternative theories of alcohol and other drug use does not identify literature which addresses what might be seen as a common reason for substance use - namely pleasure and enjoyment. Such absence reflects the comparative scarcity of literature which considers this motivation. O'Malley and Valverde (2004) explicitly identify this gap in the literature. They state that "discourse" dating from the eighteenth century to the time of writing discusses substance use in ways which "deny" and "silence" the voluntary and reasonable pursuit of enjoyment (2004, 26).

A considerable part of the reason for this silence is seen to derive from perceptions of the pursuit of pleasure as a "disreputable" activity (2004, 25-26). Governments and
other regulators seek ends which should not be associated with inappropriate and illegal substance use and addiction. Consequently, probity rather than pleasure is emphasised (2004, 27-28). Following a discussion of historical "discourses" which variously demonise use and characterise use in medical terms, O'Malley and Valverde discuss policy and education directed at socially desirable substance use and harm reduction. They observe (2004, 36-39) that such policy and education emphasise risk and risk management. This results in considerations of pleasure being considered in terms of risk, with the result that pleasure is subsumed into undesirable outcomes.

In providing this analysis, O'Malley and Valverde reflect concepts of deviance as problematic social behaviour discussed above, and at a more general level the bureaucratisation of substance use advanced by Moore and Fraser (2013) and Dwyer and Fraser (2015). Whereas the latter two discuss definition of addiction in terms of its treatment, O'Malley and Valverde (2004) identify broader social policy as shaping perceptions of substance use in generally negative terms, thus eliminating considerations of pleasure and enjoyment.

Moore (2008) draws similar conclusions to those of O'Malley and Valverde (2004) regarding the general lack of discussion of substance use in terms of pleasure and enjoyment. He commences his discussion (2008, 353-354) by examining the titles and abstracts of articles in commonly cited academic journals dealing with substance use published in the late 20th and early 21st centuries. He found the ratio of occurrence of the word "pleasure" to the word "harm" to be approximately 18% to 82%, suggesting that discussion of substance use as "pleasure" may be seen to be "marginalised". Moore then considers the concept of pleasure in terms of research into drug use. He observes (2008, 354-355) that defining 'pleasure' is difficult, as the effects of substances are particular to the individual and the substance and as such cannot be readily quantified. Moore then continues to discuss pleasure and substance use in terms which are similar to those of O'Malley and Valverde (2004). He observes (355-356) that harm reduction is predicated on the notion of rational choice and action. Risks are considered and behaviour follows such analysis. Hence, pleasure is considered as a variable for analysis rather than an outcome.

Measham and Brain (2005) provide an example of the comparatively few discussions which explicitly consider substance use as being motivated by the pursuit of pleasure. They commence (2005, 262-265) by identifying binge drinking of alcohol as having
been seen as socially unacceptable in the past. "Lager louts" who "binge and brawl" are identified as stereotypes of social conceptions of alcohol use in the latter part of the twentieth century. Measham and Brain (2005, 265-275) describe empirical social research which lead to the conclusion that binge drinking is becoming culturally accepted, particularly among younger people. They identify a widening range of alcoholic products, increased alcohol content of drinks, advertising of alcohol use as part of desirable lifestyles, and changes in the design of outlets selling alcohol as factors which are leading to greater social acceptance of alcohol consumption in comparatively large quantities. Getting drunk is identified by "many" people in the United Kingdom as part of a "good night out" (2005, 268). Such views lead to Measham and Brain (2005, 272-274) developing a concept of "controlled loss of control", under which alcohol users deliberately become intoxicated through a "hedonistic yet bounded drinking style", which is somewhat reflective of MacAndrew's and Edgerton's earlier concept of "time out". Such "hedonistic" intoxication is further seen (2005, 276) as part of a wider acceptance of substance use, particularly by young people. This conclusion is reflective of earlier research by Measham, Aldridge and Parker (1998) which discusses illicit drug use by patrons of dance clubs and concludes that such substance use is progressively becoming accepted by young people in the United Kingdom. Coomber et al (2013, 17) identify such use in terms of rational action, whereby an individual uses one or more substances after assessing the costs and benefits of such use, and accepts costs (financial and health) as being outweighed by the "fun and pleasure" obtained.

Discussion of substance use for pleasure and enjoyment by O'Malley and Valverde (2004) and Moore (2008) involves concepts of deviance to varying degrees. Substance use is identified as being widely perceived as socially undesirable and requiring regulation and control. Measham and Brain (2005) similarly identify increasing acceptance of binge drinking as a recent phenomenon reflecting changes in social attitudes by parts of society. These discussions reflect Merton's (1938) and Hirschi's (1969) perspectives of deviance as decision making by individuals and Becker's (1963) characterisation of deviance as being constructed by social and cultural attitudes.
A view from economics

To conclude this brief discussion of theories of addiction, it is relevant to consider views of drug use from a notionally separate field of social inquiry - economics.

Rasmussen et al (1998, 575) observe that basic economic theory plays "virtually no explicit role" in the discussion of drug abuse in the fields of criminology, psychology, psychiatry, sociology, and social work. They identify microeconomics as "a theory of choice under constraints" which addresses "how incentives and constraints affect behavior given 'tastes and preferences'" (1998, 578-579, italics in original). The assumption of "exogenously determined fixed tastes" is seen to constitute an "intellectual gap" between economics and other social sciences. "Rational choice" and "incentives and constraints" are discussed (1998, 580-583) as neglected considerations when addressing what is described as "deviant" behaviour, and the social and economic "price" paid for its conduct.

Grossman et al (1996) advance a similar view of "addictive behavior". They discuss addiction in terms of the marginal utility of increased use of an addictive substance, differences between short run and long run use, and price. They propose an algebraic equation which describes the current level of substance consumption as a function of previous consumption, future consumption, and price. This model is then applied to tobacco, alcohol, and cocaine use. The authors conclude that consumption of substances which may be addictive is sensitive to price, with increases in price resulting in reduced consumption (1998, 635-637).

Moos (2007) proposes that under a "behavioral economics" view, substance use may be considered in terms of selection between "rewards" deriving from use and non-use. This perspective is contrasted against "social control", "social learning", and "stress and coping" theories. In making these comparisons, Moos (2007) may be seen as reflecting the concepts underpinning the social theories discussed above and the SMH respectively.

These views from economics may be seen as addressing decision making and consequent social behaviour in ways which are different from those under the social models identified above. Decisions regarding the use of alcohol and other drugs are seen as the product of "rational" choice made under conditions of knowledge of the availability of chosen substances and the consequences of alternative choices. This
view is (within itself) generally consistent with the SMH, which is predicated on what may be seen as reasonable desires to relieve suffering using the most effective means. Monetary price is identified as a primary factor governing substance use. The social 'price' of alcohol and drug use is not seen directly in terms of individual "deviance", but rather as a more dispassionate measure of social welfare averaged across society. However, any reduction of overall social welfare is seen to be undesirable. Consequently, action deriving from addiction which compromises the wider public good may be seen in a negative light.

THEORIES OF ADDICTION: DIVERGENT PERSPECTIVES

The preceding discussion indicates that substance use, and compulsive use in particular, is seen from a variety of perspectives which are divergent to varying extents. Such differences in view may be seen to reflect fundamental differences in assumptions regarding motivations for substance use.

Theories of addiction and self determination

Implicit in the SMH is the concept of choice and consequent self determination. Under the SMH individuals use alcohol and other drugs to improve the quality of their lives by alleviating emotional distress. By definition, the emotional states from which an individual seeks relief are unpleasant, and in the limiting case debilitating. Consequently, action to provide relief from such states may be seen as involving the exercise of choice to overcome a personal problem. Using alcohol and/or other drugs may be seen to be an effort to take control over personal circumstances. Correspondingly, selecting the substance which is most effective in providing relief is an act of self determination. Both components of the SMH involve decision making and action which is directed at solution of a problem.

In direct contrast to the SMH, the Disease Model of addiction holds that individuals are powerless to control personal consumption of alcohol and other drugs. They engage in compulsive behaviour because their brains have been "hijacked" in some way, rendering them dysfunctional regarding assessment and control of substance use. Deviance theories are divided on the issue of self determination. "Strain theory", under which individuals seek to achieve legitimate ends through means which are not
legitimate, assumes "deviant" behaviour to be the result of conscious decision making. This view is consistent with the SMH. An individual may seek relief from emotional distress - a legitimate end - by using an illegal drug - a "deviant" means. "Control theory" holds that individuals adopt and enact codes of behaviour which are inconsistent with those prescribed by law and by other members of society. In this context, Becker (1963) characterises "deviance" in terms of the application of sanctions by groups on individuals in ways which may be selective depending on the social standing of the transgressor. Correspondingly, Moore and Fraser (2013) describe ways in which externally formulated standards within treatment contexts are generated and then applied, albeit in non socially polarised terms. Adoption of "deviant" codes of behaviour are generally seen to result from social learning processes. In turn, such learning processes may be seen variously as involuntary, voluntary, or an amalgam of both. Involuntary social learning leading to "deviant" behaviour may be seen to be a psychological form of a "hijacked brain", analogous to biological disruption under the Disease Model. The latter considers 'defects' in neurological function to be caused by biological malfunction and genetic transmission, while involuntary social learning reflects psychological development which is not within the direct control of the individual.

The Gateway and Diffusion theories of substance use may be seen to be variants of the social models discussed above. Under both theories, individuals' use of alcohol and other drugs is determined by social influences rather than attempts to reduce or eliminate distress or as a consequence of neurological malfunction. The Gateway Theory may be seen as a specific case of Diffusion Theory, in that it details the mechanisms by which particular substances become preferred by users.

Biopsychosocial models of addiction seek to provide understanding of addiction by integrating the concepts of each of the models discussed above. In his article providing an early articulation of the biopsychosocial model, Engel (1977, 131-133) identifies shortcomings of biological and medical models, and proposes that individuals' conscious and unconscious thoughts and behaviour should be included in the characterisation of "sickness". In doing so, he explicitly refers to a "general systems theory perspective" which is closely reflective of Bateson's (1987) cybernetic analogy. Similarly, Teesson et al (2002, 47) emphasise the need to view addiction as a "complex behaviour pattern" rather than a "disease". Such integration of
perspectives necessarily brings to the fore the tension between assumptions of personal agency under the SMH and some social process views, and neurological or psychological dysfunction and hence helplessness under biological and involuntary social learning models respectively. The conflict between "hijacked brains" and self determination is recognised, resulting in a model which is inherently more complex than those which it subsumes. In this context Coomber et al (2013, 19-22) identify difficulties in gaining a "simple" understanding of addiction. In doing so, they implicitly recognise the complexity of an integrated perspective of addiction identified by Teesson et al (2002) and the difficulties in determining the relative importance of any single factor or even group of factors seen to be relevant to the understanding of addiction.

O'Malley and Valverde (2004) and Moore (2008) identify that perspectives of substance use for pleasure and enjoyment are not widely researched. They attribute this to perceptions of substance use as deviant and related social policy which emphasises harm reduction or prohibition. Within the context of harm reduction, pleasure is seen as an input variable to rational decision making rather than an end in itself.

Viewing addiction through the lens of economics places self determination at the centre of focus. The concepts of consumer taste and utility and the maximisation of utility presuppose knowledge of alternatives, the existence of decision criteria relating to their assessment, consequent selection of the best alternative, and the capacity to implement decisions once taken. Implicit in these assumptions is the concept of rationality on the part of any relevant individual. In this sense, viewing addiction from within the framework of economics corresponds to the view under the SMH. Under both perspectives, individuals seek to consciously and deliberately serve their own self-interests.

It is evident that theories of addiction do not share a common position regarding the issue of self determination. Such differences reflect fundamental differences in conceptions of addiction. The issue of self determination cannot be reconciled between the SMH, some social models, and a perspective from economics which are predicated on notions of choice, and biological dysfunction and involuntary social learning models which assume helplessness on the part of the affected individual.
Karasaki et al (2013) address the "place of volition in addiction". They characterise "addiction" in terms of "craving", "susceptibility", "social and psychological issues", "self-concept", and "social functions". This characterisation may be seen to encompass the theories of addiction discussed above. Interviews conducted by Karasaki and colleagues with policy makers and professionals delivering services to people affected by alcohol and other drug use indicated that informants were divided over whether affected individuals were able to exercise control over substance use in all five aspects of addiction. This empirical result supports the preceding proposition that the issue of self determination is seen to be problematic.

Theories of addiction and social value judgements

The SMH and the Disease Model view addiction in socially non-polarised terms. They do not apply social value judgements to the phenomenon of addiction or to people classified as addicts.

The SMH proposes that individuals use alcohol and other drugs in order to reduce emotional distress. Implicit in this view is that such action is understandable within the ambit of individual consciousness. As such, the focus of the SMH is on the world of the individual, and not wider society. Value judgements regarding addiction in the context of society are not made and the issue of morality is not considered.

In a similar vein, the Disease Model holds that addicts are suffering from an illness, and should be treated in the same way as those affected by bacterial and viral infections. When conducting research regarding the applicability of the Disease Model, Lawrence et al (2013) explicitly addressed "moral failings" as an alternative explanation for addiction and found it received little support from the medical professionals they surveyed. In an earlier study delivering conflicting results, Conrad and Schneider (1992) identify earlier research which found that medical practitioners differentiated between 'sickness' and 'moral weakness'. Notwithstanding this difference in findings, it is apparent that when addiction is viewed as an illness it is not subject to evaluation under social norms of behaviour. Thus, a 'non-judgemental' view is common to "medical" theories of addiction exemplified by the SMH and the Disease Model. Both view addiction as a condition which requires medical treatment
in order to restore individuals' health and not as an issue involving considerations of morality or social probity.

In contrast, social theories of addiction predicated on the concept of "deviance" explicitly evaluate addiction in terms of social standards. Under Hirschi's (1969) models, social standards form the basis for differentiating between what is acceptable and not acceptable, and addiction is generally considered to be socially unacceptable. In taking this position, Hirschi is reflecting the earlier conceptions of deviant behaviour advanced by Merton (1938). Becker (1963) proposes that consideration of social standards and consequent application of sanctions in response to violation of such standards is what defines deviance. Under both Hirschi's and Becker's views, addiction is evaluated in terms of social norms and individuals suffering from addiction are viewed in socially polarised terms.

The preceding discussion identifies the Disease Model of addiction as being concerned with what physically happens within an individual's brain. The SMH, while not considering alcohol and other drug use as a disease, similarly focuses on individuals' personal actions taken in response to their personal problems within the ambit of the individual’s subjective view of suffering. Both views do not make social value judgements, as they hold that addiction is involuntary and reflective of rational action respectively. However, several alternative social theories of addiction are predicated on factors which involve concepts of 'good' and 'bad' external social influence and what constitutes socially acceptable behaviour.

Theories of addiction and researchers' perspectives

The preceding discussion of the SMH and alternative theories of addiction indicates research investigating substance use has been undertaken from within a variety of methodological perspectives. Much of the research discussed above utilised quantitative methodologies and methods. Specific analytical tools range from simple descriptive statistics (e.g. Newton et al 2009 in part) to multiple regression analysis and factor analysis (e.g. Hall and Queener 2007), and structural equation modelling (e.g. Fossos et al 2011; Garland et al 2013). The variety of methods may be seen to reflect researchers' preferences for simply summarising data or (more commonly) using inferential statistical methods to draw conclusions and make predictions. In all
cases, the methods used were 'standard', in that they incorporate calculations and associated assumptions regarding data collection (e.g. sampling) which are widely disseminated in textbooks, implemented in 'standard' software packages (e.g. SPSS, Lisrel, EQS), widely accepted within the academic literature, and intended to be applied in a specific, consistent, and repeatable manner (Babbie 1990, Lapin 1990, Hair et al 1992).

A minority of research discussed above utilised qualitative methodologies and methods (e.g. Dwyer and Fraser 2015, Moore and Fraser 2013, Nehlin 2015). Analysis of data collected in these studies was performed by the respective researchers in accordance with their own personal conceptions of qualitative methodology and associated methods. In direct contrast to quantitative analysis, qualitative methodologies place the individual researcher as the 'instrument' of analysis (Glaser and Strauss 1967; Denzin 1989; Schwandt 1994; Guba and Lincoln 1994, 2000; Charmaz 2000, 2006).

It is therefore evident that the research methods used by the researchers discussed above are predicated on different approaches to analysis. The form and content of quantitative methods are defined extensively, with the presumption that for a given common data set, multiple researchers working independently should produce the same results using the same quantitative analytical method. In direct contrast, qualitative methods reflect the personal approach of each researcher and deliver results which are specific to that researcher at that time. Analysis of the same data by different researchers will result in different results and conclusions (Glaser and Strauss 1967; Denzin 1989). Hence, empirical investigation of the applicability of the SMH (and other theories of motivations for substance use) should be considered from within the methodological frameworks adopted and specific methods utilised.
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CHAPTER 3: METHODOLOGY

INTRODUCTION

In this research I have sought to identify, interpret, understand, and discuss self-medication as characterised by the Self-Medication Hypothesis as a motivation for substance use. Informants' personal perceptions of alcohol and other drug consumption are central to this study. I have proceeded from an interpretive perspective, under which the 'worldviews' of Informants participating in this study are accorded primacy and unique status. In other words, this research is concerned with alcohol and other drug use as 'seen' and given meaning by each of the individuals contributing to this study.

In order to elicit Informants' perceptions of the applicability of the SMH from within their own perspectives, I engaged in interactive interviews with people who had first hand experience in dealing with alcohol and other drug use. In doing so, I have employed a research methodology and methods within that methodology which I believe are consistent with the interpretive approach I have taken.

This chapter begins by discussing quantitative and qualitative methodologies, and presents a discussion of the two research methodologies which have guided this research - namely Interpretive Interactionism as proposed by Denzin (1989) and Grounded Theory as initially proposed by Glaser and Strauss (1967). Relationships between the methodology employed and the research questions under consideration are then discussed. This is followed by discussions of advocacy and concepts of validity. Discussion of methodology concludes with my description of my understanding of the meaning of the SMH. I then discuss specific aspects of the research methods I employed. Issues including ways to interact with Informants, preparation for field work, informed consent and confidentiality, safety, and legal considerations are addressed. Description of interview conversations and their interpretation follow, including a specific example of how an emergent concept was progressively developed. The chapter concludes with a description of the way in which I have articulated my interpretation.
**RESEARCH METHODOLOGIES**

This research is predicated on my endeavour to convey to the reader the way in which the people who participated in this research expressed their perceptions of alcohol and other drug use in their terms, and my interpretation of those perceptions. This study therefore presents my understanding of Informants' explanations for substance use.

An interpretive methodology precludes research methods which are better suited to quantitative research methodologies. Such methods include survey questionnaires, highly structured interviews, and laboratory tests (Sekaran 1984, Babbie 1990, Hair et al 1992). These instruments are framed from the perspective of the researcher. 'Subjects' are required to respond to questions or perform tasks in laboratories reflecting the constructs seen as important by the researcher. Such 'researcher-centric' methods and their underlying assumptions are inconsistent with an interpretive approach under which individuals' perceptions of the social world are sought from their own perspectives rather than that of the researcher, and both informants and researcher are active participants in the research process (Burrell and Morgan 1979; Denzin 1983, 1989; Guba and Lincoln 1994, 2000; Holstein and Gubrium 2011).

Consequently, survey questionnaires, structured interviews, and laboratory tests are inappropriate research methods for the purposes at hand. Interactive interview conversations in which informants are free to express their views from their personal perspectives and in their own ways offer the opportunity to gain in-depth insight into the ways individuals perceive the issues at hand. Further, interactive interviews offer the potential for informants to identify issues which have not been previously considered by the researcher.

My initial decision to employ a qualitative research methodology was influenced by my earlier exposure to Norman Denzin's *Interpretive Interactionism* (1989) and Glaser's and Strauss' *The Discovery of Grounded Theory: Strategies for Qualitative Research* (1967). I had previously read these books when reviewing research methodologies for another research study. I was taken by Denzin's (1989) description of his experiences as an attendee at meetings convened by Alcoholics Anonymous, and Glaser's and Strauss' (1967) "discovery" of Grounded Theory when conducting research in hospitals. I re-read both books and concluded the methodologies they describe provide guidance for the way in which I sought to conduct this research.
The following sections provide a brief summary of key aspects of Interpretive Interactionism as described by Denzin (1989), a similarly brief summary of the conception of Grounded Theory presented by Glaser and Strauss (1967), and discussion of wider considerations relevant to these methodologies. I then identify the way in which I have applied the concepts underpinning these two methodologies to my research.

**Interpretive Interactionism and the Interpretive Process**

Denzin (1983; 1989) describes an interpretive methodology - Interpretive Interactionism - which he characterises as seeking to combine "traditional" symbolic interactionism (as proposed by Blumer) with other qualitative methodologies, including *(inter alia)* "postmodern ethnographic research", "naturalistic studies", and "interpretive", "hermeneutic" and "phenomenological" approaches. Denzin's earlier (1983) articulation of Interpretive Interactionism is described by Morgan (1983a, 25) as a methodology which is predicated on the idea that people "construct" their "everyday lives" through social interaction. Mohr (1997, 272-273) describes Interpretive Interactionism as being "conducted from the point of view of persons who are being studied". Sundin and Fahey (2008, 9) characterise Denzin's methodology as focusing on "change in the personal and social worlds" of research participants.

The "interpretive process" described by Denzin (1989) focuses on gaining an understanding of the meanings communicated by informants. Such meanings are reflective of the personal social 'world' constructed by each individual informant. The researcher interprets such meanings in order to gain the researcher's personal understanding of the social worlds of the informants, and how these worlds interact and may be understood in the applicable social contexts. This understanding is then communicated to a wider audience in terms of the informants' social worlds as interpreted and understood by the researcher.

Under the "interpretive process", assumptions regarding cause and effect relationships - that is those which postulate deterministic social behaviour which may be described by universal 'laws' analogous to those of the physical sciences - are rejected. Denzin (1989, chapter 3) describes the "interpretive process" as involving six "steps":

1. **Data Collection**: Gathering of data through observation, interviews, and other methods.
2. **Data Reduction**: Making sense of the data through coding and categorizing.
3. **Data Analysis**: Identifying patterns and themes within the data.
4. **Data Interpretation**: Articulating the meanings and implications of the data.
5. **Data Synthesis**: Integrating the findings into a coherent whole.
6. **Data Communication**: Sharing the findings with others.
1. **framing the research question**, which is defined initially by the researcher but subsequently developed through interaction between researcher and informants;

2. **deconstruction**, whereby the researcher develops an understanding of previous inquiry and related "preconceptions and biases";

3. **capture**, the process of eliciting "personal stories" from informants;

4. **bracketing**, under which informants' statements are interpreted within their individual contexts;

5. **construction**, whereby the researcher forms a holistic view of all informants' perceptions;

6. **contextualisation**, or presenting informants' lived experiences in a wider context.

In his concluding statements addressing the "interpretive process", Denzin emphasises "the lives of ordinary men and women play a central place [sic] in the research texts that are created", because "it is, after all, their lives and their problems that are studied". Consequently, "the interpretations that are developed about a subject's life ... must be understandable to the subject", and "if [such interpretations] are not, they are unacceptable" (1989, 65).

**Grounded Theory**

Interpretive Interactionism as presented by Denzin (1989) focuses on broader aspects of methodology. Consequently, it is appropriate to consider another research approach - Grounded Theory - which offers more specific direction for the conduct of Capture - i.e. eliciting informants' perceptions of their social worlds.

Grounded Theory is a qualitative research methodology which is widely seen as being an important and relevant framework for the conduct of field work and the generation, rather than testing, of theory. Charmaz (2000, 509) states the initial description of Grounded Theory by Glaser and Strauss (1967) "served at the front of the 'qualitative revolution'" and that its publication occurred at a "critical point" in the history of social science. She subsequently describes Glaser and Strauss (1967) as making a "cutting-edge statement", as it "contested notions of methodological consensus and..."

Grounded Theory methodology as presented by Glaser and Strauss (1967) is an iterative process. A researcher first decides upon a general area of inquiry, but does not develop detailed, preconceived research questions. The researcher then accesses a social environment which reflects that area of inquiry. While present in that setting, the researcher interviews individuals who potentially can inform the research, otherwise engages in conversation, observes people and their actions, and (potentially) becomes actively involved in what is going on. The researcher starts coding and analysing the data being collected from the outset of field work. This analysis leads to the generation of provisional conceptual "categories" and their "properties". Hypotheses concerning relationships between these concepts are then proposed. The outcomes of this initial theory generation process guide the researcher regarding where and how to collect further data. This method of deciding where to further source data is termed "theoretical sampling", and the comparative process used to concurrently guide theoretical sampling and develop theory from the data so obtained is termed "constant comparison".

The processes of theoretical sampling and constant comparison result in the generation of interview recordings and transcripts, field notes, and memos. These documents contribute to the development of theory.

As data collection continues, so does coding, analysis, and comparison with all previously collected data and prior analysis. Previously developed theory is tested and either confirmed, modified, or rejected. This process of iterative data collection, analysis, comparison, and theory development continues until the collection of further data and subsequent analysis no longer materially advances the development of
theory. This condition is termed "saturation" and marks the conclusion of field work. Theory development then continues until "core categories" are identified as emerging from previous analysis. These core categories define and delineate the primary themes making up the theory which has emerged from the processes of constant comparison and theoretical sampling.

At this point it is relevant to note that my discussion of Grounded Theory above is confined to Glaser and Strauss (1967). I have done this because their later individual works embody the general principles laid out in the original (1967) work and prescribe detailed methods which Charmaz (2000; 2006; 2009; 2011) and Bryant and Charmaz (2007b) identify as "objectivist" and hence inconsistent with an interpretive perspective.

"Objectivist" and "Constructivist" Grounded Theory

"Grounded Theory" is not a single, unified theoretical framework. Its progenitors and their followers have over time developed "variants" which in turn have further divided over time. These "variants" differ to varying degrees. Charmaz (2000; 2006; 2009; 2011) and Bryant and Charmaz (2007b) address fundamental differences in the assumptions underpinning alternative approaches to Grounded Theory methodology. Charmaz (op cit) defines the difference between "objectivist" and "constructivist" Grounded Theory in terms of basic assumptions regarding the nature of the social world, the role of the researcher and informant, and cause and effect relationships.

Charmaz (2000, 509-510) identifies the works of Glaser and Strauss (1967), Glaser (1978), Strauss (1987), and Strauss and Corbin (1990) as being "objectivist". These works are seen to assume a social world which exists independently of the individuals comprising it. In contrast, a "constructivist" reading of Grounded Theory assumes individuals have their own personal conception of social reality, and these multiple social realities interact during social contact.

Under an objectivist view, data acquisition and analysis can, and indeed should, proceed in a neutral and unbiased fashion. The researcher assumes the role of independent observer, and investigates the subject of the research inquiry in a "unitary external world". The researcher's personal values and opinions are separated from the "facts" being investigated. The search for cause and effect relationships is consistent
with the assumption of a single, tangible social world under an objectivist position. Variables may be examined and their interactions may be identified within a single social reality, leading to the development of universal 'laws' analogous to those in the physical sciences.

However, under a constructivist view, causality is "suggestive, incomplete, and indeterminate". Cause and effect relationships are different between people and different over time for the same individual (Charmaz 2000, 523-525; 2009, 138-139; 2011, 364-366). Research involves the researcher and informant interacting socially and jointly creating the data being obtained. The researcher relates to personal experience and knowledge when interpreting data (Charmaz 2000, 509-510; 2009, 138-145; Bryant and Charmaz 2007b, 365-366).

This research follows the constructivist perspective described above. I was not a detached observer when conducting interviews with the individuals informing this research. Rather I was an active participant in the construction of meaning being shared.

**WIDER METHODOLOGICAL CONSIDERATIONS**

Grounded Theory is a widely utilised qualitative research methodology which generates theory as distinct from testing it. Interpretive Interactionism is another qualitative methodology which focuses on interpreting and understanding the thoughts, perceptions, lived experience, and actions of individuals from their personal perspectives. This research is guided by both methodologies. The following sections briefly identify complementary and divergent aspects of each, and in these contexts discusses the ways in which I used concepts from both in conducting this research.

**Research questions**

Research inquiry under Grounded Theory begins with no specific or detailed research questions. Rather, inquiry begins with a "general question" which may be predicated on a "partial framework of 'local' concepts" (Glaser and Strauss 1967, 33, 45). In contrast, research questions may be quite specific under an Interpretive Interactionist approach. Denzin makes this clear when identifying research questions as addressing a "problematic biographical experience to be studied", and subsequently considering
how such a "problem" may be a "public issue" (1989, 49). Further, Denzin's (1989) "step" of "deconstruction" in the interpretive process involves the researcher becoming familiar with the ways in which "problems" have been studied, analysed, and articulated in the past. Such knowledge can "sensitize" the researcher to methodological assumptions and perspectives of previous researchers and research studies (Denzin 1989, 51-54). Hence, at simple face value it could be concluded that Interpretive Interactionism and Grounded Theory have divergent positions regarding how specific the subject of social inquiry is at the outset of a research project.

However, a researcher following Grounded Theory principles does not set out with no knowledge of the field of inquiry. Glaser and Strauss (1967, 6-7) stress that "sociological theory" can only be generated by "sociologists", as only they are trained to "want [theory], look for it", and "generate it". As such, sociologists must be "theoretically sensitive". Such sensitivity is progressively acquired through ongoing thinking in "theoretical terms" and associated consideration of existing theories and models (1967, 46). Such sensitivity allows the researcher to gain "critical insights" which may derive from personal experience and insights of other researchers (1967, 251-253). Consequently, the researcher commences field work with the ability and obligation to make decisions regarding what information and knowledge should be sought.

