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# AN EXPLORATORY EXAMINATION OF THE RELATIONSHIP BETWEEN SUBSTANCE USE AND SUICIDAL IDEATION

David Felton 2004 D.Psych.

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# AN EXPLORATORY EXAMINATION OF THE RELATIONSHIP BETWEEN SUBSTANCE USE AND SUICIDAL IDEATION

#### **David Felton**

**B.Psych (UWA)** 

A thesis submitted in the partial fulfilment of the requirements for the award of

Clinical Doctorate of Psychology

Faculty of Psychology

Edith Cowan University

Date of Submission:

#### Abstract

Drug use has long been considered a risk factor when assessing the likelihood of an individual committing suicide (Weiss & Hufford, 1999). The research to date is primarily correlative and provides little guidance to the clinician when assessing the role that drug use plays in influencing the risk of suicide for a given individual. Clinical observations within the literature (Downey, 1991; Motto, 1999) report that alcohol or other drug (AOD) use may provide the means to regulate emotional distress. No published studies were found that examined the proposition that AOD use may have a range of positive as well as negative impacts on suicide risk.

The aim of the current research was to gather perspectives on the relationship between AOD and coexisting suicidal ideation from which recommendations informing clinical practice were sought. Two samples were interviewed in an exploratory qualitative study. The first sample comprised clinicians who have experience in working with substance use issues and suicidal clients; the second comprised clients who have both substance use problems and have recently been suicidal.

Eleven clinicians were drawn from a wide range of work settings and disciplines. Each had extensive clinical experience with suicidal young people who use non-prescribed substances. The client sample consisted of ten clients (19-24 years of age) drawn from either a mental health service or an outpatient drug treatment service. They were required to have had a clinically significant level of suicidal ideation in the three months prior to the interview along with meeting DSM IV criteria for substance dependence or substance abuse.

A semi-structured interview was administered. The results, using grounded theory, were examined separately for each sample. This approach required the identification of themes as they emerged in the data. These themes and the assumptions contained within theme were continually collapsed until theoretical constructs emerged that are known as core themes. These core themes are representative of the participants' experiences and perspectives of the relationship between AOD use and suicidality.

Each of the clinicians frequently referred to the theme of AOD use contributing to suicide risk, generally through the effects of intoxication and an accumulation of problems associated with AOD use. A self-medication (SM) process was thought to also occur during intoxication that allowed a distancing from painful states. There was an observation that, in certain situations, AOD use would not significantly impact on suicide risk. While attempts to SM were noted as common reasons for the initiation of AOD use, it was generally thought that these efforts were soon compromised due to problems associated with their drug use. Because of these problems, most clinicians felt that AOD use should be reduced to increase safety while seeking to strengthen other alternative coping behaviours.

The clinical sample placed considerable emphasis on the role of mediating factors (e.g., mood, social setting, stressors and tolerance to the drug) in determining AOD's impact on suicide risk, which was seen to be potentially diverse. Overall, this sample emphasised the capacity of AOD use to decrease suicidal states through self-medication. Self-medication was often enacted in the context of a reduced awareness of other viable strategies to manage painful states. While the sample recognised the potential for AOD use to episodically increase suicide risk, no client indicated that seeking a reduction in use alone would increase safety.

The core themes for each sample were used to develop flow charts outlining the pathways through which AOD use was seen to impact on suicide risk. A flow chart was developed for each participant group and a third one was constructed to reflect data that were integrated from both groups. Using the integrated model, strategies for working with a suicidal substance user are outlined. These involve a comprehensive assessment process that uncovers the functional aspects of client's AOD use (e.g., mood regulation). Work with the client should focus on building alternative strategies to meet those needs that have been met through their AOD use. Except in exceptional circumstances, this process should be well under-way before efforts are made to assist the client to reduce AOD use, because curtailing drug use prior to establishing other coping strategies will