Correspondingly, under an Interpretive Interactionist approach, research questions are not fully formulated at the outset of inquiry and are not immutable. Rather, research questions are shaped and modified during the research process, as both researcher and informant are active participants in defining the direction of inquiry. The researcher's understanding of what is important develops progressively through ongoing conduct of the interpretive process, under which key statements and associated meanings emerge under "bracketing". During "construction", the researcher "puts back together" the meanings identified during "bracketing" in order to develop a picture of a "coherent whole". Development of understanding is unique to the situation at hand, which in turn means that it is not possible to precisely specify in advance the research question(s) to be addressed (Denzin 1989, 12, 24-26, 42-43, 49-62).

These aspects of the two methodologies led me to conclude that under both Interpretive Interactionist and Grounded Theory the research question(s) become progressively defined in an adaptive manner throughout the conduct of inquiry. This
outcome is consistent with an interpretive approach to research under which the objective is not deductive validation of theory, but rather inductive development of understanding of social situations located in time and place (Burrell and Morgan 1979, 4-7; Guba and Lincoln 1994, 107-116; Schwandt 2000, 191-198).

When initially embarking on this research, I had a general idea of what I wanted to investigate, namely motivations for use of alcohol and other drugs in general, and more specifically how individuals perceive the applicability of the SMH. Reviewing literature addressing the SMH and alternative theories of addiction improved my knowledge of specific aspects of these theories, but it did not cause me to narrow my view of what I wanted to achieve in conducting this research. I remained interested in understanding the ways people perceive and relate to substance use and self-medication, rather than wanting to validate (or otherwise) the SMH, or indeed any other theory.

In taking this decision regarding my research questions, I consider my position to be consistent with both objectivist and constructivist readings of Grounded Theory as characterised by Charmaz (2000; 2006; 2009). Under both variants, the researcher enters the field of interest with a general idea of the nature of inquiry rather than a specific research question or questions. This is necessarily the case, as the aim under both objectivist and constructivist Grounded Theory is to generate theory from data in an inductive manner, rather than test or validate specific aspects of pre-existing theory deductively.

My approach is also consistent with Interpretive Interactionism as articulated by Denzin (1983; 1989). Under this perspective, research questions are developed and extended through the interpersonal communication and social interaction between researcher and informant. Such processes of mutual development and extension of research questions necessarily preclude the pursuit of specific and narrow inquiry. Even if the researcher begins with highly specific research questions, these will become modified and extended given that the researcher genuinely seeks to gain intersubjective understanding.

The approach I have taken in addressing issues relating to research questions is generally consistent with both Interpretive Interactionism and Grounded Theory. Under both methodologies the researcher is familiar with prior studies addressing the
area of inquiry, but does not carry preconceptions inherent in such prior work into formulation of research questions. I developed my research questions from knowledge gained through review of relevant literature, but I have not sought to pursue them narrowly when pursuing my research. My aim has been to elicit individuals' perceptions of alcohol and other drug use and self-medication from within their own perspectives rather than seeking to validate or invalidate conclusions reached by other researchers.

As I conducted this research I progressively saw the need to recast my original research questions. The following chapter discusses how my research questions evolved.

Research outcomes and advocacy

Denzin (1989, 22-27-28) states that research conducted under Interpretive Interactionist principles may involve "pure interpretation" or "interpretive evaluation". The former seeks to convey to the reader the researcher's interpretation of given social situations and the perceptions of people involved in those situations. It does not seek to provide evaluation for the purpose of proposing or influencing the formulation and/or implementation of policy. As such, pure interpretation is not prescriptive. Rather, it is concerned with providing understanding of social issues through the construction of interpretations gained through processes of social interaction. Pure interpretation seeks to provide understanding of "social and cultural problematics" in terms of personal thoughts, experiences, and interactions with others. In particular, pure interpretation may provide understanding of "competing definitions of a problem" (Denzin 1989, 22-23). In contrast, interpretive evaluation seeks to provide "pragmatic, action-oriented recommendations" directed at policy makers, whereby the researcher acts as agent for those affected by policy. Interpretive evaluation involves presentation of recommendations to policy makers addressing social problems. As such, interpretive evaluation is prescriptive in nature and constitutes advocacy for particular groups within society. This involves "taking sides" with the "underdog" whose life is affected by policies made by "policymakers". When discussing "capture", Denzin identifies the gaining of understanding of informants' "crises and epiphanies" as a step in the process of evaluation of social issues. In this vein, Denzin
identifies one objective of "contextualization" as achieving social change (1989, 22, 54, 61-62).

Glaser and Strauss (1967, 31-35) identify theory developed using Grounded Theory principles as presenting either a "well-codified set of propositions" or a "running theoretical discussion". Either form may be used to articulate "substantive" or "formal" theory. Substantive theory is "empirical", and addresses specific social situations located in time and place. Formal theory presents concepts as distinct from observations, and is generally applicable across different locations and at different times.

Pure interpretation and substantive theory both seek to provide descriptions of particular social settings, actions within those settings, and more particularly in the case of pure interpretation the thoughts and feelings of relevant social actors. As such, these products of Interpretive Interactionist and Grounded Theory methodologies share a concern for what happens in specific places and at specific times. Both methodologies are concerned with reporting interpretive understanding of events rather than evaluating them in the context of social policy.

I have sought to follow the principles underpinning pure interpretation and substantive theory. I do not seek to directly influence the formulation and/or implementation of policy addressing the use of alcohol and other drugs. More particularly, I do not seek to advocate for any social group. Rather, I have conveyed my understanding of the perceptions of the individuals informing this inquiry to interested readers. In doing so I have endeavoured to address a topical and contested social issue. Consequently, I have followed Denzin's (1989) methodology regarding the gaining of interpretive understanding and have not followed his ideas addressing the ways in which public policy may be influenced.

However, this research does endeavour to develop further understanding of the issues which are the subject of policy considerations. It is therefore feasible that the reporting of this research could inform advocacy at some point in the future. However, any such action would be distinct from this inquiry.
"Validity"

Quantitative research methodologies have clearly defined concepts of "validity" and "reliability". In simple terms, "validity" refers to the extent to which the results from a research procedure unambiguously reflect the characteristics of the subject of inquiry, and "reliability" refers to consistency of results from repeated conduct of the same research procedure (Sekaran 1984, Babbie 1990, Blumberg et al 2014). These measures are predicated on identification of cause and effect relationships and consequent prediction and control. They are particularly relevant to deductive studies which test pre-existing theory (Burrell and Morgan 1979; Guba and Lincoln 1994, 2000; Schwandt 2000; Charmaz 2009).

However, the concepts of "validity" and "reliability" relevant to quantitative research are not applicable when applied to qualitative methodologies, and particularly those which are not directed at testing hypotheses. This is because the personal interpretations of different researchers will necessarily be different, as different individuals have different experiences and consequently different views and hence understandings. Denzin (1989, 20) emphasises the unique nature of interaction between researcher and informant, and Glaser and Strauss (1967, 103, 225) explicitly state that two researchers analysing the same (qualitative) data are likely to produce different results. Consequently, findings cannot be unambiguous and repeated conduct of the same research will yield differing outcomes.

Glaser and Strauss (1967, chapter IX) address the "credibility" of Grounded Theory. In summary, they propose that theory developed using their methodology is credible if the researcher has exercised and can demonstrate rigorous application of the methods used in conducting a Grounded Theory study. In reaching the end of the research study, the researcher "knows what he [sic] knows about what he [sic] has studied". As such the researcher can be confident that the theory which is reported has been developed through a process of "systematic ordering" (1967, 225-227). The credibility of the end product of the research study may be conveyed to the reader by quoting directly from interviews and identifying "telling phrases", discussing field notes, describing what happened in relevant situations, and including discussion of personal experience relevant to the research. Credibility may be conveyed further by describing the "codified procedure" employed for the analysis of field data (1967,
228-230). Such procedures include theoretical sampling, constant comparison, and identification of saturation.

When discussing the application of Grounded Theory, Glaser and Strauss (1967, chapter X) identify four "requisite properties" of theory developed under their methodology. Theory must "fit" with the social situation it addresses. In addition to "fit", theory must be "understandable" to both "sociologists" and "laymen". Theory must have general application, providing a "general guide to multi-conditional, ever-changing daily situations" (1967, 242). Finally, theory must enable control.

Application of theory must facilitate the user of the theory to analyse social situations, predict and control what happens in those situations, and anticipate the consequences of such control. The "crux" of such exercise of control is the ability to identify, gain access to, and manipulate "controllable variables" in order to "produce and predict change". In doing so, such "controllable variables" must have "much explanatory power" and hence "make a big difference" (1967, 245-249).

Strauss and Corbin (1990) extend the discussion regarding the "credibility" of Grounded Theory as initially advanced by Glaser and Strauss (1967). Strauss and Corbin propose criteria for "evaluating" the outcomes of research conducted in accordance with Grounded Theory principles. In summary, these criteria address development of concepts from data, systematic linkages and relationships between concepts, variations in data and associated concepts, the social context in which data was collected, adherence to process, and significance of findings (1990, chapter 14).

Glaser (1992) criticises these criteria when claiming they focus on reproducibility, generality, and misuse of methods.

It is apparent that Glaser and Strauss, collectively and individually, base their criteria for "credibility" on rigorous application of methods and subsequent demonstration and reporting of such rigour. Under an objectivist reading of Grounded Theory as described by Charmaz (2000; 2006; 2009), methodological rigour ensures "internal validity", or correspondence between research findings and the 'real' social world. Similarly, the use of Grounded Theory methodology may be seen to promote "external validity", or applicability across different settings and at different times, as "core categories" underpinning theory generated through the application of Grounded Theory principles reflect general themes emerging from the data. However, the diligent adherence to Grounded Theory methodology and methods does not
necessarily result in different researchers reaching the same conclusions from the same data (Glaser and Strauss 1967, 103, 225). Consequently, the concept of reliability - i.e. repeatability of results - simply does not apply to Grounded Theory methodology.

At a wider level, under a realist perspective "validity" may be considered to be demonstrated through independent testing of the results of research studies. For example, in the physical sciences the speed of light has been measured many times by many different researchers using different methods, and results from those measurements coincide very closely (Shivalingaswamy and Rashmi 2014). However, such testing is not applicable under 'classical' Grounded Theory, as different researchers are likely to generate different theory from the same data - an outcome explicitly identified by Glaser and Strauss (1967, 103, 225). This outcome is addressed by a number of researchers. Bryant and Charmaz (2007a, 19) propose that considerations of "validity" are confined to taking account of the "theoretical underpinnings and implications" of categories as they are developed. Green et al (2007, 483-487) present a case study to demonstrate the importance of appropriate application of Grounded Theory methods. When considering the development of categories from data, Dey (2007, 171-172) identifies "cue validity" as the probability of an "attribute" belonging to a category, and observes that coding of data which reflects high cue validity does not necessarily result in the development of categories which are relevant. Dey continues to observe that independent testing to determine "validity" of theory can not use the data used to develop that theory, but use of different data would result in the development of different theory (2007, 174). Consequently, "validation" by replication is not possible. These observations reflect Glaser's and Strauss' (1967) position that the means of establishing "credibility" are confined to demonstrating methodological rigour.

Grounded Theory is not the only qualitative research methodology. Many authors have addressed the issue of "validity" as it applies to qualitative research methodologies in general. Symon and Cassell (2012, 210-217) discuss "contingent" criteria for assessing the quality of qualitative research. Such criteria include (inter alia) thick description, multiple sources informing the research, consideration of alternative interpretations, transparency of method, and relevance to the reader. Berg (2009, 54-55) discusses "validity" of qualitative research in terms of "verification". In
essence, "verification" involves the researcher reviewing conclusions drawn from analysis of data to ensure that they do not represent "wishful thinking", and ensuring that the methods employed to reach conclusions are clearly documented. Mason (1994, 99) considers "validity" in terms of what data "tells" and does not "tell", and in "telling", "how well". Claims made from analysis of data must be "convincing" and must not "push the data too far". Eisenhart and Howe (1992, 644-645) describe the "conventional" approach to assessing "validity" as determining whether the research design has taken into account factors which may compromise interpretation and whether the research design may be applicable in other settings. They continue to propose "general standards" for "validity" as being fit between research questions, data collection procedures and analysis techniques, the effective application of specific data collection and analysis techniques, alertness to and coherence of prior knowledge, value constraints, and comprehensiveness (1992, 657-663). Easterby-Smith et al (2008, 422) propose qualitative research must exhibit "careful scholarship" involving "systematic and demanding" research methods, description of those methods, and contribution to the field of knowledge. In a similar vein, Johnson and Onwuegbuzie (2004, 16) emphasise the importance of research methods when discussing "high quality" qualitative research.

The authors identified immediately above take a view of "validity" which corresponds to that of Glaser and Strauss (1967). Rigorous application of research methods, self-evaluation of such application, reporting of methods to demonstrate rigour, demonstration of clear links between theory and data, identification of similarities and differences considered when developing theory, and consideration of the contribution to the relevant field of knowledge are indicators of "validity" of Grounded Theory studies in particular, and qualitative methods in general.

The preceding discussion of the "validity" of qualitative research methodologies assumes a realist perspective. Under an interpretive perspective, "validity" as a concept must be considered from within an interpretive worldview, and not from within a realist position. Burrell and Morgan (1979, 395-396) make this point clearly when proposing that consideration of any given worldview from within a different worldview necessarily results in the perspective under consideration being seen as deficient and inappropriate. This is necessarily the case, as the worldview under consideration by definition does not conform to the ontological and epistemological
assumptions underpinning the alternative worldview from which assessment is being made. In the case at hand, "validity" of an interpretive approach cannot be assessed against the criteria applicable to a realist perspective.

Denzin (1989, 62-65) addresses the question of "evaluating interpretive materials". He states that interpretation involves the researcher "feeling" the "streams of experience" of research participants. Such "feeling" is cognitive and emotional, and derives from interaction with the informant. Denzin then lists eight criteria applicable to the evaluation of "interpretive materials". In brief summary, interpretation must:

1. reflect the lived experience of informants;
2. be developed from detailed understanding of informants' points of view;
3. reflect social relationships as they have developed over time;
4. derive from understanding of processes and interactions used and experienced during the research study;
5. address as much relevant "material" as possible;
6. acknowledge prior understandings;
7. result in coherent articulation of the research process and its outcomes;
8. recognise that all interpretation is "unfinished, provisional, and incomplete" (ibid).

Denzin's last point is particularly relevant. In direct contrast to findings from research conducted under a realist perspective, an interpretive approach cannot produce a definite 'answer' to a research question. Rather, any one individual's interpretation is always open to further interpretation by that individual and by others. Under an interpretive view, the concept of saturation under Grounded Theory constitutes a personal judgement regarding what is sufficient to convey meaning rather than an objective criterion determining the end point of analysis.

Other authors consider "validity" of qualitative research in corresponding contexts. Symon and Cassell (2012, 206-208) identify Guba and Lincoln (1989) as providing "perhaps the best known" criteria for assessing interpretive qualitative research.

Guba and Lincoln (1989, 233-243) commence their discussion of criteria for "evaluation" of qualitative research by considering "parallel criteria". Such criteria
are intended as analogues to the realist criteria of internal validity (correspondence with external reality), external validity (transferability across time and place), reliability (repeatability), and objectivity (independence from individual values and lack of bias). Reflecting the position advanced by Burrell and Morgan (1979, 395-396), Guba and Lincoln (1989, 244-251) propose that such "parallel" criteria are inappropriate because they are predicated on concepts and associated assumptions underpinning a realist perspective which do not reflect an interpretive methodology. "Authenticity" criteria, derived from within an interpretive perspective, are advanced as applicable. In summary, such criteria address appropriate selection of people informing the research study, dealing with them in an open manner devoid of power differentials, ensuring informants are aware of their own social realities and those of others, and facilitation of action in response to research outcomes.

Guba and Lincoln (2000, 178-182) continue their earlier (1989) consideration of "validity". They differentiate between "method" and "interpretation", and observe that "method" assumes a realist view of the social world under which processes and procedures can be replicated, whereas "interpretation" is unique to interaction between researcher and informant. Symon and Cassell (2012) advance a similar argument. They propose quantitative and qualitative research methodologies are underpinned by fundamentally different sets of assumptions reflecting views of the social world. Under an interpretive perspective, there is no "absolute 'truth'", as worldviews are individual and as such are "infinitely contestable" from within other worldviews. Consequently, no set of criteria may be designated as "certain" or "privileged". Further, qualitative research methods are generally flexible, in contrast to the specific prescriptions of quantitative methods. Consequently, the concept of 'rigour' does not have the same applicability to qualitative methods (2012, 217-220).

Eisenhart and Howe (1992) present an "alternative conception" to the "conventional conception" of "validity". They discuss the difference between the "insider's perspective" under an interpretive perspective and the neutral observer assumed under quantitative methodologies. They then quote Erickson (1986) as maintaining that the "basic validity criterion" of "alternative" (i.e. interpretive) methods is the "immediate and local meanings of actions, as defined from the actors' point of view" (1992, 649; italics in original). Morgan (1983b, 396-398) takes the point of view of both the researcher and the reader when suggesting that consideration of interpretive research
needs to address the ways in which meanings are created and shared, and the consequences of differences in worldviews between individuals.

The preceding discussion suggests that different authors perceive the issue of “validity” of qualitative interpretive research in different ways. In contrast to realist quantitative research methodologies, consideration of adherence to predefined research methods is simply not applicable to interpretive research. The researcher is not an independent observer who remains detached from the ‘subjects’ under investigation and applies research methods in a neutral and prescribed manner. Rather, under an interpretive perspective, the researcher and informant jointly define the research process. As the informant is jointly involved in the conduct of research, it is not possible to adhere to predefined research processes and procedures. The research methods employed under an interpretive approach are specific and unique to each research endeavour.

Consequently, it is necessary for the interpretive researcher to articulate the research methods which emerged from a research study in sufficient detail to enable the reader of reports of that research to understand the way in which the research proceeded and the contexts in which the researcher interpreted the social interaction from which meaning was developed.

I have endeavoured to follow the eight principles of interpretation proposed by Denzin (1989) summarised above. I have sought to present Informants' individual worldviews in their terms and not mine. I believe my prior experience as an alcohol and other drug counsellor and street outreach volunteer helped me enter the social 'worlds' of both Clients and Service Workers and appreciate what they said. I have to the best of my ability interpreted Informants' perceptions from within their social 'worlds'. My interpretation reflects what was said in interview conversations. I fully recognise this thesis presents my interpretation and understanding at a particular point in time and a particular point in my life. My interpretation is definitely what Denzin (1989, 64-65) describes as "unfinished, provisional, and incomplete".

**The meaning of the SMH in this research**

The apparent lack of closely held common understanding of what the SMH means and the generally incomplete testing of its propositions illuminates a key issue central to
this proposed research. For current purposes, it is necessary to address the question: 'what does the Self-Medication Hypothesis mean?'.

The majority of studies addressing the SMH identified in the previous chapter were conducted from within what Charmaz (2000; 2006; 2009) describes as an "objectivist" perspective. Research methodologies and methods involving statistical analysis of data obtained from survey questionnaires and highly structured interviews were used in the substantial majority of cases. Quantitative analysis of results from laboratory tests was performed in a small number of cases. Most studies characterised the SMH in objective terms where individual subjective perceptions of substance use were of secondary concern. Its propositions regarding the alleviation of distress and criterion for choice of substance may be seen to be directed at explanation and prediction of behaviour in terms which are independent of the personal perspectives of the individuals informing the research.

In contrast, my research has sought to gain understanding of what the SMH meant to different individuals within the contexts of their own personal lives at the time of interview, as distinct from a predefined perspective adopted by the researcher. I was not an impartial observer, but rather an active contributor to the shared meaning created jointly by me and my Informants. My own interpretation of the subject of conversation therefore necessarily contributed to the sharing of meaning during interviews and my subsequent interpretations of these meanings communicated in this thesis.

The way in which the SMH is articulated influences perceptions of its meaning. I described the SMH to the people informing this research in simple terms. I described both its components - i.e. relief of emotional distress and criterion for choice of substance used. I presented the SMH in lay terms and not in a specialised medical or clinical context. In particular, I made no reference to the theories underpinning Khantzian's formulation of the SMH. In doing so, I endeavoured to communicate the meaning of the SMH in terms which I thought would be understood by Informants and hence elicit perceptions of its applicability from within the perspectives of each informant.

Hence, the 'meaning' of the SMH within the context of this research was that as constructed and shared between its participants - i.e. my informants and me. It
reflected what those involved understood from a description of the SMH presented in lay terms. My articulation of the outcomes of this research reflects my interpretation of the meaning of the SMH as understood by informants and me.

My approach is reflective of the way in which Khantzian developed the SMH over time. In an article which paved the way for the subsequent formal articulation of the SMH, Khantzian (1974) addresses the use of opiates in terms of his personal observations of "patients in groups". In his article formally proposing the SMH, Khantzian (1985) supports his proposal of the SMH by describing "clinical vignettes" exemplifying his ongoing interaction with people receiving treatment for addiction. When providing a "reconsideration" of the SMH, Khantzian (1997) discusses the SMH in terms of his personal experience with patients. In particular he refers to "supportive" techniques and a "semistructured treatment relationship" when dealing with clients. These provided "better access to a patient’s inner life" and facilitated "natural unfolding of his or her particular ways of experiencing and expressing emotions" (1997, 232). Similarly, Khantzian (1999) and Khantzian and Albanese (2008) base their discussion of the SMH on experiences with clients. The latter book describes the SMH and its use in the treatment of addiction as a "humanistic and understandable explanation as to why addictions are so compelling" (2008, xvi).

It is therefore evident that the approaches taken by Khantzian in formulating the SMH and by the majority of those testing its applicability are different. Khantzian developed the SMH inductively on the basis of his experience gained during close and prolonged interaction with his patients. In contrast, the research discussed above investigating the applicability of the SMH was predominantly deductive, and generally proceeded from a detached starting point.

In seeking to understand individuals' conceptualisation of the SMH, this research seeks to follow Khantzian's approach to formulating the Hypothesis. Understanding is intended to be gained through interaction with individuals in a manner analogous to Khantzian's contact with his clients.

**RESEARCH METHODS**

The preceding discussion identifies key aspects of Interpretive Interactionism as articulated by Denzin (1989) and Grounded Theory as described by Glaser and
Strauss (1967). I have taken selected concepts from these two methodologies to guide the conduct of this research study. However, this research has not followed all of the specific methods described under either methodology. The following sections describe the specific methods I employed to conduct this research.

**Initial considerations: how to engage with Informants**

Interpretive research involves 'getting inside' the social situation of interest. Such 'getting inside' may be achieved metaphorically or literally. Over time there have been many examples of the latter. Ethnographers including Malinowski and Mead lived among cultures they studied (Young 1979, Freeman 1999). Sociologists at the University of Chicago in the 1920s and 1930s went 'into the field' in order to experience first hand the social 'worlds' of the city's residents (Burrell and Morgan 1979). In a more recent example, Hassard (1991) describes a research project he conducted which involved him becoming ‘embedded’ in the operation of a fire station operated by the British Fire Service. He describes his field work when conducting one part of his study as “accompanying firemen during the working day and asking them to explain their activities” (1991, 286).

When I first considered undertaking this research study, I decided I wanted to elicit perceptions of the applicability of the SMH from within the social ‘worlds’ of the individuals informing the research. My preference was to 'get inside' my Informants' 'worlds' to the maximum extent possible. This led to me to consider whether or not becoming ‘embedded’ in the relevant environments in a way similar to that of Hassard was feasible.

The work of counsellors providing services to people affected by the use of alcohol and other drugs could be compromised by the presence of a third party during consultations with their clients. Correspondingly, clients could feel inhibited in the presence of an ‘outsider’. Hence, engaging in conversations addressing perceptions of motivations of alcohol and other drug use during counselling sessions would detract from the service being provided. Hence, becoming ‘embedded’ in counselling sessions was not appropriate. However, on the basis of my previous experience as a street outreach volunteer I saw direct engagement with Informants in street outreach
situations as reasonable. Contact is less formal and clients are not 'captive' in the sense they are in a counselling session.

When considering ‘close’ contact with clients, I determined it was not feasible for me to be present in situations where I would be in direct, ongoing, social contact where and when the issue of self-medication might spontaneously arise. This is the case because I am not a user of illicit drugs and hence would find it difficult - socially and ethically - to gain enduring entry to situations where such drugs are consumed. Further, I considered it likely that clients would resent any attempt to encroach on their privacy. As a result, I concluded becoming ‘embedded’ in situations where alcohol and other drugs are consumed was not appropriate.

Consequently, I decided 'full entry' research was not possible in the current context. Therefore, I determined that engaging in interactive interview conversations with the individuals informing my research offered the best available means of engaging in meaningful interpersonal communication.

**Preparation and practice for field work**

Prior to commencing field work, I considered what sort of preparation I should undertake in order to successfully engage with the individuals informing this research. I also anticipated I would learn from my experiences during the conduct of field work and adapt my interaction with Informants accordingly.

The literature review I performed constituted the initial activity in my preparation for venturing 'into the field'. Reading the literature familiarised me with theories addressing alcohol and other drug use. In turn, my consideration of the multiple and divergent views of addiction sensitised me to the potential diversity of views I could feasibly expect to elicit during interview conversations. As such, my literature review reflected the process of deconstruction described by Denzin (1989). In a broader sense, my review was also consistent with the principles of ‘classical’ Grounded Theory, as reading the literature gave me at least some measure of “theoretical sensitivity” regarding my inquiry.

At a practical ‘hands on’ level, I prepared for engaging with Informants by practicing the use of the audio recording equipment I used to record interview conversations. I did this in order to firstly ensure that conversations would be recorded successfully,
and secondly to reduce any preoccupation I might have with use of the equipment. I did not want to be distracted and hence compromise interpersonal communication. I recorded somewhat contrived conversations with friends who agreed to help me familiarise myself with my equipment in a variety of locations in order to determine how I should best position the equipment and establish the effects of background noise on recording quality.

My research involved concurrent conduct of interview conversations, their transcription from audio recording to text, and interpretation of that text. I therefore practiced using the transcription equipment I used. I recorded voice from television news broadcasts, transcribed what was said, and then replayed the audio recording and compared what I heard with what I had written.

I used the software package “NVivo” (discussed further below) to facilitate interpretation of interview conversations. In order to familiarise myself with its operation, I used it to code the transcribed text of the television news broadcasts I had recorded. My objective in doing this was to become proficient in the operation of the software so that my attention could be fully directed at interpreting the text I was reading. I did not want to be distracted by thinking about which computer mouse or keyboard operation I should be performing.

**Interview questions**

When conducting interview conversations, I sought to elicit Informants’ perceptions of the applicability of the SMH from within their own perspectives. To the fullest extent possible, I wanted Informants to share their social ‘worlds’ with me, and in doing so share what substance use meant to them. In order to take this approach, I sought to avoid imposing my own conceptions of alcohol and other drug use on Informants. My objective was not to test one theory regarding motivations for substance use against others, but rather gain understanding of how people who are involved in dealing with such use perceive it from within their social contexts.

This approach precluded use of a predefined interview schedule containing a number of specific, predetermined, questions reflecting my own conceptions of substance use. Consequently, I confined my interview questions to a general initial question describing the SMH and asking Informants whether they thought it is applicable. As
conversation progressed I sought clarification of what was being said, and posed general questions directed at eliciting comparative perceptions of motivations for substance use if relevant and applicable. To the fullest extent possible, I endeavoured to engage in interpersonal conversation on a topic of mutual relevance and avoid ‘interrogation’. This approach resulted in every interview conversation being unique, both in terms of my participation in the conversation and the direction the conversation took.

**Gaining access to Informants**

In order to gain access to Informants I approached two agencies in Western Australia which provide services to individuals adversely affected by alcohol and other drug use. These agencies provide *(inter alia)* counselling and street outreach services. As the number of such agencies in Western Australia is small I do not provide further information about them in the interests of maintaining confidentiality.

In total, 22 Informants participated in this research. Of these, 12 were Clients and 10 were Service Workers. These individuals engaged in a total of 22 interview conversations. The durations of interview conversations varied widely, ranging from around 15 minutes to around 45 minutes, with a typical conversation taking around half an hour. Some interviews with Clients accessing street outreach services were comparatively short, while others were comparatively long. This range of durations reflected my opportunistic access to these Informants. Interviews with counsellors and their clients were at prearranged times and in prearranged settings. These scheduled interviews lasted between half and three quarters of an hour.

**Informed consent and confidentiality**

Obtaining Informants' informed consent to participate in this research was a critical prerequisite to engaging in interview conversations. Murdoch University required the development of explicit processes and measures to ensure informed consent be gained and documented prior to approving the conduct of this research. Correspondingly, organisations from which Informants were recruited similarly required informed consent to be sought and given. As a former counsellor and street outreach volunteer working in the area of alcohol and other drug use I too wanted to be sure all
Informants engaged in interview conversations voluntarily and on an informed basis. In addition to my consideration of the rights of interview participants, I felt that any conversation which was in any way coerced or undertaken reluctantly would be unlikely to result in frank and meaningful communication of Informants’ perceptions, and therefore would undermine the objectives of this research.

Aligned with the need for informed consent was the issue of confidentiality. As with informed consent, both Murdoch University and host organisations required the issue to be addressed explicitly, systematically, and in detail. From my personal perspective, I felt I was under a very strong obligation to ensure the maintenance of all aspects of confidentiality. I therefore did not collect Informants’ demographic data.

I developed an Information Letter which was provided to Informants prior to commencement of interview conversations. This document identifies me as a researcher, describes the nature and purpose of the study and what the study will involve, addresses voluntary participation, withdrawal, and privacy, discusses potential benefits of the study, and addresses possible risks. I also developed an associated Consent Form, which confirmed that Informants have provided informed consent to participate in this research study. These documents are provided at Appendix B.

Prior to engaging in conversations with Informants I gave a verbal undertaking that no personal identifying data whatsoever would be published, and that quotations from interviews would not be attributed to any particular Informant.

When providing informed consent, Informants identified themselves by name on Consent Forms. These forms hence have the potential to permit identification of the individuals participating in this research. To deal with this issue, I kept all forms in safe storage separate from my other working documentation for the duration of the research study. Following completion of the research, these forms were held securely by Murdoch University.

When making audio recordings of interview conversations, I specifically asked Informants to not state names of people, organisations, and anything else which might allow identification of the Informant or the relevant agency providing services. Audio recordings were saved as digital files on my personal computer. Access to this
computer was restricted by password at operating system level. The file names given to these audio files were encoded so that the name and/or organisation of the Informant was not apparent. During transcription, any inadvertent comments which could lead to identification of people or organisations were redacted. During conversations with my academic supervisors I did not reveal Informants’ personal information. Following completion of this research audio files were deleted and interview transcripts were held securely by Murdoch University.

**Safety considerations**

Discussion of alcohol and other drug use has the potential to cause distress to people for whom substance use is a problem. Consequently, I gave careful consideration to this issue.

First and foremost, I decided if an Informant showed any signs of discomfort or distress during interview conversations I would immediately terminate the interview. I felt my previous training and experience as an alcohol and other drug counsellor equipped me to identify any discomfort in its early stages.

I then addressed potential situations where an Informant remained in a state of distress following termination of the interview conversation or became distressed at some later time. I sought to ensure that in such cases the affected Informant would have access to relevant and appropriate support services.

Service Workers - i.e. counsellors and street outreach workers - work in an environment where debriefing, counselling, and referral to wider clinical and non-clinical services are provided on an ongoing daily basis. Consequently, access to counselling within host organisations and referral to other support services was readily available. Clients who accessed services were by definition accessing services which are specifically oriented towards providing help regarding issues deriving from the use of alcohol and other drugs. As such, both Clients and Service Workers had ready access and knowledge of how to obtain access to a range of support services.

Informants' safety was discussed with Murdoch University and host organisations. All parties agreed access to appropriate services was available and appropriate.

No Informants became distressed during or after interview conversations. Hence the support described above was not required.
Legal considerations

This research involved conversations with individuals who, in many cases, used substances in contravention to prevailing State and Federal laws. I therefore considered my position regarding knowledge of illegal activity.

As an Australian citizen, resident of Western Australia, and Masters degree candidate I have no statutory obligation to report illegal substance use. When I worked as an alcohol and other drug counsellor I encountered many clients who used substances illegally. Unilateral reporting of illegal substance use by individuals providing counselling and/or street outreach services is extremely rare. If such reporting occurred there would be no clients. I therefore proceeded with interview conversations and held as confidential knowledge of illegal substance use.

Conduct of interview conversations

When initially planning interviews, I decided to conduct interview conversations in places and situations which constituted, to the fullest extent possible, places in which Informants chose to be. For counsellors this was either their places of work or coffee shops close by. Relocation to a 'neutral' environment reflected Informants' desires to not be interrupted during conversations. Interview conversations with Clients accessing counselling services took place in agency premises. Conversations with Clients accessing street outreach services and the Service Workers providing those services took place in public places including street footpaths, parks, and entertainment areas - i.e. the settings in which street outreach services are provided.

My rationale for selecting these venues was twofold. First, I engaged in conversations in environments in which Informants would likely feel comfortable to articulate their views in an open manner. Second, and equally importantly, I wanted (to the extent possible) be exposed to the physical environment of the relevant social contexts.

In keeping with my decisions regarding selection of venues for conducting interview conversations, I sought to take a consistent approach when interacting with Informants. I initiated conversation by introducing myself by name and as a postgraduate student researcher. I then thanked Informants for participating, asked if the setting we were in was appropriate, and how much time was available for
conversation. I then engaged in small talk such as discussion of our respective journeys to the meeting place and similar events which were likely to have been recently experienced by both Informants and myself. I did this to 'break the ice' and establish rapport.

Following this 'ice breaker' I asked Informants if I could introduce them to the Self-Medication Hypothesis. I then described the SMH in simple terms. I did this to convey my understanding of the SMH to Informants prior to engaging in a recorded conversation in order that they might better understand how I made sense of the Hypothesis. However, I did not discuss my perception of its applicability. Rather, I sought to share my construction of the simple meaning of SMH so that Informants would (hopefully) engage with me through common understanding of the subject at hand and discuss the SMH in common terms.

I then raised the issue of informed consent and confidentiality. I provided Informants with the Information Letter, reviewed it with them, and confirmed consent to proceed through completion of the Consent Form.

I asked Informants how they felt about having our interview conversations audio recorded. If Informants showed even the slightest sign of reluctance I said I would not activate my recorder and honoured this statement. I did this in the interests of full informed consent and my desire to not inhibit conversation in any way. In the 5 (of 22) cases where Informants did not wish to have the interview recorded I engaged in conversation and wrote notes of my recollection of what was said as soon as possible after the conversation ended. In the 17 (of 22) cases where Informants consented to audio recording I again confirmed consent to audio recording of our conversation. After receiving consent, I switched on the audio recorder and confirmed it was recording.

Then I again described the SMH in simple terms and asked Informants to discuss their views of its applicability. The following excerpt from an interview conversation is typical of the way I summarised the SMH:

All right. I've turned the audio recorder on, so it's recording. As we were talking earlier before I switched the machine on, can we start our conversation by talking about the idea of self medication, as expressed in a hypothesis called the Self-Medication Hypothesis, which says in simple terms that people
use alcohol and other drugs in order to alleviate emotional distress. That's part one of the hypothesis, and part two is that people use the substance for self medication, they use the one that works best. Works best. What, what do you think of that. What do you think of that proposition.

My motivation for summarising the SMH in this way when commencing interviews was multi-faceted. First, I wanted to begin what Informants may have perceived as 'formal' conversation by discussing something with which the Informant was already familiar. My prior training and experience as a counsellor and street outreach volunteer has been that starting a conversation about something with which my interlocutor is familiar facilitates engagement. Second, beginning in this way gave Informants the opportunity to respond by articulating their perceptions of the applicability of the SMH rather than responding to more specific questions framed by me which reflect my conception of the SMH rather than theirs. Third, I wanted to reinforce to Informants that the purpose interview conversation was to elicit Informants' perceptions from within their own worldviews.

As interview conversations progressed, Informants conveyed their perceptions of the applicability of the SMH, and without exception offered views regarding other motivations for alcohol and other drug use. In doing so, they made the conversation unique in terms of the flow of ideas articulated and the ways in which perceptions were stated.

To the best of my ability I avoided 'putting words into the mouths' of Informants to elicit views consistent with my own views of motivations for substance use. I did this so that interview conversations reflected Informants' worldviews and not my own. Otherwise I played an active role in conversations. When relevant, I encouraged Informants to elaborate on statements they made, sought clarification of statements I did not fully understand, and paraphrased Informants' statements in order to confirm that my understanding reflected what the Informant was saying. I further encouraged conversation by confirming that Informants' statements addressing both the SMH and alternative views were relevant, and when applicable sought comments addressing inter-relationships between the concepts being articulated.

I believe all Informants were not influenced by our dialogue being audio recorded. I have drawn this conclusion from Informants' willing engagement in conversation,
personal demeanour during interview conversations, and comments at the end of the conversation when I switched off the audio recording device. This suggested to me that Informants were generally unconstrained in providing their views to me.

At the conclusion of interview conversations I thanked Informants and asked whether they wished to review my transcript of the interview. None took up this offer.

I then left the setting in which the conversation took place and wrote notes of how I perceived the interview and any external factors which might be relevant. My aim in doing this was to record my own impressions as soon as possible while they were fresh in my mind. I subsequently used these notes when transcribing and interpreting interview conversations.

In summary, I actively engaged with Informants in interview conversations. I did not adopt the impersonal and detached stance of an 'observer'. Rather, I sought to facilitate conversation by actively and sincerely demonstrating interest in what Informants were saying and conveying my understanding of the perceptions being shared. I endeavoured to realise what Denzin (1989, 20) describes as studying "experience from within".

**Interpretation of interview conversations**

My interpretation of interview conversations with Informants commenced during those conversations. While engaging in dialogue I was relating to what my interlocutor was saying and seeking to understand the meanings being communicated. Immediately after the conclusion of interviews I reflected on my personal interpretation of what had been said, and similarities and differences between other conversations. In doing so I was engaging in the first step of what Glaser and Strauss (1967) identify as "constant comparison".

I continued interpreting what had been said as I manually transcribed the audio recordings of interview conversations. I transcribed them as soon as possible after completing meetings with Informants. Transcription involved me listening to recordings of what was said and typing the words spoken using a word processor. The audio equipment I used to replay conversations consists of a foot pedal-operated audio player which permits pausing and 'rewinding' of audio recordings. Pausing the replay of speech was necessary as I cannot type sufficiently fast to transcribe normal
speech in real time. I frequently 'rewound' recordings to ensure I had transcribed dialogue faithfully. Pausing and 'rewinding' also provided the opportunity for me to 're-live' what I had experienced during the interview conversation and hence interpret dialogue from within that context to the fullest extent possible. Transcribing as soon as possible after completing interview conversations fostered this engagement, and allowed me to reflect on my impressions and tentative interpretation during and immediately after interview conversations.

I transcribed dialogue literally. If an Informant began a statement, reconsidered it mid-sentence, and then recommenced with different words I transcribed all words as spoken. Similarly, if Informants repeated a statement I transcribed such repetition. I did not edit transcriptions in the interests of 'readability'. In taking this approach, I sought to faithfully capture the ways in which Informants expressed their thoughts.

When I completed the transcription of an interview conversation, I began to interpret it further following the principles of Denzin's (1989) bracketing and subsequent construction, and Grounded Theory's constant comparison. I used the software package "NVivo" (manufactured by QSR International Pty. Ltd.) as a tool to help me organise and record my interpretation. My decision to use this tool was guided by my previous experience using the software package "NUD*IST" (a predecessor to NVivo, also manufactured by QSR International Pty. Ltd.) when conducting another qualitative, interpretive research study. I was familiar with NUD*IST, established that NVivo operated in essentially the same way, and decided to use NVivo on the basis that it a widely used and recognised tool and I could become proficient in its operation in a reasonably short time.

I deliberately did not use many of the capabilities offered by NVivo. In part this was due to my using only one form of source data - i.e. interview transcripts (NVivo facilitates the use of many forms of source data). However, I also did not use a number of features facilitating data manipulation. I confined my use of the software to coding text to "nodes" (discussed below). In effect, I used the software package to facilitate what I could otherwise have done by writing notes in the margins of interview transcripts, physically cutting and pasting selections of text from hard copies of interview transcripts, and developing categories (as defined under Grounded

2 "NUD*IST" is an acronym for Non-numerical Unstructured Data Indexing Searching and Theorizing.
Theory) and their inter-relationships on several white boards. I took this approach to ensure that I did not run the risk of confusing means with ends, and permitting use of technology to displace me as the "instrument" of interpretation.

NVivo facilitates the association of selected words, phrases, sentences, or other sections of text with "nodes". NVivo permits nodes to either exist independently of other nodes, or relate to other nodes in a hierarchy. A given section of text (phrase, sentence, etc.) may be associated with, or "coded", to more than one node. This facility permits association and comparison of expressions of meaning within a single conversation and between multiple conversations. As such, NVivo facilitated my implementation of the principles of "taking apart" what has been said under Denzin's (1989) bracketing and Grounded Theory's comparison of "incident with incident".

I began coding the first interview conversation I transcribed by reading the text and replaying the audio recording of the transcribed conversation. I created nodes which I thought reflected the meanings being communicated by the Informant, and coded sections of text to those nodes. I gave nodes names which reflected words used by Informants and which were meaningful to me. I consciously avoided using terminology used in the academic literature dealing with the SMH.

I soon began to code relevant sections of text to nodes which had already been created when meanings reflected those already coded to particular nodes. However, other sections of text were coded to newly created nodes if the meanings reflected in that text did not reflect existing nodes.

In order to select sections of text for coding to relevant nodes, I interpreted what the Informant was communicating. At a superficial level, this is an obvious activity. However, at a deeper level, selection of text for coding required me to interpret the meanings being communicated within the context of the active, two-way dialogue between Informants and me. The process of delineating text reflecting different meanings required me to consider the many and often inter-related concepts being articulated.

As I continued coding, I developed a considerable number of nodes, reflecting categories of my understanding of interview conversations. Initially, I defined each node independently of other nodes. However, as progressive coding of interview conversations unfolded, I began to associate nodes into hierarchal groups, reflecting
different aspects of similar concepts I had developed through my interpretation. This
process is reflective of Denzin's (1989) construction and Grounded Theory's
"integrating categories".

The above description of my interpretation of interview transcripts suggests what I did
was a linear process. However, what I actually did was anything but linear. Unlike
processes employed when testing hypotheses using quantitative methods, my
interpretation was both exploratory and iterative. I modified my conceptions of nodes
as I progressively coded interview conversations. I renamed nodes and in some cases
deleted nodes because I felt my interpretation was inappropriate. When coding text to
a given node I would see text previously coded to that node and refer back to other
relevant conversations in order to re-evaluate meanings and contexts. I referred to
other nodes to identify similarities and differences of meaning. I often suspended
coding of one interview transcript in order to revisit the content of another interview.
I interpreted successive conversations with Informants and concurrently considered
my interpretation of perceptions conveyed by the same Informant in other contexts,
and by other Informants in similar and different contexts. I encountered 'dead ends'
along the way, particularly during the early stages of the work. Similarly, I went on a
number of excursions down 'rabbit holes'. I found these 'side-tracks' frustrating at
times but informative regarding how I should proceed.

The themes I developed through constant comparison and association of nodes
reflected (variously) emerging threads of understanding and tentative speculation
during initial coding, explicit examination of the result of the full ambit of my
interpretation, and afterthoughts. These forms of development of understanding
reflect the different ways in which I progressively 'made sense' of my inquiry.
Flashes of insight, reflective interpretation, and progressively dawning realisation
each contributed to my interpretation of Informants' expressed perceptions. The
diagram at Appendix A provides a high level representation of the relationships
between key concepts emerging from this research.

My development of the notion of "attitude adjustment" as a continuum (discussed in
following chapters) serves as an example of the way I developed one of the key
conclusions emerging from my research. As I progressively engaged in interview
conversations I heard Clients repeatedly discussing self-medication in terms of
alleviation of severe emotional distress. However, in other interviews I heard some
Clients and the majority of Service Workers discuss substance use as a means of relief from general pressures of life. Drinking alcohol as a means of winding down on a Friday evening at the conclusion of the working week served as an example which reflected my own personal experience. These perceptions lead me to think about what 'self-medication' meant to Informants and indeed me. After some reflection of what Informants said, my own experience, and the development of the SMH to address substance use in progressively wider terms, I came to the realisation that winding down at the end of the working week and seeking relief from intense emotional distress both sought to achieve the underlying premise of the SMH – reduction of mental discomfort. This then lead me to consider how to express this emergent conclusion. In my mind the notion of a continuum between extremes reasonably reflected the way in which I interpreted Informants' perceptions, so I employed it. Developing the concept of "attitude adjustment" in progressive terms as a response to a continuum of discomfort was the result of reflection over time leading to a tentative concept which I progressively developed as I interpreted what Informants said.

My interpretation of interview conversations was consistent with the general principles underpinning Grounded Theory and Interpretive Interactionism. Conducting research under both methodologies is an iterative process. The researcher progressively gains understanding of the subject of inquiry through exposure to relevant social situations and consequent perceptions of what individuals say and do within them. As understanding is gained, the researcher becomes more attuned to the future direction of the research and the particular activities which will facilitate further progress.

**Narrative articulation of interpretation**

Denzin (1989, 83) states that under an Interpretive Interactionist perspective the researcher's aim is to create text which "permits a willing reader to share vicariously in the experiences that have been captured", reflecting the "voices, feelings, actions, and meanings of interacting individuals". I have taken this guidance to heart in presenting my interpretation of interview conversations. I have not taken the position of a detached observer presenting the results of analysis. I have quoted what Informants said extensively. In some cases I have presented conversational exchanges involving statements by me as well as Informants. In doing so I have
sought to show how I made sense of my experiences during interview conversations and convey to the reader the ways in which I interpreted Informants’ dialogue.
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CHAPTER 4: KEY EMERGENT THEMES and REVIEW of RESEARCH QUESTIONS

INTRODUCTION AND OVERVIEW

My interpretation of interview conversations with Informants was analogous to exploration of uncharted territory. It resulted in my seeing progressive emergence of broad, key themes which directed my ongoing conduct of this research. This resulted in a shift in the direction I took in conducting this research. It is therefore relevant to address these emergent themes at this point, as they prompted a recasting of the research questions at hand. The following sections discuss the reasons for my redirecting this research and my development of revised research questions.

BROAD EMERGENT THEMES AND RECASTING OF RESEARCH QUESTIONS

When I first commenced my research, I formulated the following research questions (presented in abbreviated form):

(1) How do Clients perceive the applicability of the Self-Medication Hypothesis?

(2) How do Service Workers perceive the applicability of the Self-Medication Hypothesis (to themselves and for their clients)?

(3) What are the similarities and differences between Clients and Service Workers views, and what are their implications for service delivery?

During my conduct of interview conversations it rapidly became apparent to me that Informants perceived the SMH as articulated by Khantzian to be applicable. Clients and Service Workers indicated they saw the first component of the SMH (individuals use alcohol and other drugs to alleviate emotional distress) as relevant and applicable. Both groups conveyed this view in very similar terms. Correspondingly, both Clients and Service Workers perceived the second component of the SMH (individuals use the substance which is most effective in providing relief) as not always being enacted in practice because access to the 'best' substance is often limited by cost, and, to a lesser extent, other factors. Hence, it became readily apparent to me that Clients and Service Workers shared similar views regarding the applicability of the SMH.

However, Informants also discussed issues, ideas and concepts relating to substance use which diverged from specific consideration of the SMH. Such discussion which
did not directly address the SMH constituted a substantial part of interview dialogue. This discussion of what may be described as associated and wider perceptions of alcohol and other drug use was not surprising. I did not use a structured interview schedule when conversing with Informants, and did not seek to limit conversation to consideration of the SMH. Rather, I introduced the SMH in simple terms and encouraged each of my interlocutors to speak about what they felt was relevant and important.

Informants engaged in extended and varied dialogue conveying perceptions of other motivations for alcohol and other drug use. Without exception, Informants discussed a variety of perceived reasons for substance use. In the substantial majority of cases, such dialogue conveyed personal views in considerable detail.

A second theme which rapidly became apparent was the extent to which Service Workers discussed the SMH and alternative explanations for substance use in their own personal terms as well as those of their clients. The majority described and related to their own experiences in considerable detail, which mostly involved use of alcohol. Many Service Workers discussed personal substance use as not being compulsive, but some described their use in terms comparable to Clients with self-identified difficulties with alcohol and/or other drug use.

Access to and use of medically prescribed drugs as an alternative to self-medication emerged as a separate but related theme. During one interview conversation a Client asked me the rhetorical question: if medically prescribed drugs are effective why would anybody need to self-medicate? This Informant’s discussion of this question and the explicit and implicit views of others conveyed a commonly shared perception that medically prescribed drugs have several shortcomings. These themes emerged in interview after interview. At first, I was somewhat reluctant to identify them as having 'major' status, as I did not want to jump to premature conclusions. However, as I conducted more and more interviews perceptions reinforcing these themes continued to be articulated. With ongoing interpretation I progressively elevated the importance of these themes. Following a 'first pass' interpretation of all interviews once they had been completed, transcribed, and initially coded, I came to the view that my earlier, tentative conclusions were supported.
I saw the early emergence of these broad themes as having considerable impact on my subsequent conduct of this research. I needed to re-think and re-cast my original first two research questions addressing (in turn) Clients' and Service Workers' perceptions of the applicability of the SMH. Confining attention to dialogue articulating perceptions of the SMH would at minimum result in key themes not being considered appropriately and at worst being completely ignored. Further, my original research questions did not address perceptions of medically prescribed drugs as alternatives to self-medication - an issue explicitly raised by a number of Informants and addressed by the substantial majority.

My progressive interpretation of interview conversations suggested the first component of my original third research question - similarities and differences in worldview between Clients and Service Workers - remained relevant. However, Informants did not address service provision. One oblique exception was a Client who identified medical professionals as not having experienced the effects of the pharmaceutical drugs they prescribe and hence not understanding the consequences of their use. This was, however, an isolated instance. Service Workers generally did not discuss the ways in which they perceived their clients viewing service provision. Further, neither Service Workers nor Clients discussed their counterparties' views regarding substance use as influencing service delivery. Consequently, I decided that the second component of my original third research question addressing implications for service provision could not be pursued.

Given that Clients and Service Workers saw the applicability of the SMH in similar terms and identified alternative motivations for alcohol and other drug use I combined these two issues into one question addressing comparisons between the various perceived motivations. I added a new research question addressing self-medication as an alternative to clinically prescribed substances. For convenience of discussion I integrated the initial part of the question - similarities and differences in worldviews - into the first research question.

Therefore, for the purposes of communicating Informants perceptions as elicited during interview conversations I revised, integrated, and supplemented the original research questions as follows:
(a) How do Clients and Service Workers perceive the applicability of the Self-Medication Hypothesis as compared to other explanations for alcohol and other drug use, and how do similarities and differences in such views between Clients and Service Workers regarding alcohol and other drug use and related issues manifest themselves?

(b) What underpins the perceptions of Clients and Service Workers that self-medication using alcohol and/or other drugs is often preferable to use of medically prescribed drugs?

I made these changes in the interests of better reflecting Informants' views of what they perceived as relevant to the subject of self-medication. In this sense, they became 'emergent questions'.

At this point (i.e. prior to engaging in discussion of specific themes which emerged from this research) it is relevant to reiterate that my interpretation of Informants' perceptions was exploratory and iterative in nature. My ongoing interpretations led to tentative conclusions which were subsequently retained, modified, or discarded as I progressed. This process was reflective of constant comparison as described by Glaser and Strauss (1967) and Denzin's (1987) bracketing, construction, and contextualisation. Thus, the somewhat 'linear' articulation of my interpretation of interview conversations which follows does not reflect the means by which I achieved insight. Rather, I have presented the following sequential and discrete discussion in the interests of space, simple articulation, and ease of presentation. For example, perceptions concerning the applicability of the SMH are discussed separately from those regarding other motivations for substance use, notwithstanding the fact that references to self-medication and other motivations were intertwined and interspersed throughout interview conversations.

However, it is essential to note that the following discussion is 'linear' only to a point. The interpretation which follows is not strictly delineated by my reformulated interview questions. Similarly, boundaries between research questions are not hard and fast. Rather, the following discussion draws on themes which emerged from Informants' perceptions considered holistically. It endeavours to provide a narrative description which illustrates the complex and intertwined nature of Informants' perceptions of the SMH and substance use in general.
CHAPTER 5: PERCEPTIONS OF THE SELF-MEDICATION HYPOTHESIS

INTRODUCTION

As foreshadowed above, several major themes emerged as interview conversations were progressively conducted and interpreted. In particular, Clients and Service Workers articulated similar perceptions regarding the applicability of the Self-Medication Hypothesis, alternative motivations for alcohol and other drug use, and problems with obtaining and using medically prescribed drugs. Given the commonality of views between Clients and Service Workers, the following discussion initially addresses themes emerging from discussion of the applicability of the SMH. These include Informants' perceptions of self-medication in terms which I interpreted to be broader than those underpinning Khantzian's formulation of the SMH. Differences between Clients' and Service Workers perspectives are then discussed in the context of these themes. In particular, I address perceptions of what constitutes distress and associated relief. Throughout the chapter relationships between Informants' perceptions and Khantzian's formulation of the SMH are discussed.

Presentation of direct quotations

My research involved 22 interview conversations. Of these, 17 were audio-recorded. In the discussion which follows, direct quotations from transcripts of audio-recorded interview conversations are presented in *italics* and delimited by the symbol "//". For example, a quotation of a statement by an Informant (designated for current purposes as "Jane" or "John") appears as:

// words spoken by "Jane" or "John" //</p>

Some dialogue has been redacted in order to maintain confidentiality. Many Informants described illegal acts, and participated in this research under the strict assurance that their identity not be disclosed directly or indirectly. I have erred on the side of caution when honouring my commitments to the individuals who made my research possible. Substitutes for redacted text are enclosed within square brackets. I have added explanatory text in square brackets in order to convey context where context is not obvious. In a limited number of cases I have deleted words and phrases
such as "um" and "you know" in the interests of clarity. I have not otherwise changed words used by Informants other than for the purposes of redaction.

Quotations from interview conversations which were not recorded reflect field notes and my personal recollections of dialogue. Such quotations are presented 'in line' within the following discussion.

Some Service Workers discussed personal self-described compulsive use of substances for the purpose of self-medication. In the discussion which follows these Service Workers are identified as Clients when discussing their personal self-medication and as Service Workers when discussing their experiences when delivering services. I have done this to ensure anonymity. Service Workers also described non-compulsive personal substance use. Such dialogue is attributed to Service Workers.

In this and the following chapters I have not identified Informants' gender or other distinguishing characteristics. I have done this in the interests of maintaining my undertaking of total confidentiality given in writing and verbally prior to interview conversations.

**PERCEPTIONS: APPLICABILITY OF THE SMH**

As perceptions of the applicability of the SMH are the anchor point for my research it is relevant to begin this chapter by discussing Informants' perceptions specifically directed towards the Hypothesis.

Khantzian's (1985; 1997; 1999; Khantzian and Albanese 2008) articulation of the SMH is in two parts. First, the SMH proposes that individuals use substances in order to alleviate emotional distress. Second, it proposes that those individuals use the substance which most effectively provides relief. Informants addressed both these components. For convenience of presentation, these are presented sequentially. However, such separation does not reflect separate discussion. Rather, Informants typically discussed the two aspects of the SMH in intertwined and iterative ways.

At the beginning of each interview conversation I asked Informants to discuss their views regarding the applicability of the SMH. Responses varied from a handful of sentences to comparatively lengthy discourses. However, without exception,
Informants provided definite views. Not one responded with statements such as 'I don't know' or 'it's hard to say'.

It is appropriate to note at this point that Informants did not confine their discussion of the SMH to immediate responses to my initial question soliciting views of the applicability of the SMH. Informants expressed views concerning the SMH and more particularly self-medication in general throughout interview conversations. Further, other important motivations for substance use were addressed when discussing self-medication. Comments regarding one perceived motivation for substance use were frequently made while discussing another motivation, and during dialogue which did not specifically address reasons for substance use.

Perceptions of alternative motivations for use are discussed in the following chapter.

**Substances alleviate emotional distress**

Without exception, Informants indicated they thought that self-medication for the purpose of alleviating emotional distress is a motivation for alcohol and/or other drug use in at least some personal circumstances. One Client stated:

// The first thing that springs to mind with the self medication aspect, that self medication theory, I can relate to it on a personal level, with my own life, because as a seventeen, eighteen, nineteen, and twenty year old, I was self medicating with alcohol. //

These words are a representative example of explicit statements by Clients and Service Workers alike confirming the applicability of the SMH. This Informant subsequently indicated that depression following a relationship breakdown motivated self-medication.

Another Client was correspondingly specific when addressing self-medication. This Informant stated that using heroin provided relief from emotional distress deriving from childhood and early adult life experiences. Use of heroin enabled this Informant to "block out" memories of prior experiences and associated emotional reactions. In turn this enabled the Informant to "take myself away" from "feeling bad". When asked directly whether this constituted self-medication this Informant answered unequivocally "yes".
A different Client provided graphic insight into similar motivation for self-medication. This Informant, who in the past attended the scenes of many motor vehicle accidents, stated:

// I've seen people put chains around their head, ... hit the accelerator and rip their heads off. I've seen them gas themselves, explode, seen fatal car crashes, had people die on me. They basically, four people burned alive, young people, in [location and time redacted]. //

These experiences took their toll. This Informant went on to describe the emotional and physical distress deriving from these experiences and consequent attempts to alleviate this suffering. The following statement provides insight to both issues:

// Basically [I] get flash backs, you don't sleep that well, you go to the doctor, they give you pills, you can't function the next day, so you smoke pot, you have a good night's sleep, you eat properly. //

In subsequent conversation this Informant emphasised that self-medication made the difference between being incapable and capable of functioning "normally". This Informant further stated that cannabis is most effective substance for providing relief for not only the Informant but also many other people.

At this point it is relevant to observe that this Informant alluded to two issues which are the subject of further discussion below. First, the Informant identified and used the substance (cannabis) which most effectively provided relief, reflecting a view of the second component of the SMH. Second, the Informant indicated that medically prescribed drugs were unsatisfactory, reflecting a commonly held view (discussed further in a following chapter) that self-medication is preferable to use of medically prescribed drugs.

This conflation of multiple perceptions is typical of other Informants' dialogue.

Another Client described personal self-medication with alcohol when stating:

// I've ... been through a four year break up, and I'm on the end of a domestic violent relationship [sic] with someone new, and I can probably say that I've used alcohol as a coping mechanism, to get through that. //
This statement identifying problems with relationships and substance use provides another example of Informants articulating perceptions of more than one issue in one statement.

Correspondingly, another Client indicated a preference for cannabis for self-medication when stating:


A small number of Informants indicated that issues relating to sexual orientation resulted in emotional distress which was moderated through self-medication. The following quotation from one Client illustrates such action, and is reflective of other comments by the same Informant and those of another Client:

// Twenty years ago I was in the closet for a really long time, and I broke the hearts of all my family, and they didn't kiss me any more ... I was ... devastated, and that kind of like ... vilification against you, changes you to go and kind of act out, that you want to get revenge on everyone. So you go out, and you go to [garbled word] you get involved with drugs, and you end up, like, taking speed, and then you go on benders for days and days just to get back at everyone because you feel worthless. //

The above conversational excerpts illustrate perceptions of self-medication as it applied to some Informants. Emotional distress deriving from traumatic experiences was relieved by alcohol and/or other drug use.

Other Informants discussed self-medication in terms of less extreme emotional discomfort. However, all Informants indicated they considered self-medication for the purpose of alleviating emotional distress to be a motivation for substance use.

Many Informants articulated their perceptions of how self-medication was practiced by others. This was more particularly the case for Service Workers. One Service Worker, when speaking collectively about interaction with clients and the wider population, explicitly indicated that self-medication is a motivation for substance use when stating:

// So in regards to alleviating emotional suffering I most certainly believe that, that's a huge reason that brings people to make a decision to use drugs. //
When describing interactions specifically with clients, another Service Worker articulated essentially the same perception when stating:

// ... my view on it is, is for that person, it's their way of dealing, it's functional in some respects in their way of dealing with the pain and suffering that life is bringing them at that point in time. //

Later in the interview conversation, this Informant reflected the same perception when stating:

// For whatever reason, because most of these people have had some type of pain, suffering, in their life, and that has been the best way that they've been able to deal with it at this point in time. //

The above statements by two different Informants reflect the same meaning. In each case these Informants make an explicit connection between emotional distress and a means of obtaining relief from that distress. This association directly reflects the first component of the SMH.

Other Service Workers expressed similar views to those above. One spoke of the form of relief obtained when discussing substance use when stating:

// ... there's particularly people who start [using substances] in teen years, it's my experience, or people suffering trauma, delayed trauma reactions, drugs are a great way to numb things out. //

This Informant led up to the statement above by discussing alcohol use, and then extended the ambit of substances used for self-medication to "drugs". Such identification of alcohol, illicit drugs, and illicit use of pharmaceutical drugs is typical of similar perceptions regarding self-medication articulated by other Informants.

However, not all Service Workers related substance use to severe emotional distress. Some identified substance use for relief of less intense emotional discomfort as self-medication. The following statement by one Service Worker is illustrative:

// ... there are also those people that use it as a coping strategy for a kind of distress. Or even no major distress. Often just minor discomfort, or just irritability. //

As my interpretation of interview conversations progressed, it became progressively apparent to me that Service Workers perceived self-medication to be a widely shared
motivation for substance use not only by Clients but also by the wider general population. In the cases of Clients the distress from which relief was sought was typically severe. In the cases of the wider population, the intensity of distress was by implication seen to be less. However, this differentiation did not recognise individuals in the wider population who experience extreme distress but do not seek help from Service Workers.

Statements regarding self-medication by others were not restricted to Service Workers. Many Clients expressed views which indicated their perceptions of self-medication by others corresponded closely to those of the Service Workers cited above.

When discussing getting support from friends as an alternative way of dealing with emotional distress, one Client linked personal self-medication to self-medication by others when stating:

// ... but the other thing is, if they've got a friend that's going through similar things, they say well, I get off, I take this particular drug, this, this, and this, and I start, I drink a lot because it makes me feel better, I forget all about it. //

This statement suggests that social interaction may influence individuals' self-medication. This theme is discussed further in a following chapter.

Other Clients similarly indicated they thought people other than themselves engage in self-medication using various substances. In particular, two Clients made observations which closely echoed each other. One stated that people (in general) use alcohol and more particularly other drugs such as cannabis and methamphetamine to "take their mind off problems". The other reflected this statement when saying this happened "quite a bit". Both indicated that a number of people they know personally self medicate.

I interpreted Service Workers' and Clients' perceptions regarding the applicability of the first component of the SMH - people use alcohol and other drugs in order to alleviate emotional distress - as being remarkably similar. Both groups saw self-medication as being a motivation for substance use both personally and across the general population. While self-medication might be naively seen to be more applicable to Clients, both Clients and Service Workers indicated they viewed self-medication not as something undertaken by a minority of the population, but rather a
motivation for alcohol and other drug use by many Australians. I further interpreted Informants' perceptions as closely reflecting Khantzian's specific articulation of the SMH. When initially providing a formal statement of the SMH, Khantzian describes the motivation for use of self-selected substances as "compelling" (1985, 1259), and continues to say that the "short term effects" of "drugs of choice" help users of those substances to "cope with distressful subjective states". This language is closely reflective of Informants' descriptions of substance use to alleviate emotional pain.

**Physical distress**

The SMH as proposed by Khantzian holds that individuals self-medicate in order to relieve emotional distress. This conception of self-medication does not address relief from physical discomfort.

Some Informants discussed self-medication in terms of alleviation of physical pain. A Service Worker spoke explicitly on this subject when discussing the circumstances of a particular client. The former stated:

// I work with a lot of clients who have suffered a lot of, say abuse, and family violence, and domestic violence. And some are very kind of, they specifically know that on certain days they might cop a beating, and they'll start drinking before hand to lessen the pain of the beating, stuff like that. //</n

This Informant then went on to discuss a specific instance:

// For this particular person I'm thinking of, the alcohol reduces the fear associated with anticipating the violence, and also that she, her compliance, because of being a bit drunk makes the beating a bit less, and she feels less pain with it as well. So, it has a clear function there for her. She never drunk to that extent before that kind of stuff happened. //</n

These statements indicate the Informant perceived alcohol use to satisfy two needs in this situation. First, alcohol use and subsequent intoxication served as an analgesic to reduce physical pain resulting from physical assault. Second, intoxication further served to reduce emotional distress deriving from the victim's anticipation of violence and consequent fear of physical pain.
A Client described use of alcohol to both alleviate emotional distress deriving from problems in a relationship and deal with physical pain from assault in similar terms. This Informant’s description of self-medication coincided closely with the perceptions of the Service Worker cited immediately above.

Another Service Worker recounted discussion with a client which identified similar multi-faceted motivations for illicit drug use. The following extract from that interview conversation provides insight:

// Informant

... I’ve seen drug use in domestic violence as well, a lot of victims, or should I say survivors, most of them survive it, but victims, they are pressured into using the drugs by the perpetrators, to make them happy. So a lot of people, there’s a lot of people that, a group of people that don’t do drugs because they want to, they’re forced into it.

Researcher

In that situation does the flipside occur. Do people use, do people that are on the receiving end of violence, do they use any substance as an anaesthetic?

Informant

Definitely.

Researcher

You know, so it doesn’t hurt as much?

Informant

Yes. I reckon, well, one they use to make the perpetrator happy, two they use it to numb out the perpetrator, and three they can use it as a happy medium to keep everything safe. For them. //

The latter part of this conversational exchange suggests the client in question was perceived to be self-medicating to reduce physical pain which resulted from domestic violence and to reduce anxiety which derived from the threat of violence. Such perceptions are consistent with those discussed above. Further, in the earlier part of this dialogue this Informant suggested a third, socially motivated motive for substance use. In participating in substance use with the perpetrator the client was perceived to
be complying with externally imposed social norms followed by the client's domestic partner. The issue of social influence is discussed further below.

In different circumstances but a corresponding context, a Client stated that withdrawal from prolonged heroin use involved considerable physical discomfort. Further use of heroin eliminated these physical symptoms. This Informant explicitly discussed heroin use in this context as self-medication. In this Informant's view withdrawal symptoms are an illness which can be cured through administration of a drug in a manner analogous to medication used to cure disease. This Informant continued to say that medically prescribed drugs provided to alleviate withdrawal symptoms are ineffective, leaving affected individuals with no alternative to self-medicating with an illegal drug. Informants' perceptions of the shortcomings of medically prescribed drugs are discussed in a following chapter.

In a similar context, another Client discussed the use of methadone as providing relief from both physical and mental discomfort deriving from heroin withdrawal when stating:

// But that was the only thing I took, was the methadone, to cure the crave, because opiates, you have the physical pain, but it's the mental too. //

This statement suggests motivation similar to that of the domestic violence victims referred to above. Methadone acted to relieve both physical pain and emotional distress. In this case, surrounding conversation suggested that the emotional distress being experienced derived from not only the anguish deriving from the physical pain resulting from withdrawal but also the underlying issues prompting self-medication in the first place.

A third Client provided a corresponding example of one drug being used to alleviate the effects of another drug's use. When discussing the use of various drugs, this Informant offered the view that cannabis may be used to alleviate the 'come down' following methamphetamine use, and in particular sustained use. This Informant spoke of the effects of methamphetamine in terms of intoxication and the subsequent "crash" as follows:

// You become like superman. ... Then the day you've got to crash, eventually when you crash, it's like, and then when people do crash they go to the pot to calm them down anyway. //
Surrounding dialogue indicated this Informant had considerable experience with methamphetamine users and cannabis use to reduce the effects of the "crash".

The preceding excerpts from interview conversations serve to illustrate perceptions by both Service Workers and Clients that motivation for self-medication is not restricted to relief from emotional distress. Rather, substance use is in some cases directed towards relief from physical pain, including withdrawal symptoms. Further, self-medication may seek to relieve both physical and emotional pain, and interrelation between the two. In summary, interview conversations indicated motivations for self-medication extended beyond relief of emotional distress, and included alleviation of physical pain.

This perception places self-medication in a context beyond that presented by Khantzian. Beginning in 1974 with his initial journal article which foreshadowed the SMH and extending through to 2008 in his book co-authored with Albanese, Khantzian confines consideration of self-medication to the relief of emotional distress. His initial articulation of the SMH refers explicitly to "painful emotional states" (1985, 1263; emphasis added), and Khantzian and Albanese subsequently describe the first component of the SMH in terms of "alleviating, removing, or changing human psychological suffering" (2008, 2; emphasis added). It is therefore clear that Khantzian did not consider self-medication as extending to relief of physical pain. Informants' perceptions regarding self-medication for relief of physical pain may therefore be seen as conceptually extending the SMH. While Khantzian takes a restricted view of pain and suffering, Informants perceived discomfort in wider terms.

"What works best"

The second component of the SMH proposes that when using alcohol and/or other drugs to alleviate emotional distress, individuals select the substance which is most effective in providing relief. As identified above, all Informants explicitly addressed the first component of the SMH - i.e. people self-medicate in order to alleviate emotional (and in some cases physical) distress. In contrast, only around half explicitly addressed the second component of the Hypothesis.
Informants discussing the efficacy of substances used for self-medication were consistent in the view that using the one which is most effective is desirable. A Client’s description:

// The one that works best ... //

is representative of perceptions articulated by other Informants addressing the issue. The same Informant continued to explicitly address the second component of the SMH when discussing the evaluation of substances by trial and error in order to identify the "best" one. After identifying cannabis as the substance which is most effective for providing relief from emotional distress, this Informant stated:

// I've tried some [intravenously administered substances], and decided that's not for me. //

Another Client indicated that for some people using more than one substance concurrently provided 'best' relief. This view was echoed by a Service Worker. In both cases these Informants indicated they were endeavouring to maximise relief. However, the majority of Informants expressing views on the second component of the SMH indicated that obtaining the 'best' substance is not always possible. In particular, cost was seen as limiting access to the substance which provides most effective relief. A Service Worker made this point clearly when stating:

// My experience is that in a lot of cases people don't actually use the drug which works best. They use the one which is most efficient for their circumstances. They can't afford more expensive drugs, and they just use what is available, which might be a four litre cask of cheap wine for example. //

This Informant later reinforced cost as a factor determining selection of substance when stating:

// And if you can afford it you use expensive ones. If you can't you'll go for cheap cask wine. //

Another Service Worker articulated a corresponding view when describing early-career experiences. This Informant stated:
That wasn't something I was aware of at all, but [I] repeatedly had clients say, you know, how mad they were, or frustrated they were, about being in the financial position they are because they couldn't use the particular substance that they wanted to use as much as they wanted to use it, or using it has caused them to be in the financial situation they’re in. //

This Informant’s reference to "repeated" statements by clients that cost was a factor in selection of substance suggested this perception was commonly held by those accessing the Informant’s services.

A Client who used heroin to alleviate emotional distress discussed the extent to which cost was an inhibiting factor in obtaining the drug of first choice. The following conversational exchange illustrates this perception:

// Informant

And, I mean, when you’re using three hundred dollars worth [of heroin] twice a day it's a lot of money.

Researcher

It's a lot of money.

Informant

And you can't keep it up. //

Surrounding dialogue further suggested tolerance was the underlying factor in limiting this Informant's access to drug of first choice. Increasing tolerance to the effects of heroin over time led to increasing use, which in turn led to increasing cost, which then became the factor limiting heroin use. This Informant subsequently used pharmaceutical drugs in combination with heroin to alleviate the effects of withdrawal.

The cases identified above suggest use of second choice drugs for self-medication was widespread. However, Informants' dialogue indicated those using substances for self-medication used the 'best' one which was available to them. This view is consistent with the underlying premise of the second component of the SMH. Individuals seek to maximise relief to the fullest extent possible.
The explicit statements above identifying cost as a factor when selecting a substance for the purpose of self-medication suggest the second component of the SMH as articulated by Khantzian may be viewed as an aspiration rather than an actual outcome. Informants' perceptions suggest the second component of the SMH might better be cast as selecting the 'best' from the range of substances which are available and affordable rather than the one which most effectively provides relief.

Cost was not the only factor perceived as determining choice of substance for self-medication. Other Informants identified the time it takes to provide relief as a factor determining selection of substance. The Client first quoted above in this section spoke of the substance which "works best" as:

// ... the one that works, like, sort of like straight away. //

Obtaining rapid relief was an important part of the reason for this Informant selecting cannabis for self-medication.

In the same vein, a Service Worker explicitly identified the importance of achieving relief quickly when stating:

// To be honest with you I think people are desperate. I think they're desperate to alleviate whatever it is. So I don't think they think about [what works "best"]. I think they're looking at what's going to get them the gain the quickest. //

This statement conveys the notion that the relevant individuals were experiencing severe distress, and that any measure of rapid relief was beneficial.

Some Informants perceived other factors as limiting access to "the one that works best". A Client stated that use of the preferred substance (in this case heroin) is influenced by "fitting in with the crowd". Procurement of an illicit drug such as heroin necessarily involves contact with those who provide it. Hence, "fitting in" with those associated with use and more particularly supply is both a prerequisite and potential limitation for access. Social influence is discussed further in a following chapter.

Another Client expressed a view which contradicted the second component of the SMH. This Informant advanced the view that at least some people are not aware that some substances may be more effective than others in providing relief. Such people
use a given substance in the hope of alleviating distress because they see others using that substance successfully. The statement:

// And people will just, well, it worked for this person, I'll try it, and even if it doesn't work for them, well OK, I'll keep doing it. //</

captures this view succinctly.

However, views contradicting the second component of the SMH were in the minority. The majority of Clients and Service Workers perceived that individuals select substances for the purpose of self-medication on the basis of availability and effectiveness in providing relief.

One consequence of limits on access to the very 'best' substance was use of more than one substance for self-medication. The experience of the Client quoted above who used pharmaceutical drugs in combination with limited amounts of heroin to reduce the severity of withdrawal illustrates both the Informant's desire to obtain relief and selection of substances (plural) which in combination were both accessible and most effective in reducing discomfort.

In summary, the second component of the SMH was perceived by Informants to generally apply. Within prevailing external constraints individuals seek to choose and use the substance which provides most effective relief. These views are closely reflective of the description of the second component of the SMH by Khantzian and Albanese (2008, 2) that "individuals navigate towards a certain drug because of what it does for them".

**Satisfy addiction**

Informants identified substance use in order to relieve withdrawal symptoms as one aspect of self-medication. The following discussion seeks to expand on this perception as it was communicated by several Informants.

About half of the Clients and about half of the Service Workers discussed substance use in the context of alleviating the effects of withdrawal from substance use, particularly opioids. A common thread throughout interview conversations was the perception that opioid withdrawal symptoms are intense.
A Client who self-identified as a heroin addict described the difference between discontinuing heroin use and discontinuing use of other drugs when describing discomfort caused by withdrawal. This Informant stated that methamphetamine use did not result in intense withdrawal symptoms but withdrawal from heroin use was agonising. The following excerpts capture the extent to which heroin withdrawal was debilitating:

// The first way I explained it was a few days on that, I was fine, and then one morning I'd wake up and it was like a heroin stamp on your head, a H. Just, you'd wake up, and just, you'd feel something wrong, you knew it, and you couldn't shake it. And that would take four days, and that was really draining. And I kept shaking that off, but it was, it just grinded me. //

This Informant continued to say that the only form of relief from withdrawal was to take more heroin:

// Informant

But the opiates just, the cycle just, and, yes. You just had to, had to take it to keep going, to survive. And you needed more and more and more, and then the more I worked, the more money I had, I had [a small business].

Researcher

Right.

Informant

The more I did, the more I spent on it, the more went into it, and it was just this cycle of life, that, it was just killing me. I just couldn't do it any more. And I fought it for years. //

In later conversation this Informant described the discomfort experienced during withdrawal as being emotional as well as physical. The succinct statement (quoted above in a related context) provides a simple and specific example of this perception:

// ... opiates, you have the physical pain, but it's the mental too. //

This Informant went on to describe withdrawal in terms of both "physical" and "mental" distress as follows:
// If it's your mind you can pretty much lock yourself in a room, put the TV on, and just ride it out for a few days. But when your body is just clashing with it, you're turning yourself inside out. You literally are. You can't control your bowels, you're throwing up, you're sneezing, you've got freezing cold running through you, and this just goes up and down, all day long. And it's just, it's shattering. It's soul shattering. //

This Informant indicated the combination of physical and emotional distress during heroin withdrawal is overwhelming. In surrounding dialogue this characterisation of withdrawal as being "shattering" was repeated.

In a related vein another Client discussed others' dependence as a consequence of substance use initially promoted by ready access to its supply. In this context this Informant stated:

// ... there's so much of it going around, and it just makes it very, very hard, and once they get into the habit of doing it, it's very hard to break the habit. It's like, like with smoking [cigarettes]. Once you start smoking it's very, very hard to stop. //

This Informant then said:

// ... so it's the same thing with alcohol and drugs. You know, it makes it very, very hard. Once you're sort of addicted to it, well, it's very hard, hard to do anything, so, and stop, stop doing it. //

In this case the Informant did not explicitly describe substance use as a means of obtaining relief from withdrawal symptoms. However, the implication is clear. The words "very, very hard to stop [use]" when "addicted" strongly suggest that cessation of use was seen to result in severe distress.

Other Clients identified "addiction" as a motivation for substance use. These statements were made in the context of reasons for use.

Discussion of relief from withdrawal symptoms was not confined to interview conversations with Clients. Service Workers recounted their clients' descriptions of the level of discomfort derived from withdrawal and consequent use of the relevant substance in order to obtain relief in similar terms. One Service Worker identified the need to relieve withdrawal symptoms in fundamental terms:
// I think when someone, like has a physiological addiction, and particularly to opiates, and alcohol actually, it's like a starving person looking for food all the time. Equivalent to that kind of desperation, and that single mindedness, and, you know, you look at, if you think about kind of Maslow's hierarchy of needs, that's a base need. So everything else gets completely missed out on.

This Informant continued to say:

// It's priorities. That's like food. Food's the most, it's the highest priority. Without food you die. //

This comparison of seeking relief from withdrawal from opiates and alcohol with satisfying hunger suggested this Informant perceived alleviation of symptoms as having the same force as the satisfaction of fundamental human needs.

Another Service Worker expressed a comparable view when describing the onset of dependence as a consequence of regular use of a substance which was initially used "for fun". The following exchange illustrates this perception:

// Informant
Then it turns into a habit and it's not a fun thing, it's actually a need.

Researcher
Yes.

Informant
It is a need because the people that are addicted to drugs, illicit drugs, that once were a party, now need it to survive.

Researcher
It's maintenance?

Informant
It's, it's maintenance because if they don't have it, then they're very sick people. //

This dialogue is illustrative of other Informants' perceptions of self-medication as a key reason for using alcohol and other drugs. It is reflective of their descriptions of
the effects of withdrawal and consequent continued use of the relevant substance to avoid the acute discomfort resulting from cessation of use.

This dialogue also illustrates the complex and interwoven nature of Informants' views regarding reasons why individuals use various substances.

These perceptions parallel those addressing relief from physical pain derived from domestic violence discussed above. Such commonality is to be expected, as in both cases Informants identified substance use as a means to reduce or relieve physical pain. However, in both cases Informants also identified relief in terms of alleviating emotional distress accompanying physical pain. These perceptions further illustrate Informants' extension of the meaning of 'pain' beyond Khantzian's more restricted ambit of emotional distress.

**PERSPECTIVES: APPLICABILITY OF THE SMH**

Informants conveyed a variety of perceptions regarding the overall applicability of the SMH. My interpretation of interview conversations suggests Informants perceived the SMH to be generally applicable, but identified limitations and expanded its ambit to varying extents. Themes concerning what constitutes distress and the nature of relief emerged. Informants also expressed views which drew attention to some of the assumptions implicit in Khantzian's articulation of the SMH. The following discussion summarises my interpretation of the ways in which Informants perceived the applicability of my simple description of the SMH.

**The SMH's first component: relief of emotional distress**

The first component of the SMH proposes that individuals engage in self-medication in order to alleviate emotional distress.

All Informants indicated they perceived substance use as a means of relieving emotional distress. Correspondingly, all Informants identified alleviation of emotional distress as a motivation for alcohol and other drug use.

Clients discussed self-medication in generally personal terms. They described the nature of their emotional discomfort and the substances they used in order to obtain relief. Clients generally described their emotional distress as being severe.
Correspondingly extreme causes of their distress were identified. Trauma, physical and mental abuse, relationship breakdowns, and persecution on the basis of sexual orientation were described as underlying causes. In most cases this emotional distress had been experienced over long periods.

Clients also discussed self-medication by others. Perceptions of the reasons for substance use by others closely reflected Informants' own reasons for self-medication, and the means to achieve relief were similar. When Clients discussed others self-medicating they spoke in terms consistent with their own experiences and actions.

Service Workers discussed self-medication to relieve severe emotional distress mostly in terms of experiences described by their clients. These experiences corresponded closely to those described by Clients, generally involving intense discomfort. This commonality is to be expected, as Clients and other clients of Service Workers are from the same group of people accessing services dealing with substance use.

Service Workers also discussed self-medication in personal terms. Such substance use was in response to discomfort which was generally less severe than that typically experienced by Clients. Further, Service Workers generally used alcohol (a legally available substance), whereas Clients used both legally available substances (alcohol and codeine) and a variety of illicit drugs (primarily cannabis, heroin, and methamphetamine).

It is reasonable to expect Clients to describe their distress as being more intense than that motivating personal self-medication by Service Workers. Clients generally access allied health services because of the severity of their distress. In contrast, Service Workers typically do not experience the same intensity of emotional anguish as that affecting Clients. However, Service Workers did use substances to alleviate lesser forms of discomfort.

These perceptions are consistent with the first component of the SMH as proposed by Khantzian. Individuals experience severe emotional distress and consequently self-medicate to obtain relief. Such correspondence between Informants' (and particularly Clients') perceptions and the first component of the SMH is reflective of the development of the SMH. In general terms, the environment in which the SMH was formulated and the environment in which this research was conducted are

3 Prior to 1 February 2018 codeine was available in Western Australia without medical prescription.
comparable. Khantzian worked as a psychiatrist in mental health facilities which assisted individuals with problems derived from substance use (Khantzian 1974, 69; 1985, 1262-1263; 1997, 237-239; Khantzian and Albanese 2008, 2-4). The Service Workers informing this research worked in organisations providing help to individuals adversely affected by alcohol and other drug use. While Khantzian's was a clinical psychiatric environment and Service Workers provided services in an allied health environment, the basic premise under which both operated was the same.

However, some Informants perceived substance use for the relief of physical pain as self-medication. Relief from physical pain resulting from domestic violence was seen by both Clients and Service Workers as a motivation for substance use. Such use was perceived as also alleviating anxiety derived from anticipation of violence and consequent physical pain. Substance use to alleviate a combination of physical discomfort and emotional distress resulting from withdrawal from opioid drugs was seen in a similar context. The substance from which withdrawal was being experienced (primarily heroin) was identified as the 'best' substance for providing relief. In other cases the use of a different drug was seen as directed at relieving the after effects of using a given substance. Cannabis was identified as relieving the after effects of sustained methamphetamine use, and antidepressants were used to reduce opioid withdrawal symptoms. In all cases, self-administered substances alleviated physical pain.

Khantzian (1997, 234-235; Khantzian and Albanese 2008) addresses relief of alcohol and opioid withdrawal through use of the same substance or (in the case of opioid use) methadone. However, he pays little attention to physical pain from other causes. Hence, Informants' perceptions of substance use as self-medication to relieve physical pain go beyond the scope of the SMH as proposed by Khantzian. Further, Informants' perceptions of substance use directed at alleviating emotional distress associated with physical pain constitute an aspect of self-medication not specifically addressed by the SMH. Hence, the ambit of Informants' views of self-medication to alleviate discomfort was wider than that considered by the first component of the SMH.
The SMH's second component: choice of substance

The second component of the SMH proposes that when self-medicating, individuals select and then use the substance which is most effective in providing relief.

Informants generally perceived use of the 'best' substance to be most desirable. This criterion implies the need for comparison of the effects of different substances in order to identify the 'best' one. One Informant explicitly described use of various substances on a trial and error basis in order to identify the one which was most effective. Others implied such comparisons were made. These perceptions reflect Khantzian's and Albanese's articulation of the second component of the SMH. They state (2008, 2) that individuals may experiment with various drugs in order to find the one which is most effective in providing relief.

However, some Informants indicated that using the 'best' substance is often not possible. Cost was seen as imposing a constraint on which substances may be acquired for self-medication. In an extreme case, the cost of the quantity of heroin required for effective self-medication in order to avoid withdrawal ran into many hundreds of dollars per day and was prohibitive. In other cases Informants described selection of cheap substances such as cask wine on the basis of price.

Other Informants identified speed of relief as a criterion for selection of substance. Those which provided relief quickly were seen to be preferable to those which took a long time to act. One Informant described this consideration in terms of "desperation" to obtain relief.

One Informant suggested that individuals may be ignorant of the effects of various substances due to lack of exposure and hence may not choose the 'best' out of ignorance.

These perceptions suggested Informants thought the second component of the SMH should be recast as a desired rather than actual an outcome. Khantzian (1985; 1987; 1999) consistently describes use of substance in terms of first choice rather than what is available. In contrast, Informants identified constraints on access, speed of effect, and ignorance as factors which may result in the 'best' substance not being used.

Restrictions on access was perceived to motivate concurrent use of more than one substance. Such action may be seen as seeking the 'best' outcome available within
prevailing constraints, but contradicts Khantzian's proposition that a single 'best' substance is used.

All Informants addressed the first component of the SMH - self-medication is directed at obtaining relief from distress (emotional and in some cases physical) - but only around half addressed the second component - individuals use the substance which is most effective in providing relief. I interpreted this outcome to reflect Informants' perceptions of the relative importance of the two components of the SMH. This outcome is reflective of studies addressing the applicability of the SMH. Discussion above indicates that a number of studies which variously support, reject, or provide partial support for the SMH address the first component of the Hypothesis but do not consider the second component.

This outcome also is reflective of my research methodology. I did not enter interview conversations with a pre-existing list of questions. Rather, I described both components of the SMH in simple terms and asked Informants to articulate their views of its applicability. I allowed Informants to respond in their own terms and discuss what they saw as relevant and important. As such I did not explicitly request discussion of the separate components of the SMH. Rather, I sought Informants' views of the SMH in total. In doing so, I wanted Informants to discuss what they saw as relevant. The more limited discussion of the second component of the SMH suggests that Informants may have perceived the first component to be more relevant.

The SMH and other theories of substance use

When proposing and discussing the SMH, Khantzian acknowledges that self-medication is not the only motivation for substance use. He explicitly states that "there are other determinants of addiction" (1985, 1263), and makes similar statements which identify other theories explaining addiction (1997, 232; 1999, 1-2; Khantzian and Albanese 2008, 3-5, 7-11).

However, Khantzian confers particular status on the SMH as an explanation for addiction. He (and his co-authors) identify relief from emotional distress as a particularly important motivation for substance use which leads to dependence (Khantzian et al 1974, 163-164; Khantzian 1974, 61, 69; 1985, 1259, 1263; 1997, 231, 237; 1999, 18, 121-122; Khantzian and Albanese 2008, xvi, 49, 121-126). In
particular, Khantzian privileges self-medication as a motive for substance use above desire to enhance 'good' feelings. When reviewing "theories of addiction" Khantzian (1974, 61) describes literature proposing the "pleasurable aspects of taking drugs" as placing "undue emphasis" on such a motivation. In subsequent discussion of motivation, he reiterates this view (1974, 61, 64). In his article formally proposing the SMH, Khantzian (1985, 1259, 1263) describes "euphoria" (along with "peer group pressure" and other motivations) as a "popular or simplistic" explanation for substance use.

In contrast, the individuals informing this research perceived "having fun" and social influences (including social culture) as important alternative motivations for substance use. These perceptions are discussed further in a following chapter. When articulating these perceptions Informants did not rank or prioritise motivations for use. In particular, Informants did not perceive self-medication (or any other motivation) to be the primary reason for substance use.

These perceptions do not reflect Khantzian's view of the particular applicability of the SMH. Hence, Informants' perceptions of the SMH as one of several explanations for substance use may be seen as qualification of the overall status of the Hypothesis.

**PERSPECTIVES: AMBIT OF SELF-MEDICATION**

Intertwined with Informants' specific perceptions of the applicability of the SMH were wider perceptions of its ambit. In particular, perceptions of what constitutes distress and what constitutes relief from distress were articulated. In doing so, Informants expressed views which illuminate the contexts in which Khantzian considers self-medication and proposes the SMH.

**Emotional distress and "attitude adjustment"**

Informants described self-medication as attempts to relieve severe emotional distress and in some cases physical pain. However, some also discussed self-medication in terms of what one Informant described as "attitude adjustment". This form of self-medication involved use of substances, mostly alcohol but also other drugs, to relieve stress and tension experienced in everyday life. Relief from stress caused by doing
paid work was seen as a prime example. This level of emotional discomfort was perceived as considerably less intense that that experienced by many Clients.

Several Informants (Clients and Service Workers) spoke of general pressures of life causing feelings of stress which could be relieved by substance use. For example, one Service Worker stated:

// If you look at the way life has changed over the decades, I personally view it as life is more stressful than it used to be. I think there’s a lot more pressures in employment, sometimes. //

This Informant made this comment in the context of previous and subsequent conversation in which this Informant discussed linkages between general pressures of life and substance use.

A Client described alcohol use as a means of alleviating stress derived from employment when stating:

// Well certainly, certainly that's a release of tension, of, perhaps in a workplace there's, they've been working all day, and some people in jobs they don't like, some people in jobs that are just stressful, and they want a release, and Friday drinks is, it's the Friday social get together, that's the catalyst for being able to have a drink. //

In making this statement this Informant alluded to social interaction as a means of relieving tension. However, this Informant went on to indicate that alcohol consumption is the primary means of achieving relief when saying:

// But from personal experience it's not just [interacting with work colleagues] socially, it's going home and having a drink because it's Friday and you can have a drink. //

I then asked this Informant whether or not such use of alcohol is common, and received the response:

// Yes. I think it's universal. Well, universal in western society. //

In making these statements this Informant emphasised the role of the effects of alcohol consumption in obtaining relief. In later conversation this Informant explicitly referred to such alcohol consumption as "attitude adjustment".
A Service Worker spoke of alleviating work-related pressures and consequent stress. In this context this Informant discussed alcohol use as facilitating relief when stating:

// I mean, it's, it's fairly common to, you know, like a bunch of adults might sit around after a really big week at work and go, oh, Friday night, oh, really need a glass of wine. //

Another Service Worker articulated a similar view when discussing conversations with clients, but extended the ambit of perceived sources of stress and means of relief when stating:

// ... we have a lot of very high functioning drug or alcohol users [as clients] that we work with. So they're holding down jobs, they're raising children, they're, so for some people it might just be an aid to winding down, or they associate it with winding down, and it might have the effect of helping them wind down because it has this kind of analgesic effect. //

This Informant identified family issues as sources of stress and "drugs" as a means of achieving what another Informant described as "attitude adjustment".

The above excerpts and relevant parts of other interview conversations suggested some Informants perceived alcohol (in particular) to be used consciously and deliberately to relieve stress and tension derived from employment activities and family issues. Such action reflects the first component of the SMH. Individuals use a substance in order to relieve emotional discomfort.

Khantzian describes individuals practicing self-medication as seeking relief from severe emotional distress. Khantzian (1985, 1263; 1997, 234-237) describes the emotional distress felt by individuals he treated as "painful emotional states", "extreme states of emotions", and "pain". Khantzian and Albanese (2008, 40-41) similarly describe "intense emotions" and "intolerable feelings" which are "often unbearable". They subsequently (2008, 79) state that "addicted people suffer greatly".

Informants' conversations brought into focus the perceived severity of the discomfort being experienced. Informants who discussed having drinks on Friday as a means of "winding down" implied their level of discomfort was less than that experienced by Informants cited above who experienced heroin withdrawal, physical assault, and severe emotional trauma. This suggested levels of discomfort vary between individuals. One Client made the latter point when stating:
What was "small" to this Informant was important and debilitating to the other individuals concerned.

Notwithstanding differences in severity, Informants clearly characterised "attitude adjustment" after a week at work or dealing with day to day family issues as self-medication. "Release of tension" and "winding down" suggested discomfort which was real but not "extreme" or "unbearable". Further, "attitude adjustment" was practiced by individuals who did not perceive themselves as having problems derived from alcohol and other drug use. However, a Service Worker quoted above identified "high functioning drug or alcohol users" as individuals who use substances to "wind down" but experience difficulties as a consequence of such use. This suggests "attitude adjustment" was seen as prevalent and practiced by individuals who do not see themselves as having problems with substance use, as well as people who demonstrably do identify their use as a problem. Further, some individuals experienced more emotional distress deriving from everyday life than others. However, in all cases substance use to relieve levels of stress and similar discomfort experienced in everyday life was seen to be conceptually similar to corresponding efforts to alleviate extreme emotional distress.

Informants' characterisation of "attitude adjustment" as a form of self-medication extend the ambit of self-medication beyond that underpinning Khantzian's articulation of the SMH. Informants perceived having a glass of wine after work on a Friday afternoon in order to relieve stress accumulated during the working week in the same general context as substance use directed at relieving extreme emotional distress and/or physical pain. This conception of "attitude adjustment" as self-medication suggested Informants perceived severity of distress as a continuum, ranging from mild to extreme. Substance use to alleviate discomfort anywhere within this continuum was identified as self-medication. These views go beyond Khantzian's proposition that self-medication is directed at relief from extreme emotional distress.
"Feeling numb" and "feeling better"

The SMH is predicated on the assumption that substance use actually alleviates emotional distress. In itself, this is a simple and appealing proposition. Alcohol and other drugs (illicit and prescribed) alter consciousness. If such change of emotional state provides the desired outcome then at least at a superficial level substance use has realised its desired function. However, the statement of the SMH by Khantzian and Albanese (2008, 2) (on which I have based my research) does not explicitly address the form of relief sought and realised.

In the description of the SMH I conveyed to Informants I did not address the specific nature or extent of relief sought or obtained. I did not want to influence Informants' discussion of their perceptions of what constitutes desirable relief. Consequently, I did not explicitly raise this issue.

Clients and Service Workers articulated perceptions regarding the nature of relief provided by substance use in two related but separate ways. Informants implicitly and explicitly differentiated between "feeling numb" and "feeling better" as desired outcomes of self-medication. In simple terms, "feeling numb" involved removal of distress much in the way that an anaesthetic removes physical pain, while "feeling better" involved a change in overall emotional state from less satisfactory to more satisfactory.

Service Workers generally described the outcomes of self-medication in terms analogous to physical anaesthesia. At the very beginning of one interview conversation, one Service Worker responded to my initial description of the SMH by stating:

// [The Self-Medication Hypothesis] doesn't tell the whole story, but I believe that a lot of drug users use to numb their pain, numb their feelings. ... And to self medicate themselves. Yes. //

A second Service Worker referred to "feeling numb" when discussing the applicability of the SMH and further proposing that social culture influences individuals' alcohol and other drug use. This Informant identified desire to comply with cultural norms as a motivator for alcohol use, but went on to say:
But, having said that, yes, there's particularly people who start in teen years, it's my experience, or people suffering trauma, delayed trauma reactions, drugs are a great way to numb things out.

In surrounding conversation this Informant exemplified the ways in which all Informants articulated perceptions of multiple conceptions and considerations in their interview conversations. The first component of the SMH was perceived as being applicable, but self-medication was identified as not the only motivation for substance use. Further, relief was characterised in a specific way.

Another Service Worker made a similar reference to self-medication in terms of "feeling numb" when discussing drug dependence and stating:

// But I do think in the majority of cases [self-medication] is to, to either numb pain, or to, yes, alleviate ... suffering is a good word. //

Later in the same conversation this Informant discussed alcohol use for self-medication as practiced by an individual who was identified as not dependent. The Informant observed:

// Yes, but I do think it all stems down to emotional suffering. I think so, in the example [involving people known to the Informant] I've seen [self-medication] be used because [an individual experienced emotional distress when interacting with some family members]. Therefore in that situation, to prevent that, those feelings, they get to numb it. //

Another Service Worker discussed self-medication as not the only motivation for substance use. However, when discussing alternative motivations this Informant returned to the original subject of self-medication and stated:

// Maybe it reduces that feeling, the discomfort, or acts as a numbing of that discomfort to a degree //

These excerpts are representative of perceptions regarding feeling "numb" expressed by other Service Workers. Self-medication was seen as a means of neutralising or blocking out unpleasant emotional feelings. As such, the desired effect of substance use was seen to be selective, and confined to particular aspects of an individual's overall emotional state. "Numb" was in these cases perceived to neutralise specific feelings such as those deriving from memories of traumatic events, the feeling of
physical pain, and the anticipation of physical pain. In other cases, feeling "numb" pervaded all emotions. In either case, "numb" was seen as removing distress rather than promoting a "better" overall emotional state.

A few Clients described alleviation of emotional and physical distress through "feeling numb" in positive terms. In this context one Informant discussed motivations for young people to use alcohol and other drugs. This Informant stated that children who live in disadvantaged family situations may self-medicate. When expanding on this statement the Informant referred to the results of self-medication as:

// Well, it's sort of, it dulls the pain. //

In making this statement and in surrounding conversation this Informant identified the desired outcome of self-medication as removal of discomfort but not changes to other aspects of overall emotional state.

Another Client discussed differences in effect between various strains of cannabis and the relationship between these differences and the medical use of cannabis. This Informant advanced the personal view that one particular strain of cannabis does not result in change of emotional state but rather reduces physical pain only. The following conversational exchange illustrated this view:

// Informant

I can go, I can go putting [a particular strain of cannabis] in front of you ... it'll actually do nothing for you, all it'll do is numb you, like an anaesthetic.

Researcher

Right. It takes away pain?

Informant

It takes away pain.

Researcher

But you don't get stoned?

Informant

No, you don't get stoned. It takes away pain. //
In this case this Informant was specifically addressing relief of chronic physical pain such as that derived from ailments such as cancer. This Informant indicated that use of the given strain of cannabis did not result in a change of emotional state. The user obtained relief from physical pain but was otherwise unaffected by use of the drug. However, most Clients perceived "feeling numb" as different to feeling "better". A minority of Clients saw "numb" as an indeterminate state. This perception was exemplified by the following dialogue:

// Informant

So I figured, you know, if I start taking these pills [i.e. antidepressants] my life will get better. I'll feel better about things. No, they just stopped me from wanting to drink, I suppose, to deal with things.

Researcher

Yes.

Informant

I actually felt quite numb on them.

Researcher

Right.

Informant

But this is all just a personal experience with it.

Researcher

Yes, and in this case, am I hearing it right, that numb is not good, numb is numb, rather than numb being a desirable way to be?

Informant

Yes. Numb is so neutral. So ...

Researcher

Yes.

Informant

I'd say it's neutral.
In surrounding conversation this Informant identified feeling "better" as the desired outcome of substance use and differentiated between feeling "quite numb" and feeling "better about things". Removing emotional distress caused by cravings for alcohol was only part of this Informant's aim when using an antidepressant drug. "Feeling better" involved more than only reducing the desire to consume alcohol, as self-medication with alcohol was directed at alleviating severe depression. "Feeling better" involved not only suppressing cravings for alcohol but also not experiencing depression.

Other Clients saw feeling "numb" as undesirable.

The Informant quoted above regarding the use of cannabis to alleviate physical pain discussed relief of emotional distress in different terms. This Informant described the desired outcome of self-medication as allowing the Informant to safely perform work-related functions. In this context the Informant discussed side effects of medically prescribed drugs as follows:

// I'm on call, right. I get a phone call during the night. If I'm on sleeping pills or depression [medication] I can't get up at two o'clock in the morning and just go out and [perform work related functions]. //

This Informant did not explicitly use the word "numb". However, the context of surrounding conversation suggested this Informant perceived that the relevant medically prescribed drugs impaired physical and mental functioning in a detrimental way.

Another Client (quoted above describing the effects of heroin withdrawal) identified feeling "numb" in a similar negative way. When describing personal experiences of escalating heroin use culminating in self-described addiction, this Informant stated:

// ... you are that numb, and then when you, I needed my mind, it just got slowed down that much that things got really hard, and I was starting to lose control. //
This Informant saw "numb" as negatively affecting cognitive functions. The statements "I needed my mind", and "I was starting to lose control" indicated this Informant considered mental capabilities as being diminished when feeling "numb", and that such impairment had serious consequences. In this case "feeling numb" was the direct result of self-medication with a substance of choice. However, this Informant went on to describe "feeling numb" in a related context. In subsequent conversation this Informant spoke of feeling "numb" when using other drugs in combination with heroin. The following conversational exchange provides further illustration of that Informant's view that feeling "numb" is undesirable and distinctly different from feeling "better":

// Informant

And because my tolerance [to opioid drugs] was so high, in the end I was using other medications too, to work with it.

Researcher

Yes.

Informant

And that's why, I reckon if I just stayed on the morphine or the heroin I would have been all right. It's the other ones that build up in your system which totally numbs you in the end.

The "other ones" referred to above were a variety of medically prescribed antidepressant drugs. Subsequent discussion of concurrent use of heroin and antidepressants further suggested this Informant considered feeling "numb" to be undesirable and counterproductive. The following statement illustrates this perception:

// So if you just take, you know, a hundred milligrams of Seroquel or a couple of Xanax then you're OK. You don't need to keep bumping it up [i.e. increasing dose due to tolerance]. That controls it for a year or two. And then, it's like using [heroin], you still need more and more and more as you go. And then ... that's where I need to think, I couldn't think any more.

The statement "I couldn't think any more" is reflective of the previous statement "I needed my mind", indicating this Informant held a firm view that "numb" involved
cognitive impairment and such impairment is undesirable. This view was embodied in the statement "I was starting to lose control". These perceptions mirror the Client quoted above who stated that the side effects of medically prescribed drugs prevented 'normal' functioning.

Other Informants perceived self-medication as more than removal of unpleasant emotional feelings. Clients in particular indicated that feeling "better" was desirable.

One Client discussed motivation for alcohol use in terms of connoisseurs appreciating wine and whisky. This Informant then indicated that people using alcohol in this way may over time come to realise that drinking in this way may result in feeling "better" holistically. At the beginning of the interview conversation this Informant identified a linkage between self-medication and appreciation of the drink itself as follows:

// Informant

... there's a blurred line, blurred line, and I think of all the people that, that drink alcohol for appreciation of what it, what it contains, whether it's whisky or wine, it doesn't have to be just wine, I would have to say that there's a portion, I don't know how many, would, that, that's the extent of their, of their intake. But then there's the other portion that extends their intake. [Laughter]. They start off with the appreciation of the product, whether it's wine or whisky or brandy or whatever.

Researcher

Yes.

Informant

And enjoy it so much that they continue to drink more often, and it's that point at which you have to say well why do they, why do they do that. And they do that because it makes them feel better. For whatever reason //

This exchange then continued:

// Researcher

... in that case what do you think gets people to a situation where they do become dependent on it?

Informant
Oh, because they do start drinking, they enjoy it, but at the same time their lives are, whatever's happening in their lives, they need to compensate for that, and so because they feel much, feel better or good when they've been drinking, that leads them to using alcohol, then, in this case, as a mechanism to make, make their life better. //

This and surrounding dialogue suggested this Informant perceived alcohol use as improving some individuals' lives in a general sense, rather than neutralising only unpleasant feelings.

Not all Service Workers perceived self-medication in terms of "feeling numb". One Service Worker explicitly discussed "happiness" when discussing the temporal dimension of self-medication:

// I think happiness is another factor. You get people that feel happy when they drink alcohol, and for a short period of time, and then they have their feelings contradicted. So, one thing, that constant, you know, feeling of happiness, because they're not getting it in other areas that they want. //

This Informant identified the effects of alcohol as providing "happiness" whereas other activities did not. Self-medication was seen as a means of achieving a desired holistic emotional state.

Another Informant articulated in some detail the difference between "feeling numb" and "feeling better". The Client previously quoted as saying feeling "numb" is "neutral" went on to say:

// Informant

But the thing is antidepressants don't give you a buzz. They don't give me a high, they don't make you feel good. Antidepressants will sort of bring you to a level where you are able to function, every day, and you're not seriously depressed and going aahhhhh, but they're not giving you a good effect, they're not making you super happy. That you've got to do yourself.

Researcher

Yes.

Informant
And that's the key. The doctors don't tell you that, either. Like, because when you go on antidepressants, or at least I did, I had an assumption that it would make me happy, because they're also known as happy pills. //

This Informant was explicit when describing the difference between "feeling numb" and "feeling better". On the one hand, "feeling numb" meant that particular feelings causing distress were no longer present. In this case, those feelings were craving for alcohol. On the other hand, "feeling numb" was quite different to feeling "better" as the effect of the antidepressant drugs being used did not promote "happiness". The statement "That you've got to do yourself" was illuminating. It suggested this Informant saw not craving for alcohol and being "happy" as separate but necessary parts of feeling "better".

In summary, Clients and Service Workers generally perceived the outcomes of self-medication in different ways. Clients generally perceived effective self-medication as resulting in feeling "better". This involved not only obtaining relief from specific aspects of emotional and physical distress but also achieving holistic improvement in overall emotional state. In contrast, Service Workers typically described as feeling "numb" as the desired and actual outcome of self-medication. Feeling "numb" neutralised severe emotional distress derived from specific causes, such as reactions to emotionally traumatic experiences and physical assault.

The distinction between feeling "numb" and feeling "better" may at first glance appear to small. In both cases the aim of self-medication is to no longer experience emotional states which cause distress. Further, no longer experiencing strong unpleasant emotions may in itself be seen as feeling "better". Relief from discomfort is desirable. However, Clients perceived self-medication generally in terms of feeling "better" while Service Workers generally saw "numb" as its outcome. Hence, it is appropriate to consider the contexts in which Clients and Service Workers perceived the desired outcomes of self-medication.

The Clients who differentiated between feeling "numb" and feeling "better" self-medicated in order to alleviate strong emotional distress and physical pain. The Client who discussed the use of heroin and pharmaceutical drugs to alleviate the effects of heroin withdrawal described these effects as being very severe. Other Clients indicated they self-medicated in order to obtain relief from memories of
extreme trauma. Yet others self-medicated in order to alleviate severe emotional distress with other origins, including alcohol use to lessen physical pain from domestic violence and emotional distress derived from anticipation of that pain. In each of these cases the discomfort being experienced was extreme.

In contrast, Service Workers who saw feeling "numb" as the desired outcome of self-medication did not indicate they had personal experience of self-medication in order to alleviate extreme distress. Rather, these Service Workers discussed their personal experiences of self-medication in terms of reducing less intense emotional discomfort. Typically, these Informants described personal alcohol use as a means of "winding down" from stress derived from their work and relieving less intense emotional feelings arising from the course of their daily lives. Therefore, these Service Workers did not have personal experiences which were comparable to those of the relevant Clients.

However, one Service Worker did explicitly acknowledge a difference between feeling "numb" and feeling "better" when stating:

// The shame there, ... is that when people numb their feelings they want to numb the bad feelings, they also end up numbing the good feelings. //

In this context feeling "numb" was seen as an improvement over the discomfort which would otherwise have been experienced, but not facilitating feeling "better".

Clients' views of feeling "better" after self-medicating more closely reflect discussion of the development of the SMH. When describing motivations for seeking relief, Khantzian views relief in holistic terms. In his journal article predating his formal articulation of the SMH Khantzian (1974, 64-66) describes narcotics use in terms of stabilising his clients' overall emotional and behavioural states. Similarly, in his article initially articulating the SMH Khantzian (1985, 1262-1263) describes the effects of opiates and cocaine as having wide ranging beneficial effects on his clients. In his later book with Albanese substance use is described as making clients "feel normal" (2008, 40-41). Khantzian consistently describes the results of substance use in holistic, positive terms. Hence, his view of the consequences of self-medication and Informants' perceptions of "feeling better" are closely aligned. In this respect Clients' perceptions generally indicated greater applicability of the SMH.
**Self-medication: perceivedambits**

Informants discussing "attitude adjustment" identified use of alcohol and (to a lesser extent) other drugs as a means of alleviating emotional discomfort. In doing so, their conception of substance use is consistent with Khantzian's view of self-medication. However, in direct contrast to the SMH as articulated by Khantzian, Informants identified "attitude adjustment" as being practiced by individuals who are not addicts and seek relief from comparatively minor emotional discomfort. Further, Informants described the intended and realised forms of relief obtained through self-medication in different terms. Feeling "numb" and feeling "better" were seen as two different outcomes with different levels of desirability.

Differences between Khantzian's conception of self-medication as relief from extreme emotional distress and Informants' conceptions of "attitude adjustment" as constituting self-medication may be seen to derive from the way in which Khantzian developed the SMH and the purpose of the Hypothesis.

Khantzian considered self-medication in a clinical context and from the perspectives of individuals adversely affected by substance use, and not in terms of members of the general population. In contrast, both Clients and Service Workers discussed self-medication in terms of their own experiences and those of others. As such, their views were not confined to perceptions of the experiences of "addicts" accessing psychiatric services. Rather, Informants addressed self-medication in a wider context.

Khantzian and the counsellors informing this research provided services to relatively similar groups of clients. Hence, despite the differences in professional training (none of the counsellors informing this research were qualified in psychiatry), both Khantzian and counsellors interacted with clients with generally comparable substance use issues. However, clients of street outreach services may or may not be accessing (or have previously accessed) counselling services at the time of contact in the street. Hence, they may or may not be experiencing personal difficulties deriving from substance use to the same extent as individuals accessing counselling.

Therefore, Clients' experiences and personal situations were broader than those of Khantzian's clients. Correspondingly, the street outreach workers informing this research were trained in social work and community services. Hence, the range of
Service Workers' experiences was different and in some cases broader than Khantzian's.

Differences in perceptions of the ambit of the SMH reflect differences in the way Khantzian and (collectively) the individuals informing this research and I approached the Hypothesis. Khantzian sought to provide an explanation for addiction to alcohol and other drugs. In contrast, my interview conversations addressed the use of alcohol and other drugs for the purpose of alleviating emotional distress. Self-medication was the starting point of discussion and not a proposed explanation for addiction.

**CONCLUSIONS: PERCEPTIONS OF THE SELF-MEDICATION HYPOTHESIS**

When asked to express views regarding the applicability of the SMH, every Informant articulated detailed perceptions that self-medication is a common motivation for alcohol and other drug use. They spoke of self-medication in personal terms and in terms of others. However, all Informants also identified other common motivations for substance use, indicating that self-medication is one of several equally important reasons for substance use. These perceptions conceptually dilute the SMH as proposed by Khantzian, as Khantzian proposes that relief of emotional distress is the primary motivation for substance use.

When discussing relief from distress, Informants identified alleviation of physical pain resulting from physical violence and substance withdrawal as a motive for self-medication. This perception conceptually extends self-medication beyond that identified by Khantzian, who considers distress solely in terms of emotional discomfort. Informants further discussed distress in terms of a continuum, ranging from extreme emotional and physical pain at one extreme to stress and tension experienced in everyday life. Correspondingly, self-medication was seen to range from use of substances in substantial quantities to "attitude adjustment" through the consumption of a glass of wine at the end of the working week. These perceptions further extend the concept of self-medication, as Khantzian describes self-medication as a means of relieving severe emotional distress.

Clients and Service Workers perceived the nature of relief sought and obtained through self-medication in different ways. Service Workers generally described relief in terms similar to the effects of an anaesthetic, whereby individuals seek to "numb"
emotional and physical pain. In contrast, Clients differentiated between feeling "numb" and "feeling better". To them, feeling "numb" was at best an absence of distress and at worst disabling, whereas feeling "better" constituted an enjoyable and desirable emotional and physical state.

In relative terms Informants' perceptions regarding the SMH focused more on its first component – substance use relieves distress – compared to the second component – choice of substance used. However, all Informants expressed views that use of the substance which most effectively alleviated distress was desirable. However, when discussing selection of substance, some Informants characterised choice of the 'best' substance as being constrained by factors including cost, availability, and speed of effect. Hence, choice was seen by some to be an aspiration rather than realised outcome.

Overall, Informants' perceived the principles underlying the SMH as being directly applicable to consideration of substance use for the purpose of self-medication. Alleviating distress through the use of the most effective substance was seen as a widespread reason for alcohol and other drug use. However, Informants' perceptions conceptually extended both components of the SMH beyond what Khantzian proposed. Distress was seen to be physical as well as emotional, ranging from intolerable to mild, and selection of the 'best' substance was seen to be constrained.
CHAPTER 6: PERCEPTIONS: ALTERNATIVE MOTIVATIONS FOR SUBSTANCE USE

INTRODUCTION

When I was interpreting what Informants were saying during interview conversations I endeavoured to understand both the specific thoughts, views, and ideas of each individual Informant, and concurrently form my own mental picture of commonalities and differences between them. In the latter context I was struck by the commonality between Informants' perceptions that self-medication is a common motivation for alcohol and other drug use, but that it is by no means the only motivation. Some explicitly identified self-medication as not the only motivation, while others implied this by explicitly discussing alternative reasons for use. Both Clients and Service Workers expressed these views in similar ways and in similar terms. Alternative motivations for substance use identified by Informants included "fun", cultural norms and values, and social influence. The latter two were widely perceived as closely intertwined. Similarities between my interpretation of Informants' perceptions and perspectives advanced in the academic literature are discussed.

NO SINGLE DOMINANT MOTIVATION

Viewed holistically, Informants perceived self-medication as one of several motivations for substance use. In some cases, self-medication was seen to be intertwined with other motivations. "Having fun" and social influences were perceived as motivations in their own right. In some cases they may lead to and/or complement self-medication. Such perceptions indicated Informants perceived that substance use may not be reflective of a dominant motivation.

Explicit and implicit views

The majority of Informants explicitly stated self-medication is not the only explanation for substance use. By way of example, when responding to my initial question regarding perceptions of the applicability of the SMH a Client stated:

// I think, I think that [the Self-Medication Hypothesis] is a sound hypothesis.
I don't think that self medication is the only reason why people use alcohol and drugs, particularly young people. //
This Informant continued to discuss social influence as motivating substance use before returning to discuss the SMH in further detail.

Another Client (quoted above) provided an alternative motivation for consuming alcohol when saying:

// Well, I would agree that, I would agree with [self-medication being a motivation for alcohol and other drug use]. I would also say that particularly with alcohol though, that could be categorised in two areas, and one is where, where it's used to alleviate their anxieties or whatever they're feeling, but there's, particularly with alcohol, there's an aspect which is like food, which is an appreciation of the, of the product. //

This Informant discussed alcohol use in terms of connoisseurs enjoying the consumption of wine and whisky in some detail. In doing so this Informant subsequently identified a link between drinking for enjoyment and progressive realisation that alcohol use can relieve emotional distress. This connection exemplified other Informants' perceptions of relationships between notionally different motivations for substance use.

Service Workers articulated similar perceptions. One responded to my initial question by saying:

// On its own, as a stand-alone theory I don't think it's applicable in all cases. It's applicable in some. //

Another Service Worker provided a similar response:

// Oh, I think, you know, sometimes the self medication is the way people get into it, and other times other reasons are why people get into it. //

Some Clients and Service Workers did not explicitly state that they did not perceive self-medication to be the only motivation for substance use. However, their explicit discussion of motivations for substance use other than self-medication clearly indicated they perceived the SMH as one of several explanations for alcohol and/or other drug consumption.

Informants' discussion of self-medication as being one of several prominent motivations for substance use is reflective of conclusions drawn by studies investigating the applicability of the SMH. For example, Boys et al (2001) identified
eighteen "functions" of drug use. Of these, five involve "changing mood" while the remaining thirteen are directed at other outcomes. More specifically, Becker (1963) and Bandura (1977a; 1977b) discuss substance use in terms of social learning, and MacAndrew and Edgerton (1969) take a broader perspective when proposing that substance use is socially sanctioned as "time out". These motivations may be seen as alternatives to self-medication.

Informants' discussions of motivations other than self-medication were extensive and detailed. The following sections briefly address the most commonly held perceptions.

"Drugs are fun"

All Informants identified "having fun" as a motivation for using alcohol and other drugs. In contrast to perceptions of the outcomes of self-medication, Clients and Service Workers perceived "fun" in similar contexts and in similar terms. "Fun" was characterised variously as "having a good time", "feeling good", and experiencing "pleasure". As such, "fun" was perceived in positive terms as something which is desirable and commonly sought.

One Client described "having fun" through the use of an illicit drug in the following way:

// You get into all that sort of stuff, like cocaine, that's a bit of a party drug, good sex afterwards, or whatever. //

Describing cocaine as a "party drug" and referring to "good sex afterwards" suggests this Informant perceived "fun" as having enjoyable experiences. When discussing other issues, this Informant discussed methamphetamine use in the context of "having fun".

Another Client provided a similar evaluation of alcohol use as facilitating "fun" when stating:

// And I know I have friends of mine, and I know myself, you know, I've had a fun night out when I've had a few drinks, and I know that the alcohol does contribute to that, so I do know that if I go out with a bunch of friends and I'm going to have a few drinks I'm most likely going to have a good night out. ... Fun is certainly a motivator. //
In common with the previous description of "fun", "a good night out" suggests "fun" as enjoyment. Surrounding conversation conveyed perceptions of alcohol and other drugs being associated with social functions and desirable social interaction.

When discussing alternative motivations for substance use a Service Worker perceived a deficiency in theories of substance use predicated on social influence when stating:

// I think what's missing from all of those [theories proposing social influence] is pleasure. I think a lot of people use drugs and alcohol because it is pleasurable to do it. It gives them a good feeling, a nice feeling. And often they, they seek that out again, and again. That nice feeling. //</p>

Experiencing "pleasure" and a "nice feeling" directly suggest enjoyment and "having fun". Repeating the "nice feeling" "again and again" suggests it is very desirable, and hence a motivator for substance use.

Another Service Worker provided insight into reasons for use of illicit drugs rather than alcohol to have "fun" when stating:

// For fun. I know it's huge among, gosh, it wasn't so much when I was at school ... but in the last decade drug use has become really prevalent, just for reasons to have a good time. And you actually see it these days as being cheaper than alcohol, so they'll go out to a festival and think well great, we'll have a pill and, yeah, we'll have a really good time, and it's cheaper than buying drinks for the entire day. So I think that's like a huge thing. //</p>

In making this statement, this Informant linked selection criteria with enjoyment. In common with other Informants' views regarding the choice of substance for the purpose of self-medication, this Informant identified cost as influencing which substance was used for "having fun". A Client similarly identified cost as a potential limitation on alcohol use. This linkage between enjoyment and cost is reflective of views regarding the applicability of the second component of the SMH. In both cases choice of substance is at least in part determined by financial considerations. However, the prevailing view held by both Clients and Service Workers was that alcohol and other drugs are readily available and used widely for recreational purposes.
Statements identifying "party" and "good sex", "a good night out", "nice feeling", and "a really good time" all reflect aspects of "fun". The following statements by other Informants explicitly convey the same perception:

// And you know a lot of people take drugs or alcohol because it makes you feel good and it's fun. //

and

// Oh, yes, doing it for fun. //

and

// Fun is the main reason why everyone gets into that kind of stuff. //

Perceptions of substance use facilitating "fun" were closely aligned between Clients and Service Workers. Both groups associated "fun" with enjoyment, pleasure, and relaxation.

Informants generally did not perceive any particular substance as being the best for "having fun". Alcohol and illicit drugs were both seen as facilitating enjoyable recreation. However, when speaking of "fun" and substance use in personal terms Service Workers consistently referred to alcohol, whereas Clients generally spoke in terms of their preferred substance, principally alcohol, cannabis, heroin, and methamphetamine.

Informants' perceptions of "fun" involved perceptions of social interaction. Alcohol consumption during social events involves interpersonal social contact, and "attitude adjustment" at the pub after work involves interaction between individuals with common experiences in the workplace. Similarly, illicit substances are typically used in social situations. Hence, substance use was not perceived as the sole means of facilitating "fun". Rather, substance use was seen as intertwined with social interaction.

Informants' perceptions of substance use being motivated by having "fun" are reflective of the positions of several authors discussed above. Boys et al (2001) explicitly reflect Informants' observations that substance use facilitates "good sex" when identifying "enhanced feelings when having sex" as a "function" of drug use. Measham et al (1998, 22) report the findings of a study of young people's attitudes towards drugs conducted in the United Kingdom between 1991 and 1996. Of those
respondents indicating positive experiences of drug use, between one third and one half "had fun". O'Malley and Valverde (2004) discuss evolution of social attitudes towards alcohol and other drug use, and conclude that such use has been and remains widespread. Moore (2008) proposes that public discussion of the pursuit of pleasure deriving from substance use has been stifled over time. In a similar vein, Measham and Brain (2005) discuss binge drinking in terms of both culture and enjoyment. It is therefore evident that this study's Informants perceived "having fun" in terms similar to individuals in different places and at different times.

**Culture**

All Informants discussed alcohol and other drug use in terms of what they described as "culture" and "social influence". These two conceptions were intertwined. The following discussion addresses "culture" and "social influence" under two separate headings and in a linear fashion in the interests of simplicity of presentation. However, the two sections should be considered together as they address interlinked and overlapping perceptions.

Around half of all Informants explicitly identified "culture" as influencing the use of alcohol and other drugs. All of these Informants identified alcohol consumption as an aspect of Australian and wider Western culture.

A Client articulated the view that alcohol consumption is part of Australia's culture simply and definitively when stating:

// I believe Australia has a massive drinking culture. ... if people want to hang out with their friends, generally they'll be drinking. //

A Service Worker expressed the same view in similar terms:

// I mean I think alcohol is so commonplace in our society it's not even funny, and it's considered such a norm to drink that a lot of the time I really forget that when we are talking about, you know, [alcohol and other drugs], that alcohol is really even included in that. But, you know, it is. It's a huge part of that. //

Another Service Worker was emphatic when discussing alcohol use in wider terms of national culture:
// Anglo-Celtic culture, it's seems to me, has this surreal almost, relationship to alcohol. And, we just have normalised almost functional alcoholism. In this country, and certainly if you've ever been to Scotland, yes, you would normalise it there. //

Use of the words "massive", "commonplace", and "normalised" reflects the emphasis these Informants placed on alcohol use as being ingrained in Australian culture. In surrounding conversation these and other Informants described personal experiences of drinking in social situations as reflecting social norms.

Clients and Service Workers articulated perceptions of alcohol consumption as an integral part of Australian culture in similar terms. Both groups saw alcohol use as widespread, socially acceptable, and in some cases expected by those involved in social contact.

Some Informants described alcohol consumption in terms of social sub-cultures. One Client discussed alcohol use by cricket players in the Australian national team:

// With cricket players it's a very, um, yes, it's a thing because most cricket players drink. And, like, you know, Boony and all that, David Boon, they all used to drink, even Dennis Lillee. And, um, Rodney Marsh, you'd see with king brownies [740 millilitre beer bottles], and stuff like that. //

This Informant subsequently implied alcohol consumption by these elite players implicitly promoted acceptance of alcohol use in the wider community.

Elite players were not the only cricketers identified as being part of a 'drinking culture'. The same Informant described personal experiences of suburban cricketers consuming large quantities of alcohol. Further, such consumption was seen to be 'normal'.

Other Informants identified alcohol consumption as an aspect of workplace culture. When speaking about alcohol consumption as part of Australian culture, one Client described drinking as:

// Down the pub. You know, after work. I think for males especially, my dad, growing up, you know, all his work mates would go to the pub straight after work. They'd finish their day [location redacted] and dad was basically the designated driver for all of them, they'd all get hammered at the pub. //
Another Client discussed corporate managers drinking at company-sponsored social functions in terms of legitimising alcohol consumption by staff in order to promote conversation. The following statement encapsulates this perception:

// It does occur to me that they [senior managers] might be there being seen to be drinking in order to relieve the anxiety of those around them and let them say what they feel. //

The two Informants cited immediately above identified workplace drinking in two contexts. The first described alcohol consumption in a setting away from the workplace - i.e. "down the pub". The second discussed alcohol provision and consumption within workplace settings - i.e. at events sponsored by the employing organisation. In both cases the end result was the same. The first Informant subsequently spoke of those participating "getting hammered", and the second was less colloquial when subsequently describing employees as "drunk". In both cases the use of alcohol in order to become intoxicated was perceived in terms of what Deal and Kennedy (1982) describe as "the way we do things around here" when defining workplace culture.

A smaller number of Informants discussed use of other substances in terms of culture. One Service Worker described methamphetamine use from within a cultural perspective. When describing interaction with a client, this Informant stated:

// But for some people their social norm is to get plastered on meth all weekend, and create some havoc and have some fun with it. And that's just a different norm. And I work with clients, that that has been their norm for generations, that kind of behaviour. //

This Informant went on to further describe cultural influence to be inter-generational and multi-faceted when stating:

// Just as, like that's what dad did, that's what everyone around me does, that's what you do. In the same way for other people it is to have a glass of wine when they get home from work. //

Drawing similarities between methamphetamine use and alcohol use suggests this Informant perceived social culture to transcend both alcohol and other drugs. This Informant also linked "social norms" with "having fun". This association is reflective of perceptions articulated by other Informants.
All Informants who discussed the relationship between social culture and substance use indicated a strong linkage between the two. None identified the influence of either as being tenuous or in question.

These perceptions are reflective of literature discussed above. At a broad level, Informants discussed the influences of culture mainly on alcohol consumption. This parallels the works of Bateson (1987), Denzin (1993), Madsen (1974), MacAndrew and Edgerton (1969), and Measham and Brain (2005), who have written extensively on cultural influences relating to alcohol consumption. However, some Informants discussed illicit drug use in terms of culture, reflecting analysis and commentary by Measham et al (1998), O'Malley and Valverde (2004), and Parker et al (2002).

At a more specific level, several Informants discussed social culture as legitimising alcohol use. The Informant quoted above who discussed "Anglo-Celtic culture" used the word "normalised" when discussing the interaction between culture and alcohol consumption. This is reflective of Measham's and Brain's observation that "public drunkenness is tolerated" (2005, 263) and their discussion of binge drinking as reflecting a "new culture of intoxication" (2005, 265). They subsequently (2005, 267-269) discuss alcohol as being "recommodified" through the availability of a wider range of drinks including high strength beers and alcoholic lemonades, advertising which portrays alcohol consumption as an element of desirable lifestyles, and upgrading of venues dispensing alcohol. Such "recommodification" has lead to a widespread view that "going out to get drunk" is a part of a "good night out". It is therefore apparent that Measham and Brain (2005) directly relate increased alcohol use, and excessive alcohol use in particular, to changes in cultural values.

The literature discussed above also addresses consumption of illicit drugs in terms culture. Measham et al (1998) and Parker et al (2002), discuss "normalization" of illicit drug use in terms of its acceptance in society over time. Measham et al (1998, 14-15) discuss social perceptions of illicit drug use in the United Kingdom progressively shifting from "deviance" to "normality". Parker et al (2002, 944-945) discuss increased availability and easy access to illicit drugs in terms of social networks comprising "friends of friends" rather than sustained efforts by drug dealers to sell their wares. Further, experimentation by young people trying different drugs reflects wide acceptability of a range of substances. They conclude (2005, 948-949) that there are "multiple indicative signs" of illicit drug use being progressively
accepted by society in the United Kingdom, and that distinctions between licit and illicit substance use are becoming "blurred".

Another Informant (quoted above) discussed alcohol use by cricket players. Such players and their social environments may be seen to be subcultures, analogous to "drug cultures" identified by Becker (1963; 1967) and "dance culture" in the United Kingdom discussed by Measham et al (1998), Parker et al (2002), and Measham and Brain (2005).

The concept of "normalisation" is directly linked to concepts of deviance. Parker et al make this point explicitly when proposing (2002, 942-944) that normalisation is a process whereby formerly "stigmatized or deviant" individuals or groups become accepted into mainstream society. As such, the concept of normalisation may be seen as a "barometer" of changes in "social behaviour" and "cultural perspectives". It is therefore notable that Informants did not explicitly emphasise or even discuss in any detail perceptions of cultural acceptance in terms of deviant behaviour. I interpreted this lack of focus on deviance to reflect Service Workers' non-judgemental attitudes towards their clients and related substance use. I further interpreted Clients' positions to potentially reflect normalisation in their personal worldviews.

When discussing social culture and alcohol and other drug use, Informants indicated that cultural norms can exert pressure on individuals to join others in substance use. In doing so, Informants suggested that social influence is an important and common motivator for alcohol and other drug use.

**Social influence**

Clients and Service Workers consistently described "social influence" as a factor motivating the use alcohol and other drugs. Such influence was seen in several contexts.

As identified above, "social influence" and "culture" were seen as overlapping concepts. Hence, this section should be considered together with the section addressing culture immediately above.

A Client described alcohol consumption in terms of enhancing social status amongst peers. In doing so this Informant identified interacting motivators for young people to drink when stating:
// I certainly see it quite rife among young people, you know, trying to attain that cool, cool factor, or cool status. You know, you're drinking not just because of the fact that you're drinking alcohol but also the fact that you're a rule breaker too. You know, that's, that's quite a cool thing to do. So it certainly is an important motivator for young people to start taking drugs or drinking alcohol. //

Other Informants viewed substance use by individuals in group settings as reactive compliance with group norms. In this context another Client discussed drinking in social situations in the following simple terms:

// ... if you don't drink you don't seem to fit in. //

This statement suggested alcohol consumption in specific social situations is widely perceived as 'normal' and hence expected by those involved. This view was conveyed in more explicit terms by a Service Worker who stated:

// I think people get into problem level drinking through social; the connection between any and every social event with alcohol drinking, the fact that we've normalised [it]. //

This Informant subsequently discussed a work group which consumed considerable quantities of alcohol every day after work. Group members did not consciously think about their alcohol use. Rather, such use was taken for granted by all involved.

"Normalisation" of substance use was seen by several Informants as involving peers exerting pressure on group members to practice and hence conform to what others in the group do. The following statement by a Service Worker exemplifies this view:

// I think that [motivation to use substances is] quite multi-faceted, and I think that a lot of the time the people that get addicted to drugs from a young age may do so out of, you know, trying it for peer pressure reasons. //

This Informant made this comment when discussing the way in which young people in particular become dependent on illicit drugs and non-prescribed use of pharmaceutical drugs such as codeine. In subsequent conversation this Informant further discussed alcohol use with peers in social situations as leading to dependence.
A Client indicated norms regarding alcohol use vary between social groups. Some social groups may endorse heavy consumption while others may consider more moderate use to be appropriate. The following dialogue illustrates this perception:

// ... sometimes you can be in with a group of people and the standard is not really to drink a lot, whereas you can go to another setting with a whole bunch of friends and it's acceptable to get completely drunk, and like pass out and stuff. //</

This Informant went on to identify nightclub patrons as a "group" typically wanting to consume large quantities of alcohol.

In contrast to Informants who perceived a positive linkage between "culture" and "having fun", one Client related social influence to having "fun" in a more negative way when addressing substance use in general:

// I suspect that a lot of people who use, the reason that it's fun are in fact doing it either for peer pressure or under peer pressure or because of, to relieve social anxiety. //</

This statement suggests the Informant perceived individuals as either the initiators or recipients of social pressure. Further, this Informant perceived a link between emotional discomfort in the form of anxiety and substance use as self-medication. In this case "social anxiety" could feasibly be that derived from pressures to conform, wider social anxiety, or a combination.

A Service Worker spoke of the mass media exerting social influence on the population at large when discussing what is portrayed in popular entertainment:

// You look at the media. It's seen as having fun to go out, like you see so many movies, so many TV shows. You know, some shows are even set in a bar. Like Cheers. Like, I remember watching that [in the past], but, you know, there's so many shows that are like, it promotes alcohol in a positive way, or, you know, you see these characters having fun off their faces. That's one thing. I think people think oh OK, so alcohol equals fun. Alcohol means me and my mates have a great time and do stupid things, but it's funny. //</

References to "having fun" while intoxicated and alcohol use at least partly legitimising "stupid" behaviour suggested this Informant perceived the television
program as sending a message that alcohol use is acceptable and potentially socially beneficial.

The preceding discussion addresses social influence in general terms. However some Informants described forms of social influence in more detail. In particular, several Informants discussed social influence in terms of learning from others.

A Service Worker described individuals' uptake of a particular substance as the result of observation of peers' behaviour:

// And they see how maybe from their friends, if they're all using a certain substance, what their effects are on it, and they go oh, I want to feel like them. And then they start using with their friends and they go oh, I actually like this feeling, or they don't see a problem because everyone else is doing it, or their family is doing it, or their brother or sister, whoever. I suppose, maybe it's role models that are doing it. //

Reference to "role models" suggested those adopting use of a particular substance are influenced by others who are held in high regard. In subsequent conversation this Informant further identified family members in particular as "role models". Discussion of this perception was followed by dialogue indicating individuals may follow social group behaviour in order to achieve a "sense of belonging".

Other Service Workers articulated similar views. In particular, these Informants perceived family environments as having strong influence on children who use alcohol and other drugs. One Service Worker explicitly identified uptake of substance use as the consequence of learning through observation of members of relevant social groups:

// I think definitely it's used to hide and help their emotions, but it's also sometimes a learned behaviour, too. I, I find that if, it's like monkey see monkey do. If someone's in that environment, born into that environment, and everyone in that environment is doing it, sometimes it's a learned behaviour. //

A Client expressed a similar perception when stating:

// And, and in that, to that extent they've learned that, not consciously learned, but just, just subconsciously learned that that's a way of being able to, to solve
In this case social learning was perceived as something which happens subliminally. The recipient is not taught in an explicit manner. Rather, observations of behaviours and their causes and effects lead individuals to make decisions regarding substance use based on their lived experience.

In this context a Service Worker described social learning as beginning in childhood as follows:

"// How I see that is, is so multi-generational drug use, or alcohol use. And young people feeling really comfortable with heading into that, that kind of use because they are familiar with it, they understand it, they've seen it before in their family history, and they've seen it growing up. //"

The following conversational exchange with another Service Worker indicated this Informant perceived a connection between social learning and self-medication:

"// Informant
Like sometimes people get into it because they're, their family members are doing it around them, or ... Researcher Yes. Informant And teach people to do it, how to find people, yes, you know, yes, people are self medicating because they're sad, or something's happened in their life, that they really can't live in the reality any more, so they want to get, like, you know, fucked up to deal with everything. //"

By implication the statement "how to find people" suggested that "teaching" may extend beyond substance use in itself and involve passing on the means to access illicit drugs, which could include acquisition for self-medication.

The statements immediately above and other conversations suggested a complex relationship between substance use and self-medication. Young children may live in social environments where substance use is prevalent and hence learn that such use is
'normal'. However, at least initially children may not understand the motives for use by those around them. Subsequently, those children may learn from others that self-medication may be a reason for substance use, or they may discover self-medication themselves through their personal experiences.

One Client offered a different view of learning which may be seen to incorporate some but not all of the elements of the perceptions discussed immediately above. This Informant suggested that at least some individuals do not consciously decide to self-medicate, but rather do so unconsciously. When discussing alcohol use by adults this Informant stated:

// ... to that extent they've learned that, not consciously learned, but just, just subconsciously learned that that's a way of being able to, to solve their issues. //</

This Informant made this comment in the context of discussing transitions in motivations for alcohol use from "having fun" to self-medicating. Inherent in this line of conversation was the perception that individuals do not necessarily make conscious plans to self-medicate, but rather experience relief from emotional distress vicariously when drinking for enjoyment and in situations where cultural and social influences promote consumption.

The preceding discussion identifies "social influence" as perceived in a number of ways. Substance use directed at achieving social status is a proactive motivation, whereby the given individual seeks to influence the perceptions of others. In other cases, substance use may be a reaction to influences by others. Social pressure to conform to group norms and practices involves initiation by those promoting compliance, and reaction by those complying. Such pressure may be explicit or implicit. Most Informants spoke of pressure to use substances as being an expectation rather than a explicitly spoken prerequisite for social interaction, but the majority perceived implicit pressure to be strong. Several spoke of not "fitting in" when not consuming alcohol in social situations. These perceptions are reflective of views and propositions advanced in the literature discussed above. Coomber et al (2013) propose that close relationships with individuals and groups who use substances result in similar substance use. They propose that social deprivation and alienation from the mainstream of society leads some individuals to adopt an "alternative" lifestyle in
which substance use is widely practiced. Such use then results in those individuals being labelled as "deviant", which causes further alienation, and so on in a self-reinforcing feedback loop. At a wider level, social class is identified (2013, 70-71) as providing context for the formation of attitudes towards substance use. They observe that in western societies alcohol consumption is socially expected at ceremonies such as weddings and during occasions including meals together and weekend social gatherings. Measham's et al (1998) discussion of dance culture strongly suggests shared social values of nightclub patrons towards illicit drugs promotes their use. Similarly, Measham's and Brain's (2005) discussion of shots of alcoholic spirits being aggressively dispensed in bars suggests social pressure to accept them. At a broader level, MacAndrew and Edgerton (1969) provide examples of indigenous cultures which engage in ritual alcohol consumption where all are expected to participate.

One Informant perceived humorous portrayal of alcohol consumption and consequent intoxication in popular entertainment as a broader social influence promoting alcohol use. This comment is reflective of the broader discussion of the role of media and advertising by Measham and Brain (2005).

"Social influence" was also perceived directly in terms of social learning. Most Informants viewed social learning as a process of observing the behaviours and actions of family members and following their example. This view is reflective of Bandura's (1977a; 1977b) theory of social learning, which in essence proposes that children and adults observe and then imitate the behaviour and actions of others. The former are then influenced to adopt or reject observed behaviours by the responses of others to their actions. Similarly, when discussing their concept of 'time out', MacAndrew and Edgerton (1969, 88) propose that individuals learn about drunkenness from the ways their society treats drunkenness, and as a consequence confirm their society's teachings. This statement may be seen as reflective of Informants who described social influence in terms of both encouragement and pressure for legal and illegal substance use.

Social influence and compliance with cultural norms were perceived by Informants as important and common motivations for alcohol and other drug use. However, not all Informants perceived social factors as being independent of self-medication. Some saw social influence as facilitating substance use directed towards relief of emotional discomfort.
"Experimentation"

Some Informants identified "experimentation" as a motive for initially using alcohol and other drugs. One Client discussed using cannabis for the first time after previously having considerable experience with alcohol use. This Informant stated:

// So I tried [cannabis] because I thought well, it's not going to kill me. You can't overdose on it. //

In this case a person known by the Informant was a cannabis user. The Informant indicated that ready access to the drug was a factor in deciding to try another drug.

Another Client first started using alcohol and a variety of illicit drugs as self-described "experiments" to determine their effects and whether these effects were enjoyable.

Although these Informants described uptake of substance use in terms of experimentation, it is apparent that "trying it" was facilitated by social contact with individuals who had access to relevant substances and were themselves users. This suggests a considerable overlap between the notion of experimentation and notions of social influence discussed above.

Experimentation is consistent with the second component of the SMH. In order to determine the substance which is most effective in providing relief from emotional distress it is necessary to experience and then compare the effects of different substances. Similarly, the results of experimentation facilitate informed decision making when selecting substances to enhance "having fun". In both cases identification and then use of the 'best' substance maximises the benefits obtained from use.
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CHAPTER 7: PERCEPTIONS OF CLINICAL MEDICATION

INTRODUCTION

At its outset, this research focused on eliciting perceptions of the applicability of the Self-Medication Hypothesis. However, as discussed above, all Informants identified other motivations for alcohol and other drug use.

Alternative motivations for substance use was not the only theme to emerge from interview conversations. As I engaged in successive interview conversations Informants discussed use of medically prescribed drugs time and time again. I interpreted this as a key theme. Consequently, in later interviews I asked Informants to share with me their perceptions of medically prescribed drugs. In doing so I posed the question in general terms to allow Informants to respond from within their own contexts and perspectives and discuss what they saw as relevant. Informants consistently indicated they saw the acquisition and use of medically prescribed drugs as unsatisfactory in various ways.

The extent and variety of Informants' perceptions of the efficacy of medically prescribed drugs lead me to identify them as collectively constituting an emergent theme to be reported in its own right. Consequently this chapter addresses that theme.

PERCEPTIONS OF MEDICALLY PRESCRIBED DRUGS

The obvious question - why not use prescribed medication?

Many pharmaceutical drugs have been developed specifically to alleviate emotional distress, and medical professionals prescribe these drugs in considerable quantities. The SMH explicitly addresses selection and use of non-prescribed substances which are seen to have effects ostensibly provided by prescription drugs. I therefore began to think about why individuals self-medicate when medically prescribed drugs are available.

During the course of my research an Informant explicitly reflected this question back to me. In the middle of an interview conversation a Client spontaneously and forcefully posed the question: if legal drugs are available, why do people use illicit
drugs to self medicate? The rhetorical way this question was put to me illustrates this Informant's vehemence:

if they [i.e. medically prescribed drugs] are so fucking great why the fuck would you do that [i.e. self-medicate]?

Informants' specific and wider perceptions of the utility and effects of medically prescribed drugs variously address this question.

"[They] just don't work"

The Informant quoted above asking why individuals self-medicate in preference to using medically prescribed drugs was scathing when conveying personal perceptions of the efficacy of such substances. This Informant continued to say that medically prescribed drugs in general, and benzodiazepines in particular, do not provide relief of emotional distress (including but not limited to depression and anxiety) as effectively as illicit drugs. These statements were made using similar language and with the same intensity as when posing the question: "why the fuck would you do that?". This Informant made it abundantly clear to me that medically prescribed drugs are inferior to illicit drugs for providing relief. This perception was shared by the majority of Informants.

Another Client was less expressive but articulated the same perception when stating that drugs prescribed to alleviate emotional distress "just don't work". This Informant went on to say medically prescribed antidepressants "turn you into a zombie".

A third Client described the effect of long term use of antidepressants as similar to those of heroin use in some respects. This Informant described developing tolerance to medically prescribed drugs and experiencing impaired cognitive capabilities when stating:

// So if you just take, you know, a hundred milligrams of Seroquel or a couple of Xanax then you're OK. You don't need to keep [increasing dose]. That controls it for a year or two. And then, it's like using [heroin], you still need more and more and more as you go. And then you, and that's where I need to think, I couldn't think any more.

Researcher
Yes.

Informant

*And I was just a dribbling, dribbling idiot. //*

The statement "I couldn't think any more" and self-description as a "dribbling idiot" are reflective of becoming a "zombie". Both Informants perceived the effects of antidepressants as debilitating and undesirable.

Another Client discussed the use of cannabis as preferable to prescription medication for providing relief from emotional discomfort derived from witnessing traumatic events. When describing the effects of antidepressant drugs this Informant stated:

*// You can't function. You can't function. //*

Surrounding conversation indicated "functioning" involved fitness to perform paid work. This Informant identified such impairment as preventing the pursuit of a 'normal' life.

An interview conversation with a Service Worker elicited a similar perception. This Informant initially discussed relief of physical as well as emotional pain, identified use of some substances as leading to dependence, and indicated that medically prescribed drugs are in some cases as addictive as illicit drugs. The conversation then turned to relief of emotional distress. When discussing clients' attempts to substitute medically prescribed drugs for illicit drugs this Informant stated:

*// ... they go to the doctor and the doctor puts them on Xanax and Valium, and [inaudible word], whatever the latest, newest antidepressant is at the moment, and, you know, or go to methadone, or whatever. Whichever issue they're presenting with. And that's why a lot of these people that I'm seeing, you know, if they're presenting with depression or anxiety, and I [write a report on the consultation] [they say] don't send it to my doctor because they'll just increase my medication. //*

This Informant continued to describe the effects of medically prescribed drugs:

*// ... it's the antidepressants, and it's the mood stabilisers, and then it's the relaxants, which, you know, I've been told by people are the worst. Like the Xanax, and the Valiums, and that, are the ones that give them bad side effects and hard to, to get off. //*
This conversation suggested to me that this Service Worker's clients perceived the intended and actual effects of medically prescribed drugs in distinctly separate terms. Increases in dosage were seen as making an existing problem at minimum no better or more likely worse. My interpretation was predicated on this Service Worker's having participated in a sufficient number of conversations with clients to form a collective opinion regarding "bad side effects".

Other Informants articulated similar perceptions. Clients and Service Workers perceived impairment of cognitive functions in similar terms. These "side effects" were perceived as serious, and imposing unacceptable limitations on the everyday lives of those using medically prescribed drugs.

Other Informants identified as an issue the time it takes for some medically prescribed drugs to take effect. One Client made this point when discussing self-medication with cannabis as preferable to taking antidepressant drugs. When discussing the relative efficacy of prescribed and illicit substances this Informant stated:

// Yes, like, I feel a lot better, I don't feel as bad, nervous, like, um, I mean, because I take the pills, then I go off the pills but like, um, smoking [cannabis], it works, it gives me a better result. //

I then clarified that "the pills" were medically prescribed. The Informant responded that the "pills" were antidepressants, and continued to say:

Yes, yes. [Cannabis] works better. For me, like, um, if I've been off the pills, um, off my medication for a while and go back on, it takes a while to work, but the marijuana, it works like straight away, you know what I'm saying, you know what I mean. //

This Informant viewed "taking a while to work" as undesirable.

In surrounding conversation this Informant described getting a "better result" from cannabis use not only in terms of time to take effect but also in terms of relief provided. When further identifying cannabis as the preferred substance this Informant indicated medically prescribed drugs did not alleviate emotional distress as well as cannabis:

// Informant
[Cannabis is] more instant and more, how do you say, I suppose stronger, maybe. It's not quite the right word, but you know what I mean.

Researcher

Would I be wrong in saying more effective.

Informant

Yes, that's the word. //

This Informant then went on to say:

// Like, I'm on [an antidepressant drug] and like I'm supposed to take one a day, but like I was taking like two a day and they weren't doing nothing [sic]. //

This Informant perceived the effects of the relevant medically prescribed antidepressant as inferior to those from cannabis on two counts. First, the drug did not provide adequate relief even with increased dosage. Doubling daily intake had little or no effect. Second, the prescribed antidepressant took an unacceptable time to act.

This perception of some medically prescribed antidepressants not "working" for some time was echoed by a Service Worker, who indicated some take "three weeks" to have sufficient effect to provide relief from emotional distress.

Another Client discussed the nature of relief provided by medically prescribed drugs. When discussing the relative benefits of alcohol and antidepressants this Informant stated:

// But the thing is antidepressants don't give you a buzz. They don't give me a high, they don't make you feel good. Antidepressants will sort of bring you to a level where you are able to function, every day, and you're not seriously depressed and going aaahhhh, but they're not giving you a good effect, they're not making you super happy. That you've got to do yourself. //

This part of this interview conversation reflects previous discussion of the difference between "feeling numb" and "feeling better". This Informant described the outcome of taking antidepressants as "feeling numb" and described this personal state as "not good, not bad, just existing, being there". This Informant saw "just existing" as
preferable to experiencing depression but differentiated between "existing" and
"feeling better". This Informant made this point explicitly when stating:

// I had an assumption that [antidepressants] would make me happy, because
they're also known as happy pills. //

"Happiness" was this Informant's desired emotional state. Medically prescribed
antidepressants did not provide that state. As such, antidepressants did not provide
what was sought by this Informant and as such did not "work".

The preceding discussion reflects my interpretation that Informants perceived
medically prescribed drugs as not "working" in several contexts. Some Informants
identified the effects of medically prescribed drugs as resulting in disorientation and
unacceptable impairment of physical and cognitive functions. The Informant quoted
immediately above perceived the effects of antidepressants as inadequate rather than
debilitating, but nevertheless unsatisfactory. Informants also identified the time it
takes for some antidepressants to take effect as a deficiency. Overall, these
perceptions paint a picture of self-medication being preferable because the individuals
involved were able to identify and then use substances which "worked" in ways
perceived as being "better".

Such use of self-chosen substances in preference to medically prescribed drugs is
consistent with the second component of the SMH. Individuals selected substances
which "worked best" - i.e. were most effective in providing relief. In the cases at
hand, medically prescribed drugs were perceived as not satisfying that criterion, and
self-selected substances were perceived as substantially more effective. At this point
it is relevant to note that Khantzian (1974; 1985; 1997; 1999) engages in very little
discussion of clinically prescribed medication. However, Khantzian and Albanese do
briefly address medical prescription. They discuss (2008, 42-47) various classes of
drugs when addressing "drug preference". Discussion of "sedatives" focuses on
alcohol and only briefly addresses barbiturates and benzodiazepines. Similarly,
discussion of "stimulants" is dominated by consideration of illicit drugs, primarily
cocaine and amphetamines. Khantzian and Albanese discuss "medication" primarily
in terms of treatment of addiction. Discussion centres on the uses and applications of
drugs such as methadone, naltrexone, and buprenorphine. It is therefore apparent that
Khantzian implicitly acknowledged illicit substances to offer superior outcomes
compared to medically prescribed drugs, as he does not address comparisons between self-selected and medically prescribed drugs.

**Antidepressants and opioids**

The preceding discussion identifying Informants' perceptions of medically prescribed drugs "not working" focuses on antidepressant drugs commonly prescribed to relieve emotional distress. However, Informants also perceived opioid drugs, such as codeine, morphine, and heroin as alleviating emotional discomfort. Codeine and morphine are typically prescribed to relieve physical pain but not emotional distress. Hence, when stating that medically prescribed drugs "do not work" Informants spoke in terms of pharmaceutical drugs prescribed specifically for relief of emotional distress.

**Difficult to access**

Efficacy was not the only issue discussed by Informants. The majority of Informants identified ease of access to alcohol and illicit other drugs combined with difficulties in accessing medically prescribed drugs as reasons for self-medication.

When discussing time and inconvenience as a factor constraining access to medically prescribed drugs one Client stated:

// And, you know, like any, any kind of social service that you access, it means you've got to fit that into your life that you are living, and how easy is it to take time off work these days to go to appointments that you might need, or something like that. So perhaps reaching for the bottle might be more convenient than going to a doctor's appointment or what have you. //

A different Client identified individuals on low incomes as being constrained by the cost of access to medical professionals. This Informant discussed inconvenience and cost as factors when stating:

// Yes. Depending on where you are. Some areas, it's easier to go, get to see a doctor, and that. Also, if you're in, having a major problem with financing, and your particular doctor doesn't bulk bill, they can't afford to go and do that. //
A third Client identified bureaucratic procedures and privacy concerns as reasons for using non-prescribed substances:

// The procedures that you are required to go through and the fact you get on record for, for prescription drugs is probably part of that availability thing, yes. //</p>

Informants perceived time constraints, ease of access to non-prescribed substances, cost, bureaucratic procedures, and privacy as reasons why self-medication is preferable in many cases. However, legally available drugs which do not require prescription by a medical professional were generally seen as easy to obtain. Several Informants explicitly discussed the availability of such drugs. The following extract from an interview conversation with a Service Worker exemplifies these perceptions:

// ... you'd see people come in, and that was before they had the recording of, selling you know all the codeine, the pseudoephedrine and all that, before they started [imposing limitations on purchases] people would come in and buy boxes and boxes of it. //</p>

Other Service Workers made similar comments regarding the unconstrained availability and consequent acquisition and use of codeine in particular 4.

In contrast to perceptions of difficulties of access limiting the use of medically prescribed drugs, a few Informants indicated they thought it is easy to obtain medically prescribed drugs. A Client stated:

// Yes, she [a person known to the Informant] used to be, had anxiety and all that. Well I've seen her first hand, she goes doctor shopping, and she gets Valium, she gets dexies, she gets whatever she wanted by the handful, prescription after [prescription]. //</p>

This Informant discussed "doctor shopping" in the context of obtaining medically prescribed drugs to permit personal use beyond prescribed doses. Such increased use led to the person in question becoming (in the Client's view) "a junkie". Implicit in this perception are the notions of prescribed doses not "working" and dependence as an adverse "side effect".

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4 On 1 February 2018 Western Australian legislation came into effect requiring codeine to be a medically prescribed drug.
Medical prescription processes

Informants identified the need for personal disclosure in order to justify prescription as a limitation or deterrent to obtaining "legal" drugs.

One Client discussed justification for prescription of antidepressants as something which may inhibit individuals from seeking such drugs. This Informant began by stating:

// To get medically prescribed drugs you have to go through a process. //

This Informant continued to discuss "process" as a constraint on obtaining antidepressants in the following conversational exchange:

// Informant

Or to be able to convince, because you're not going to just get a medication.

Researcher

Right. It's a justification issue?

Informant

Yes. Yes. A justification issue. You're not, you can't, even if you're willing to you couldn't go to the doctor and say I want some Prozac.

Researcher

Right.

Informant

Just like that. You could say, um, in fact you can't get any drugs from a medical practitioner, in theory, without a reason.

Researcher

Yes.

Informant

Without having a good reason. //

Implicit in this Informant's dialogue was the perception that medical practitioners will not prescribe drugs sought for the purpose of relief of emotional distress if the applicant does not tell a convincing story to justify such prescription. Surrounding
conversation indicated this Informant felt individuals may be reluctant to discuss aspects of their emotional distress and hence not provide sufficient justification for obtaining a prescribed drug.

This Informant discussed alternatives to telling the 'right' story in the following conversational exchange:

// Informant

So with alcohol you don't have to do that. Just get, go to the shop and buy it.

//

Researcher

Right. OK. So ...

Informant

There may be an inhibition to have to, to go, to have to [garbled word], well partly you might feel ethically yourself that you don't want to actually lie about what your anxiety is, to justify, so that you get the drug.

Researcher

Yes.

Informant

And not just once, but continuously. Because that's part of the other problem.

Researcher

Indeed. Continuity of supply and dose are also issues.

Informant

Yes.

Researcher

Am I hearing that right?

Informant

Yes. Yes. And if alcohol works, that's all right for you. You don't need to go any further.

Researcher.
Yes. And as you say, it's readily available.

Informant

And cheap //

This Informant perceived alcohol as a better alternative to medically prescribed drugs initially on the basis of access to the latter requiring justification which may or may not be accepted by the relevant medical professional. Compounding this issue was the explicit perception that alcohol is readily available and the implicit perception that alcohol provides effective relief. Prior conversation with this Informant indicated alcohol use was indeed perceived as an effective means of relieving emotional distress.

A Service Worker articulated a similar combination of perceptions when stating:

// Yes, sometimes legal prescription drugs are actually harder to get your hands on, because you actually have to [go to] doctors, and then you've got to go to the chemist, and like you have to prove that you need them. Whereas if you just take illegal drugs you can like just ring up anyone you know that takes drugs. I mean like hey this is what I want to do, and they'll like point you in the right direction. Like you don't have to prove, you know what I mean? //

In common with the Client quoted immediately above, this Informant perceived difficulties in "proving" the need for a prescribed drug and the ready availability of alternatives - in this case illicit drugs - as motivation to self-medicate rather than seek medical assistance. This Informant also implied inconvenience is a factor influencing choice of substance. Having to visit a medical practitioner and a pharmacy potentially causes inconvenience, as discussed by other Informants quoted above.

Informants discussed issues relating to consumption of substances and dose as issues inhibiting selection of medically prescribed drugs. One Client stated:

//... controllability is probably a big one. Alcohol in particular, or [cannabis], or anything you don't shoot up, you control how quickly you put it into your system, whereas with medically, with prescription drugs you are given a dose and you take the dose and that's it. You don't, you don't have control over how rapidly you put it into your system. //
I then queried whether "controllability" also involved quantum of dose. The Informant responded by confirming that dosage is at least nominally controlled by the prescribing physician.

Implicit in this Informant's conversation was the perception of lack of choice of drug being prescribed. Another Client stated explicitly that recipients of medically prescribed drugs do not have a choice over the drug prescribed. They get the drug which the prescribing medical professional considers appropriate. This Informant then went on to say that medical practitioners are reluctant to change the drug being prescribed if the user states the drug is not having the desired effect. Medical practitioners are also reluctant to discuss the effects of different legal drugs in comparative terms. This was seen as reflecting personal ignorance. The statement: "unless they are bent they don't use [medically prescribed drugs] and wouldn't have a fucking clue" illustrates this perception succinctly.

Yet another Client articulated a similar perception. This Informant stated medical practitioners have not had experiences similar to those which caused their clients' emotional distress. Consequently medical practitioners do not understand what they are dealing with. They consequently treat their patients like "laboratory rats". It is the medical practitioner and not the patient who decides what substance to use and at what dose. When the patient states the drug is unsatisfactory the medical practitioner either ignores this feedback or prescribes another drug with similar unsatisfactory effects.

A Service Worker described a personal experience which encapsulates the range of perceptions of inappropriate prescription discussed immediately above. This Informant began by discussing a friend who was dependent on alcohol and was prescribed an antidepressant with unfavourable results. The conversation then shifted to another person known to the Informant. The following statement captures this Informant's perceptions which mirror those of the Clients regarding individuals' lack of control over the drugs they take, treatment like "laboratory rats", and unwillingness by medical practitioners to stop prescribing drugs which do not result in desired outcomes:

//Another friend of mine, diagnosed with bipolar, and she started off being medicated with one thing, it didn't work, it made her worse, another
[prescribed drug], then came the visits to [a mental health service], then came the doctors giving her another [prescribed drug]. Then they go multiples of her medication. Then [garbled word] lithium, dexamphetamines, other things. The next thing, she can't get out of bed, and the next day she's manic and thinks that God is talking through her. Before anyone ever medicated her with anything, or diagnosed her with bipolar I thought she was funny a whole lot of the time and kind of sad sometimes. You know, we used to live together. She was a bit moody, you know? //

In this part of the interview conversation this Informant identified inappropriate prescription, inappropriate dosage, and reluctance to accept feedback from the user as deficiencies in the use of medically prescribed drugs. In particular, escalation in strength of drug and dose were seen as resulting in an outcome which was worse than the initially presenting problem.

The preceding excerpts from interview conversations reflect perceptions conveyed by other Informants. Difficulty in convincing medical practitioners of the need to prescribe pharmaceutical drugs was seen as a potential barrier to obtaining drugs and hence relief. Once the need to prescribe drugs was established, Informants perceived lack of choice over the drug selected and the dosage specified as a further disadvantage. Inherent in this perception was a risk of inappropriate selection of drug by the prescriber and reluctance to change the drug(s) prescribed if the user is dissatisfied with its effects. One Informant related inappropriate prescription to medical practitioners' lack of personal knowledge of the effects of prescribed drugs.

**Emotional barriers**

The preceding sections describe Informants' perceptions of difficulties in obtaining medically prescribed drugs. These included inconvenience, cost, justification, and inappropriate prescription. These barriers may be seen as externally imposed and beyond the control of the individual seeking relief. Informants also identified what may be described as personal constraints to obtaining prescribed drugs. Informants perceived "lots of" people do not access legally prescribed drugs to deal with emotional distress because they feel uncomfortable when discussing the nature and
causes of their emotional distress with medical professionals. This personal reluctance was seen as a considerable inhibiting factor.

A Service Worker linked external and personal constraints when stating:

// ... it could be more about, you know, going to the doctor is time consuming, and it's not fun. //

This Informant described "not fun" in terms of perceptions of personal weakness, embarrassment and shame. Another Service Worker explicitly referred to "embarrassment" when stating:

// I find it embarrassing going to the doctor if I'm sick let alone if I want to take prescription drugs for like depression or my anxiety or anything like that. //

A Client perceived embarrassment derived from perceptions of personal weakness in complementary terms when stating:

// But there are people that don't want to go to the doctor to get medication to sort the problem out, because it makes them look, again, it makes them look weak //

Other Informants discussed reluctance to access medical services in comparable terms. A Client spoke of "embarrassment" as constraining discussion of personal problems when stating:

// ... for various reasons you might not want to speak to anybody about [the details of personal problems]. You know, if you go to a medical practitioner you might not want to disclose that, that you want [relief through the use of drugs]. //

This Informant related individuals' reluctance to discuss the nature of emotional distress to the need to justify prescription of drugs to provide relief. Personal unwillingness to discuss the details of personal issues led to concerns that prescription of drugs might not be justified, which in turn led to self-medication as being the preferred means of obtaining relief.

Another Client discussed reluctance to divulge the nature of emotional distress and its causes in terms of broader social factors. This Informant identified negative social
perceptions of mental health issues as a barrier to accessing medically prescribed drugs when stating:

// ... I think in some cases because there's still very much a stigma surrounding mental health, and, and, you know, that covers all, all [garbled word] areas of emotional distress in my view, and so I think people are often embarrassed or ashamed, actually, to reach out to medical practice now. //

This Informant continued to discuss ease of procurement of non-prescribed substances as circumventing reluctance to access medical services. One avenue is personally difficult and may not provide relief. The other is personally easier and is much more likely to result in the desired outcome.

A Service Worker articulated a similar perception when stating:

// I think, again, for some people going to the doctor's and admitting you have a problem is shameful. //

This Informant continued to say:

// Admitting to your family that you have more than just a drug problem, you've got a mental health issue, is embarrassing, so that's probably why some people choose to do illicit drugs rather than legal drugs. //

In common with other Informants, this Informant perceived "embarrassment" as a strong motivator to not discuss personal issues with medical professionals. By implication such lack of willingness to tell a "full story" could result in prescription not being provided.

Informants generally perceived detailed disclosure of personal emotional issues to be distressing. Concern regarding justification for prescription and fear of social alienation derived from potential diagnosis of mental health issues were seen as contributors to such feelings. By strong implication, discomfort derived from interaction with medical professionals and potential social consequences added to and compounded the severity of distress for which relief was originally sought.

Consequently self-medication, which does not require discussion of personal emotional issues and which may be implemented quickly and easily, becomes the preferred means of obtaining relief.
No social component

Some Informants discussed use of medically prescribed drugs in the context of where and how they are consumed. Self-medication was generally perceived as commonly practiced in social situations. In contrast, consumption of medically prescribed drugs occurs in private. This difference was seen as relevant to the means and extent by which relief from emotional distress may be obtained.

A Client identified this difference when stating:

// You know, I'm sure there's a lot of people that are taking, drinking to self medicate, or taking substances to self medicate, that are doing it with friends also. It's an activity that they do together as well. //

This Informant went on to say:

// Like how many people do you know that take their antidepressants together, you know, [laughter]? //

In surrounding conversation this Informant emphasised the importance of the interaction between social contact and substance use as a contributor to the overall achievement of relief from emotional distress. Personal contact contributed to the alleviation of personal discomfort in concert with the effects of the substance used. Hence, self-medication pursued in social environments involved more than only the effects of alcohol or other drugs. In contrast, medically prescribed drugs were seen to be the sole facilitator of relief.

A Service Worker expressed a similar view. The following exchange is illustrative:

// Informant

And, you know, some people live for pay day to get high.

Researcher

Yes.

Informant

It's not exciting to get paid and go to the doctor's.

Researcher

Isn't that true.
Informant

*Yes, there's, I suppose it depends on how you think of it. I know younger people, if they've got all their mates hanging around, they're not going to be like we got paid today, let's go to the doctor's to get a prescription, if they, if they are taking drugs.*

These conversational exchanges and those with other Informants suggested that substance use in itself was perceived as not the only means of alleviation of emotional distress. Social interaction may achieve the same outcome to varying extents. When combined with social interaction, non-prescribed substance use was perceived as generally more effective in providing relief. Consequently, self-medication was seen to potentially offer associated means of obtaining relief which are generally not available with prescribed substances.

**Medication and "what works best"**

The Self-Medication Hypothesis proposes that individuals select and then use the substance which is most effective in providing relief from emotional distress. The preceding discussion identifies that Informants perceived the effects of medically prescribed drugs to be inferior to those offered by self-selected, primarily illicit, substances. On this basis, Informants' perceptions of the efficacy of medically prescribed drugs reflect the second component of the SMH.

However, it is relevant to consider acquisition processes in the context of "what works best". Previous discussion indicated some Informants perceived cost as moderating selection of the "best" substance. Similarly, difficulties in obtaining medically prescribed drugs deriving from difficulties in accessing medical professionals, convincing them of the need for medication, fears of misprescription and inappropriate dosage, and emotional barriers may be seen as analogous to restrictions imposed by cost. Further, the setting in which substances are used were seen as relevant to obtaining relief. Social environments in which substances are used were seen to be more attractive than solitary ingestion. It is therefore evident that Informants' perceptions of medically prescribed drugs implicitly extended the ambit of the SMH. "What works best" was considered in terms of obtaining direct relief and in terms of what is required to acquire substances in the first place.
Dependence

Some Informants identified use of some medically prescribed drugs as leading to dependence on them. A Service Worker quoted above in the context of prescription drugs not "working" identified some medically prescribed drugs as being addictive when discussing conversations with clients during counselling sessions:

// ... it's the antidepressants, and it's the mood stabilisers, and then it's the relaxants, which, you know, I've been told by people are the worst. Like the Xanax, and the Valiums, and that, are the ones that give them bad side effects and hard to, to get off. //

In surrounding conversation this Informant described clients as recognising this problem and resisting increased doses.

Two other Service Workers conveyed the same perception when stating (respectively):

// I tell you what, another interesting thing [researcher's name], that a lot of people that I see tell me, it's the pharmaceutical drugs which are the worst. // and

// I've seen a lot of people on prescription pills that are just as addicted as people on ... illicit drugs. //

Clients articulated very similar perceptions. When discussing experiences in dealing with dependence on heroin one Client stated some pharmaceutical drugs can be "worse that the illicit stuff".

Another Client was more vehement. This Informant identified addiction as one of the strong arguments advanced against the use of opioid drugs, and continued to say that medically prescribed drugs can be equally if not more addictive. This Informant indicated pharmaceutical companies know this and develop new drugs which are addictive in order to "stay in business, repeat business, yeah, and make heaps of fucking money".

Both Clients and Service Workers described opiates, stimulants, antidepressants, and drugs promoting sleep as being addictive. Informants identified use of Cymbalta,
dexamphetamines, morphine, Stilnox, Valium, and Xanax as leading to dependence, and emphasised the brand name antidepressant drugs as being addictive.

Dependence may be seen as an aspect of not "working". Informants described withdrawal from an addictive drug as distressing. Consequently any substance which causes discomfort may be seen to be undesirable. Prescription drugs which result in greater dependence than that for an alternative self-selected substance may therefore be seen to be "worse" in terms of overall effect.

**Unintended consequences**

Methadone is an opioid drug commonly prescribed as a substitute for other opioids, particularly heroin. Methadone has a substantially longer half life than heroin, meaning that users do not need to administer the drug as often in order to avoid the onset of withdrawal symptoms. Further, methadone is less euphoric than heroin, permitting users to function comparatively effectively in their everyday lives. The philosophy underpinning methadone prescription and its practical application involves progressively reducing dose over a period of many months to several years. Such slow incremental reduction allows users' bodies to become accustomed to progressive absence of the drug and hence not go into withdrawal (Obert et al 2004, Khantzian and Albanese 2008, Seivewright 2009, Lintzberg 2015).

Methadone is a prescribed drug rather than a substance selected and used for self-medication. However, a small number of Informants perceived methadone use in the context of indirect self-medication. One Service Worker identified the effects of methadone as being similar to those of heroin when stating:

```plaintext
// I've seen a lot of people on methadone and they look just as high as someone
that's just taken heroin. //
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In making this statement this Informant implied people using methadone may be having similar experiences to those which prompted them to use heroin. If the initial motivation for opioid use was self-medication, then use of methadone (another opioid) provided the same outcomes.
A second Service Worker was explicit when indicating that methadone use may indeed alleviate emotional distress. This Informant identified some individuals taking methadone as seeking not only to avoid withdrawal symptoms, but also to experience relief from emotional distress. The following excerpt from that interview conversation illuminates this perception:

// I think that the methadone, the clients that want methadone maintenance, opiate replacement stuff, [inaudible word] they still want comfortably numb. Yeah. To an extent they want comfortably numb. It isn't just a matter of not wanting to detox, it's that they can't stop [wanting to be] comfortably numb. //</p>

This Informant saw methadone as a substitute for other opioid drugs, particularly heroin. In surrounding conversation this Informant described successful rehabilitation as not using substances of any kind. However, substitution of one drug with another facilitated relief from emotional distress, whereas abstinence (in itself) did not.

A third Service Worker articulated a complementary perception when stating:

// And it seems to be though, if some people almost have a psychological attachment to [methadone], because they'll get down to a really low dose, which [agency staff] are saying this is going to be having minimal effect on them, but they won't give up that last dose. //</p>

I asked the Informant whether the "last dose" could be seen as acting as a placebo. The Informant said "yes", and went on to say that in some cases those responsible for administering methadone continued to prescribe minimal doses.

These perceptions of the effects of methadone suggested its users may seek more than relief from withdrawal symptoms and progressive detoxification. Feeling "comfortably numb" and maintaining the "last dose" suggested methadone users may be realising the same outcomes as initially sought from self-medication with heroin. If this is the case, methadone use may be seen to offer an indirect rather than direct means of obtaining relief from emotional distress via a means which is not nominally directed at such ends. Hence, methadone use may, in some circumstances, be seen as an indirect form of self-medication. This conclusion is reflective of Khantzian's early (1974) discussion of opiate addiction. He proposes that methadone treatment is successful because it provides relief from unwanted feelings of aggression.
CHAPTER 8: CONCLUSIONS

INTRODUCTION

This research has sought to elicit individuals' perceptions of the applicability of the Self-Medication Hypothesis as proposed by Edward Khantzian. Such perceptions were elicited, but they were intertwined with discussion of alternative motivations for substance use and views of problems with the use of medically prescribed drugs. Identification and discussion of these wider issues indicated to me that Informants perceived self-medication and hence the SMH not as a discrete subject for consideration, but rather as one aspect of complex and entwined views of substance use. Further, Informants' views of the shortcomings of medically prescribed drugs and the consequent attractiveness of self-medication emerged as a theme in its own right.

CLIENTS AND SERVICE WORKERS: MANY SHARED PERCEPTIONS

Clients and Service Workers consistently perceived the SMH to be generally applicable. However, in the context of the first component of the SMH (individuals self-medicate to alleviate emotional distress) Informants perceived the reasons for practicing self-medication and the results obtained in terms broader than those underpinning Khantzian's successive articulations of the SMH. In contrast, Informants perceived the second component of the SMH (individuals use the substance which provides most effective relief) to be constrained by external factors. Clients and Service Workers consistently perceived self-medication as one important motivation for alcohol and other drug use. However, both groups viewed other motivations, including "fun", "culture" and "social influence" as important alternative motivations. These perceptions are in contrast to Khantzian, who acknowledges motivations other than self-medication but accords primacy to the latter.

Clients and Service Workers alike perceived shortcomings in the acquisition and use of medically prescribed drugs. These included perceptions that prescribed drugs "just don't work", are difficult to access in several ways, and may lead to dependence.
CONCLUSIONS: APPLICABILITY OF THE SMH

Qualified support for the SMH

All Clients and all Service Workers explicitly discussed the first component of the SMH - individuals self-medicate to alleviate emotional distress. All indicated that relief of emotional distress is a common motivation for the use of alcohol and other drugs. However, self-medication was not seen as the single most important reason for substance use. This widely shared perception is discussed further below.

Informants did not limit their perceptions of self-medication to relief of emotional discomfort. They perceived relief of physical pain in the same context. Substance use may alleviate such pain, and emotional distress deriving from physical pain or anticipation of such pain. These perceptions indicated Informants viewed the ambit of what constitutes distress to be mitigated by self-medication to be broader than that considered by Khantzian. The latter discusses distress in terms of emotional discomfort and does not address relief from physical pain in the context of self-medication (1985; 1997; 1999; Khantzian and Albanese 2008).

Only around half of Informants explicitly discussed the second component of the SMH - that individuals use the substance which is most effective in providing relief. This may have been due to the way I articulated the SMH, describing the first component before the second. Alternatively, Informants may have perceived the second component to be less relevant, or perhaps obvious.

When addressing the second component of the SMH Informants identified factors which place restrictions on the proposition that individuals use the 'best' substance when self-medicating. Both Clients and Service Workers commonly identified cost as limiting use of "what works best", but also mentioned swift relief and ignorance of substances' effects as factors influencing selection of substance.

Informants' perceptions of substance use for self-medication indicate qualified support for the SMH as proposed by Khantzian. Informants viewed Khantzian's articulation of the first component of the Hypothesis (alleviate distress) to be restrictive, as it does not address self-medication to reduce physical pain. Further, Informants perceived the second component (use the 'best' substance) to represent an aspiration rather than a necessary outcome, as acquisition of the 'best' substance is subject to constraints.
Severe distress and "attitude adjustment"

Self-medication is directed at the relief of distress. Hence, what constitutes 'distress' is a fundamental consideration. Informants' perceptions of what constitutes distress were broader than that described by Khantzian (1985; 1997; 1999; Khantzian and Albanese 2008). He identifies self-medication as a response to "extreme" emotional distress. In contrast, Informants perceived emotional distress as a continuum, ranging from mild to severe. Relief from intolerable emotional distress and stress experienced in everyday life were seen as two extremes of a range of personal discomfort. These perceptions of what constitutes distress extended beyond what Khantzian considered.

In the context of self-medication severe distress required use of substances having strong effects, while stress and discomfort in everyday life could be alleviated by one or two glasses of wine. Further, mild discomfort did not require daily self-medication in order to obtain relief. "Attitude adjustment" was commonly described as being practiced at the end of the working week. In contrast, self-medication directed at relief of severe emotional distress was generally seen to be administered more frequently and to have effects greater than those resulting from drinking a few glasses of wine. As such, Informants' perceptions of desirable outcomes of self-medication related to the severity of distress being experienced.

These perceptions may be seen as further qualification of the applicability of the first component of the SMH as proposed (Khantzian 1985; 1997; Khantzian and Albanese 2008). Khantzian's focus is on addiction derived from sustained use of alcohol and other drugs for self-medication. This reflects the clinical treatment settings in which he developed the SMH. However, Informants did not limit their consideration of self-medication to such environments. Rather, they perceived self-medication within a broader ambit, ranging from situations analogous to those in which Khantzian dealt with substance use at one extreme to everyday life situations at an opposite extreme.

Feeling "numb" and feeling "better"

Clients and Service Workers expressed differing views regarding desirable outcomes of self-medication. Clients who experienced extreme distress typically sought to change the overall way they felt. In contrast, Service Workers who I thought were less likely to have had comparable intense personal experiences couched relief from
extreme emotional distress in terms of anaesthesia. This suggested to me that perceptions of "better" and "numb" reflected differences in personal experiences of distress and hence the ability to reach common understanding. Clients discussed "feeling better" in terms of direct personal experience of extreme distress, whereas most Service Workers discussed "feeling numb" in terms of what they imagined relief from extreme distress to be, as they had not directly experienced such feelings. Differences in views of what constituted desirable relief reflected different experiences and hence understanding, which consequently led to differences in perceptions of the outcomes of self-medication.

On the basis of my holistic interpretation of interview conversations and previous occupational interaction with individuals delivering counselling and street outreach services I came to the tentative conclusion that those Service Workers describing relief as "feeling numb" had at some time in their lives experienced the effects of substantial alcohol consumption which left them feeling physically and mentally numb. This suggested to me that these Informants potentially viewed the effects of substance use and hence outcomes of self-medication from within the contexts of their own lives. Experiences of alcohol use were likely to be their personal reference points for relating to the way their clients felt when self-medicating. I see this proposition as being supported by the perceptions of Service Workers who had experiences akin to those of Clients. They described personal experiences which reflected those of Clients who differentiated between "feeling numb" and "feeling better", and sought to feel "better" rather than "numb".

Differences in perceptions of outcomes of self-medication may also have reflected Service Workers' perceptions of their occupational function. In general terms their objective is to help their clients deal with a specific problem - substance use. As such, Service Workers' perspectives may have been narrower than those of Clients. The latter indicated they sought improvements in personal holistic wellness which extended beyond specific problems which derived from substance use. Service Workers may have perceived absence of the specific substance-related problem at hand as the desired outcome, whereas Clients sought a wider ranging outcome. Service Workers may also have perceived self-medication in terms of the intended effects of clinically prescribed drugs, which are intended to resolve a specific problem and not make the user feel "good" in a wider sense.
Clients' views of feeling "better" as the desired outcome of self-medicating reflect Khantzian's statement of the SMH. The latter consistently describes relief in holistic terms in his progressive development of the Hypothesis. Khantzian describes substance use as stabilising his clients' overall emotional and behavioural states (1974), having wide ranging beneficial effects on his clients (1985), and making clients "feel normal" (2008, 40-41). This conception of relief is consistent with that expressed by the Clients informing this research. Both Khantzian and Clients characterised relief in broad terms.

**Feeling "numb", "better", and "good": a continuum**

A fundamental premise of the SMH is that substance use changes the way users feel. Informants described use of alcohol and other drugs as resulting in variously feeling "numb", "better" and "good". Feeling "numb" and "better" were discussed in the context of self-medication, while feeling "good" was associated with having "fun". Feeling "numb" was seen by some Informants as a desirable outcome of self-medication, while others perceived it as undesirable. Feeling "better" and "good" were widely perceived as desirable outcomes of substance use, regardless of motivation.

These perceptions suggest desirable outcomes of substance use were seen as a continuum ranging from anaesthesia to euphoria. At one extreme Service Workers generally perceived self-medication to alleviate severe emotional distress in terms of selective "numbing" of painful emotions, while at the other end of the spectrum Clients and Service Workers alike perceived substance use as facilitating having "fun" and "good times". Feeling "better" occupied the middle ground between these two extremes.

"Medication" in the wider sense involves administration of substances to overcome physical diseases and mental disorders. "Medication" is therefore directed at improvement of undesirable personal states of being. Within the context of the SMH "medication" is directed at relief of undesirable emotional states rather than creation or enhancement of desirable feelings. However, Informants' generally perceived the desirable effects of substance use as improving emotional state regardless of starting point. Successful self-medication was seen to result in a "better" emotional state, and
.successfully using substances to facilitate having "fun" was seen in the same terms. In both cases, substance use improved the way individuals felt.

Characterising substance use as improving emotional states across a continuum ranging from feeling extreme distress to feeling euphoria further extends consideration of substance use and self-medication. Informants' views of "attitude adjustment" as self-medication broadened the ambit of the concept beyond that underpinning Khantzian's (1985; 1997; Khantzian and Albanese 2008) development of the SMH. Self-medication was seen by Informants as not only as a response to severe emotional distress but also a means of moderating everyday feelings of stress and minor emotional discomfort. Further, substance use directed at "having fun" did not provide relief from undesirable feelings but rather enhanced "good" feelings.

This wider view of the effects of substance use resulting in users feeling 'better' regardless of starting point is conceptually consistent with the first component of the SMH. It proposes that individuals use substances in order to improve the way they feel. Substance use which selectively neutralises unpleasant emotions, changes overall emotional state from unsatisfactory to satisfactory, or enhances 'good' feelings achieves this goal. It makes users feel 'better' than the way they felt before consuming the chosen substance.

CONCLUSIONS: ALTERNATIVE MOTIVATIONS FOR SUBSTANCE USE

Informants perceived the SMH to be generally applicable. However, Informants perceived self-medication as one of several reasons why individuals use consciousness-altering substances. "Having fun" and social influences were seen as important alternative motivators.

Further, these diverse influences were generally seen as interacting to varying degrees. Substance use to promote "having fun" was seen to lead to self-medication in some cases. Peer group membership and peer behaviour was perceived by some Informants as influencing selection of substances for self-medication. Social learning was seen to influence children regarding substance use in later life and adults in the conduct of their lives.

These perceptions suggest Informants collectively did not consider any single explanation for alcohol and other drug use to be definitive. In particular, self-
medication was not seen as the primary motivation for substance use. Rather, motivations for substance use were widely seen to be complex, inter-related, and specific to each individual at particular times and in particular circumstances.

"Fun"

All Informants identified "having fun" as one of the reasons why individuals use substances. In contrast to differing perceptions of the outcomes of self-medication, Clients and Service Workers perceived "fun" in very similar contexts and in very similar terms. "Fun" was characterised variously as "having a good time", "feeling good", and experiencing "pleasure". References to "parties" and "good sex" provided context. "Fun" was perceived in positive terms as something which is desirable and commonly sought.

When proposing and discussing the SMH, Khantzian acknowledges that self-medication is not the only motivation for substance use. He explicitly states (1985, 1263) that "there are other determinants of addiction". However, Khantzian discounts "fun" as a motivator for substance use. He describes literature proposing the "pleasurable aspects of taking drugs" as placing "undue emphasis" on such a motivation (1974, 61, 64), and describes "euphoria" (along with 'peer group pressure' and other motivations) as a "popular or simplistic" explanation for substance use (1985, 1259, 1263). Hence, Informants' perceptions of "having fun" as an important motivation for alcohol and other drug use are at odds with Khantzian's. While Khantzian accords the SMH primary status among theories of motivation for substance use, the individuals informing this research perceived "fun" and self-medication as both being important reasons for substance use, and inter-related in some cases.

Existing literature gives limited consideration of fun and pleasure as motivation for substance use. O'Malley and Valverde (2004) identify this shortfall when stating that "discourse" dating from the eighteenth century to their time of writing discusses substance use in ways which "deny" and "silence" the voluntary and reasonable pursuit of enjoyment (2004, 26). Moore (2008) further identifies this gap in the literature. However, Measham and Brain (2005) explicitly discuss alcohol consumption in terms of a prerequisite for a "good night out". Such a personal
position is discussed by Coomber et al (2013) in terms of rational action, whereby costs and benefits of such use are considered.

**Culture and social influence: intertwined themes**

Informants discussed what they described as "culture" and "social influence" in closely comparable terms. While the majority spoke of either in specific terms, their perceptions of "culture" reflected discussion of "social interaction" and perceptions of "social influence" explicitly or implicitly reflected conceptions articulated when addressing "social culture".

Informants perceived "culture" and "social influence" as strong motivators for substance use. Clients and Service Workers spoke of substance use being "normalised" in very similar ways. Both groups spoke of not "fitting in" when abstaining from use in situations where others were using, and discussed peer pressure to conform to standards of group behaviour. Articulating a complementary perception, one Informant discussed substance use as a means of achieving social status through being perceived as "cool" by peers. In both cases, achieving a sense of belonging to the relevant social group was seen as the driver for substance use.

A common theme running through discussions of both "culture" and "social influence" was widespread use of alcohol in Australia. References to alcohol being consumed at social functions, in sporting clubs, and as part of everyday life were made by both Clients and Service Workers in similar contexts and expressed in similar ways. Drinking "down [at] the pub" after work and at employer-sponsored functions were identified along with other social functions as common settings for drinking alcohol, often in large quantities.

Informants implicitly and explicitly identified this wide range of settings as demonstrating the extent to which alcohol use pervades Australian life. One Service Worker described the extent to which alcohol use is part of Australian social culture as "surreal". Another differentiated alcohol from other drugs on the basis of the ubiquitous nature of alcohol use. Clients made statements reflecting similar perceptions.
A small number of Informants identified use of illicit substances in the context of "culture" and "social influence". Perceptions of such use closely reflected the ways in which Informants viewed alcohol use.

Service Workers (in particular) perceived social influence in terms of social learning. Several Informants described children and adults being influenced by observation of the behaviours and actions of others. One Service Worker explicitly described self-medication as a "learned behaviour". Others identified family members and friends as being perceived as "role models", whose actions were followed. At a wider level, one Informant discussed in some detail the way in which alcohol use is portrayed in popular entertainment. This Informant described scenes of alcohol use and drunkenness in television situation comedies as endorsing alcohol use, implying that viewers might be influenced to use alcohol.


Informants' perceptions of substance use (and alcohol use in particular) as being "normalised" are closely reflective of perspectives advanced in the academic literature. Measham et al (1998), Parker (2002), Measham and Brain (2005), and Coomber et al (2013) variously discuss "normalization" of alcohol and other drug use in terms of increasing tolerance and wider acceptance of substance use by substance users themselves and members of wider society, reflecting behavioural and cultural aspects of such acceptance. Informants' discussion of social learning is reflective of Becker (1963), Bandura and Walters (1963), Bandura (1977a, 1977b), and MacAndrew and Edgerton (1969).

Multiple, interacting motivations for substance use

"Having fun", compliance with social "culture" and other "social influence", and "experimentation" were identified by Informants as motivations for alcohol and other drug use. However, each motivation was perceived either directly or indirectly to be linked to each of the others to varying degrees. I interpreted feeling "numb", "better"
and "good" not as discrete aspects of being, but rather a continuum. Culture and social influence were discussed together and were perceived to be intertwined. Similarly, social influence and experimentation were seen as being parallel and complementary motivations. Perceptions of these motivations were embodied in discussion of substance use in situations involving interpersonal contact and interaction. The diagram at Appendix A provides a high level representation of the relationships between key concepts emerging from this research.

Khantzian describes "euphoria" and "peer group pressure" as "popular or simplistic" explanations for substance use which leads to addiction (1974, 61, 64; 1985, 1259). As such, he identifies them as less persuasive explanations for substance use. In contrast, I interpreted Informants' perceptions as not according primacy to self-medication. Rather, Informants perceived "fun", culture and social influence as motivations with comparable importance. Further, I interpreted Informants as perceiving fun, culture, and social influence not as discrete motivations for substance use, but rather as elements with complex relationships which combine to motivate individuals to use alcohol and other drugs.

The SMH as articulated for the purposes of this research provides a comparatively simple explanation for substance use. Individuals use alcohol and other drugs in order to alleviate distress. Khantzian (1974; 1985; 1997; 1999; Khantzian and Albanese 2008) proposes self-medication to be the dominant motivation for substance use. In contrast, Informants' viewed substance use in more complex terms. Self-medication was seen to be one of a number of important, inter-related reasons for alcohol and other drug use. These perceptions are reflective of the broader literature addressing substance use and addiction.

**CONCLUSIONS: MEDICALLY PRESCRIBED DRUGS**

"[Medically prescribed drugs] just don't work"

Perceptions that prescribed drugs "just don't work" emphasised several undesirable aspects of the effects of such substances. Impairment of physical and cognitive capabilities resulting from use were likened to becoming a "zombie" and a "dribbling idiot". Some Informants who took prescribed drugs, particularly antidepressants, recognised these "side effects", perceived them as undesirable, and sought to avoid
increases in prescribed dosage which would worsen these effects. In contrast, alcohol and non-prescribed drugs selected by individuals were seen to work "better".

The length of time between substance use and feeling of consequent effects was perceived by some Informants as problem with some antidepressants. Alcohol and illicit drugs were seen to have immediate effect and hence provide immediate relief, whereas some antidepressants must be taken for several weeks in order to experience their effects. During this time relief is not provided. As such, the time to take effect was an aspect of "don't work".

These perceptions reflected Informants' views of the first component of the SMH. Use of any substance (prescribed or self-selected) is directed at obtaining relief. If such use does not alleviate distress the aim of medication (by whatever means) is not met. Hence, pharmaceutical drugs which "don't work" do not satisfy the underlying premise of the SMH. Correspondingly, such drugs do not realise the objective of self-medication as perceived by Informants.

Informants' perceptions of the efficacy of medically prescribed drugs were generally intertwined with perceptions of "feeling numb" compared to "feeling better". Informants, and particularly Clients, discussed the relative efficacy of various substances and overwhelmingly described the effects of medically prescribed drugs as inferior to those used for self-medication. One Informant described "feeling numb" as "just existing". In contrast, alcohol use caused this Informant to feel "happy, energetic, more sociable, chatty", and "more relaxed". This dialogue not only illustrated this Informant's distinction between "feeling numb" and "feeling better" but also perceptions of the relative efficacy of self-selected and prescribed substances and the relevance of social interaction. Alcohol simply "worked" "better". Other Clients similarly described the effects of antidepressants as "you can't function" and "I couldn't think any more" concurrently in terms of "don't work" and "feel better".

These intertwined perceptions reflect the proposition advanced by the second component of the SMH. Individuals seek out and then use the substance which they perceive to be the most effective in alleviating emotional distress. If and when prescribed drugs are perceived to provide outcomes which are inferior to those from other, self-selected, substances, then the latter are selected on the basis that they are the 'best'.

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Prescription issues

Prescription drugs were perceived to be difficult to access for several reasons. In order to obtain a prescription, individuals seeking relief must first visit a medical professional. The availability of consultation, the time taken to attend consultations and then pharmacies (typically during business hours), and the associated costs were identified as barriers to access. Having secured a consultation, an individual must convince the relevant medical professional of the need for prescribing medication. Such justification requires telling the "right" story. Individuals may be reluctant to discuss the full extent of their situations because of feelings of embarrassment over their condition and reluctance to be potentially diagnosed as having mental health issues. Such inhibition may result in the individual not telling the "right" story and hence being denied access to prescribed drugs. In contrast, alcohol and non-prescribed drugs are readily available at short notice and do not require justification for acquisition.

The specific pharmaceutical drug used and its dose are selected and determined by the prescribing medical professional. Informants identified choice of prescribed drug as being inappropriate in some cases. Correspondingly, dose was seen as too low and too high in different circumstances. Such inappropriate prescription was seen by some Informants as reflecting lack of knowledge by the prescriber. One Client stated that medical professionals do not have personal experience with the effects of the drugs they prescribe and hence are not equipped to prescribe them.

Perceptions of barriers to obtaining prescribed drugs and inappropriate prescription indirectly reflect the second component of the SMH. Implicit in the proposition that an individual chooses and then uses the substance which is most effective in alleviating distress are the assumptions that the individual is the best judge of what "works best" and is able to acquire the chosen substance. If pharmaceutical drugs are prescribed by a medical professional who has not experienced either the distress for which relief is sought or the effects of the drug(s) intended to provide relief the assumptions of informed choice and consequent acquisition and use do not hold. By implication, prescribed medication will not necessarily provide the 'best' result.
Reluctance by medical professionals to address inappropriate prescription issues was identified as a corresponding problem. Informants perceived prescribers as not taking notice of feedback from the individuals taking prescribed drugs in some cases. In other cases, when feedback was acknowledged ignorance of the effects of prescribed drugs by prescribers was seen to result in prescription of alternative drugs by uninformed and protracted trial and error, often with undesirable results. One Informant described this process as treating recipients as "laboratory rats".

The second component of the SMH implies personal agency on the part of the individual practicing self-medication. Identification of the substance which provides best relief necessarily requires the ability to procure potential candidates for trial. Following such testing, the individual decides which is the most effective. Ongoing use of the 'best' substance necessarily requires ongoing ability to procure it. Constraints on such personal agency imposed by medical professionals correspondingly inhibit selection and use of the substance which "works best".

Some Informants discussed use of prescribed drugs and non-prescribed substances for self-medication in terms of the social environments in which they are consumed. In many cases substance use for self-medication is practiced in situations involving social contact, whereas prescribed drugs are taken in private. Social interaction associated with substance use was perceived as contributing to the alleviation of emotional distress. This benefit may be realised in many cases involving self-medication but in none involving the solitary use of prescribed drugs. As such, self-medication in conjunction with social contact potentially offers the potential for more effective outcomes in many cases.

Some Informants identified use of some prescribed drugs as resulting in dependence. Several Informants described such dependence as "worse" than that resulting from use of illicit drugs, particularly heroin. Such dependence was seen as particularly undesirable. As such, dependence may be seen as an aspect of "[they] just don't work".

Methadone is prescribed as a substitute for opioid drugs. Its primary purpose is to relieve the extreme symptoms of heroin withdrawal. However, as an opioid itself, methadone has effects which are comparable to those of heroin, albeit less intense (Gelkopf et al 2002, Seivewright 2009). A small number of Informants perceived that
methadone users seek benefits beyond mitigation of withdrawal symptoms. Feeling "comfortably numb" from the use of methadone was seen as an indirect form of self-medication. The emotional distress from which relief was sought through the use of (principally) heroin was seen to be relieved by a 'side effect' of methadone use. This unintended consequence was seen to be valued by its users, who in some cases want to continue receiving methadone after the effects of heroin withdrawal have been fully mitigated. This continuation may be seen as a form of self-meditation facilitated by prescription.

**Shortcomings**

Clients and Service Workers expressed similar views of medically prescribed drugs. Both groups viewed prescribed drugs in negative terms. The several aspects of "[they] just don't work" were perceived as serious deficiencies and as such particularly unacceptable. The effects of antidepressants in particular were widely perceived as inferior to other substances. Difficulties in accessing prescribed drugs were seen as a further issue inhibiting achievement of relief. Processes to obtain prescriptions were seen as creating problems, and Informants described personal emotional issues constraining consultation with prescribing physicians. Prescribers' choices of drug and prescription of dose was seen as problematic. Critically, many Informants described prescription medication as being more addictive than illicit drugs. Use of non-prescribed substances circumvents these problems due to ready and immediate access and the ability to choose substance(s) which are personally known to "work best".

**Prescription drugs and the SMH**

Informants' perceptions of the shortcomings of medically prescribed drugs provide implicit support for the applicability of the SMH. The first component of the Hypothesis proposes that individuals use alcohol and other drugs in order to alleviate emotional distress. Informants' perceptions that medically prescribed drugs "just don't work" indicated that use of such drugs did not realise this desired outcome. In contrast, Informants identified substances used for self-medication as providing relief. Consequently, use of self-selected substances is consistent with the first component of the SMH. Self-medication facilitated relief whereas use of medically prescribed
drugs did not. The second component of the SMH proposes that individuals use the substance which is most effective in providing relief. Self-selected drugs were perceived as more effective than medically prescribed drugs. Hence, their use instead of medically prescribed drugs was reflective of the SMH.

When discussing substance use, Informants identified factors which constrained the acquisition of the 'best' substance for the purpose of self-medication. These limitations suggested the second component of the SMH is somewhat simplistic. Informants' descriptions of difficulties in acquiring medically prescribed drugs similarly reflected perceptions that the second component of the SMH reflected aspirations rather than outcomes.

**CONTRIBUTION TO KNOWLEDGE**

The SMH proposes that individuals self-medicate in order to alleviate extreme emotional distress. Informants participating in this research described self-medication in broader terms. They identified discomfort in terms of a continuum, ranging from mild to severe, and described substance use in terms of relief from varying levels of distress. These perceptions extend the ambit of the SMH.

When discussing the nature of relief obtained from self-medication, Informants differentiated between feeling "numb" and feeling "better". Service Workers generally perceived "numb" as the outcome of self-medication, but Clients indicated that feeling "better" is the goal of self-medication. In contrast, Khantzian's articulation and discussion of the SMH does not address the nature of relief sought and realised. Similarly, the substantial majority of research studies discussed above similarly do not consider what constitutes successful self-medication. The difference between Informants' perceptions of what constitutes relief potentially offers new insight into the perspectives of service providers and users of services. Informants' perceptions offer an opportunity to further consider an underlying premise of self-medication.

This research provides insight into both components of the SMH. Studies addressing the applicability of the SMH address relief from emotional distress, but the majority do not address the second component - selection of substance - in detail. Informants' discussion of the SMH reflected this focus on the first component to some degree, but
nevertheless offers insight into choice of substance used for self-medication. Cost was identified as imposing limitations on the extent to which the "best" substance may be used. In doing so, this research offers insight into the applicability of the SMH as a whole.

This research proceeded under a qualitative, interpretivist perspective. Such a worldview offers an opportunity for gaining understanding of perceptions of the applicability of the SMH which is not provided by quantitative, positivist research methods. Discussion above indicates that research studies addressing motivations for substance use which use qualitative, interpretivist research methods are in the minority. Hence, this research offers an alternative epistemological perspective of the SMH itself and more specifically Informants' perceptions of its applicability. Further, studies addressing the perceived applicability of the SMH by residents of Australia are very rare. Hence, this research provides the opportunity for insight into a controversial theory in an Australian context.

This research set out to address the SMH. However, as the research progressed perceptual linkages between self-medication and medication prescribed by medical professionals emerged. Such relationships have not been widely identified by existing research.

Therefore, this research may be seen to offer new insight into a controversial theory.

**LIMITATIONS**

Interpretivist research is predicated on the assumption that participants have, and are capable of expressing, their own thoughts freely within their individual social worlds. My interpretation of interview conversations was that all participants engaged in conversation willingly, and conveyed their views candidly. Hence, I believe this research was not compromised by inhibition on the part of Informants.

However, Denzin (1989, 62-65) states that all interpretivist research is inherently "unfinished, provisional, and incomplete". This statement definitely applies to my research. Right up to the time of submission of this thesis I thought about my interpretation of conversations with Informants and gained ongoing insight. It is likely I will continue to think about this research well into the future. Whether this constitutes a limitation is, in my view, a personal question for my audience.
This research was constrained by my inability to fully 'get inside' counselling sessions and situations in which Informants practiced self-medication. Such 'deeper' entry could have offered the potential for first hand exposure to Informants' experiences instead of the more limiting in-depth conversations which provided the basis of my interpretations reported above. While such 'deeper' entry was not achieved in the current context, I believe future researchers should not be deterred from making such attempts in the future.

I was not an independent and dispassionate 'observer' extracting data from 'subjects'. I did not employ a process which posed the same questions in the same way and in doing so facilitated 'objective' data collection. Hence, conduct of further studies aimed at validating the results of this research is problematic. From a realist perspective this is a considerable limitation. However, this research did not proceed under the ontological and epistemological positions underpinning the methods of the physical sciences. Rather, it has sought to convey my understanding of my interpersonal interactions with the Informants making this research possible.

**FURTHER RESEARCH**

This research raises a number of questions which could provide the basis for further research in the future.

Informants generally discussed the first component of the SMH (individuals self-medicate in order to alleviate distress) in more detail than the second component (individuals select the substance which is most effective in providing relief). Further, Informants discussed factors which constrain the use of the 'best' substance. Research addressing choice and acquisition of substance might facilitate further understanding of the second component of the SMH.

The individuals informing my research were clients of services providing help to people affected by the use of alcohol and other drugs. As such they were a self-selected group. However, many Informants articulated their perceptions of self-medication as being practiced by the wider general population. Consequently, inquiry directed at self-medication by individuals who do not access the services provided by the agencies which hosted this research has the potential to provide further understanding of self-medication and the applicability of the SMH.
All Informants identified "having fun" and "social influence" as motivating alcohol and other drug use. Further research addressing these perceived reasons for substance use has the potential to extend understanding of these motivations, particularly in terms of possible relationships to self-medication. Further, such research could investigate the applicability of Khantzian's view that self-medication is the dominant motivation for substance use.

Informants consistently identified several shortcomings of medically prescribed drugs. These perceptions were intertwined with views identifying problems with prescription of such drugs. Further research has the potential to address these issues, which might shed further light on reasons for self-medication.

In conclusion, I employed a qualitative, interpretive research methodology because it is consistent with my personal experience and involvement in providing services to individuals adversely affected by alcohol and/or other drug use. However, I believe that my approach is one of several which could be taken. Future research could be pursued using qualitative, quantitative, or mixed methodologies and methods.
APPENDIX A

CONCEPTUAL SCHEMA

INFORMANTS' PERCEPTIONS: SELF-MEDICATION and RELATED PRIMARY EMERGENT CONCEPTS

- OTHER REASONS
  - FUN
  - CULTURE
  - SOCIAL INFLUENCE
  - EXPERIMENTATION
- APPLICABILITY OF SAH?
  - WHAT WORKS BEST
    - EMOTIONAL DISTRESS
      - ATTITUDE ADJUSTMENT CONTINUUM
        - ADDICTION
      - PHYSICAL PAIN
        - MEDICAL PRESCRIPTIONS
APPENDIX B

INTERVIEW CONSENT DOCUMENTATION
Information Letter

Master's degree research project:
Alcohol & other drug use as "self-medication"

Dear participant,

My name is Fred Howie. I am a student at Murdoch University. I invite you to participate in a research study looking at the "Self-Medication Hypothesis" (see below) and asking whether people see it to be applicable.

In simple terms, this hypothesis proposes that people use alcohol or other drugs to alleviate emotional suffering, and they use the substance which best provides relief.

My study seeks to gain understanding of personal views of this hypothesis.

This study is part of my Master of Philosophy degree in sociology, supervised by Dr. Jeremy Northcote at Murdoch University

Nature and Purpose of the Study

The Self-Medication Hypothesis was developed over a period of more than 30 years by a senior professor at Harvard University in the USA. It has been the subject of considerable academic research asking whether or not the hypothesis is applicable. Conclusions are mixed. Some studies conclude it applies, and others conclude it does not apply.

The aim of this study is to investigate how people who are not engaged in academic research see the applicability of the hypothesis.

If you consent to take part in this research study, it is important that you understand the purpose of the study and what is involved in participation in a loosely structured interview conversation. Please make sure that you ask any questions you may have, and that all your questions have been answered to your satisfaction before you agree to participate.

What the Study will Involve

If you decide to participate in this study, you will be asked to engage in conversation with me (on a one-to one basis) regarding what you think about the Self-Medication Hypothesis. I do not have a list of detailed questions reflecting what I think about the hypothesis. Rather, I am anticipating the conversation will be about how you see the hypothesis, and will flow in directions indicated by your views.

I see the interview conversation lasting for around 20 minutes. The actual time may be shorter or longer, and is up to you.

If you agree, I will make an audio recording of our conversation. No recording will be made without your consent. This consent may be withdrawn at any time.

I request that people who are less that 18 years of age do not participate in the study.
Voluntary Participation and Withdrawal from the Study

Your participation in this study is entirely voluntary. You may withdraw at any time without discrimination or prejudice.

If you agree to audio recording of the interview conversation but later change your mind, recording will cease and previously recorded conversation will be erased.

All information is treated as confidential and no names or other details that might identify you and/or any other person and/or organisation will be used in any publication arising from this study. If you withdraw, all information you have provided will be destroyed.

Privacy

Your privacy is very important. Whether you elect to participate or not will be kept entirely confidential. Information provided by you during the interview conversation is confidential and will be maintained as such. Information from this study may be used in future studies, and confidentiality will be maintained.

I request that you review the attached Consent Form, and discuss it with me if you have any queries or concerns.

Benefits of the Study

It is possible that there may be no direct benefit to you from participation in this study. While there is no guarantee that you will personally benefit, the knowledge gained from your participation may help you and/or others in the future. Understanding of how people see the applicability of concepts relating to the use of alcohol and other drugs may lead to increased understanding for counsellors and people involved in rehabilitation.

Possible Risks

There are no specific risks anticipated with participation in this study.

If you have any questions about this project please feel free to contact either myself, Fred Howie on (mobile telephone number) 0414-508-680 or my supervisor, Dr Jeremy Northcote on (telephone number) 9360-2063. My supervisor and I are happy to discuss with you any concerns you may have about this study.

If you find that participation has caused you discomfort, please contact me or my supervisor so that we can arrange assistance for you.

If you are willing to consent to participation in this study, please complete the attached Consent Form.

Thank you for your assistance with this research project.

Sincerely,

Fred Howie
Consent Form
Master's degree research project:

Alcohol & other drug use as "self-medication"

I have read the participant information sheet, which explains the nature of the research and the possible risks. The information has been explained to me and all my questions have been satisfactorily answered. I have been given a copy of the information sheet to keep.

I am happy to be interviewed. I may withdraw consent to be interviewed at any time.

If I provide consent, an audio recording of the interview conversation will be made for the purposes of this research. I may withdraw consent for audio recording at any time.

I understand that I do not have to answer any questions if I do not want to, and that I can withdraw from the interview conversation at any time without needing to give a reason and without consequences to myself.

I agree that information provided during interview conversations may be published provided my name or any identifying data is not used.

I have been informed that information obtained during interview conversations may be used in other future studies, and that confidentiality will be maintained.

I have been informed that I may not receive any direct benefits from participating in this study.

I understand that all information provided by me is treated as confidential and will not be released by the researcher to a third party unless required to do so by law.

Participant’s name: ________________________

Signature of Participant: ___________________________ Date: ........../........./........
                                                                                     day   month   year

I confirm that I have provided the Information Letter concerning this study to the above participant; I have explained the study and have answered all questions asked of me.

Signature of researcher: ___________________________ Date: ........../........./........
                                                                                     day   month   year

This study has been approved by the Murdoch University Human Research Ethics Committee (Approval 2016/115). If you have any reservation or complaint about the ethical conduct of this research and wish to talk with an independent person, you may contact Murdoch University’s Research Ethics Office (Tel. (08) 9360-6677 or e-mail ethics@murdoch.edu.au). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
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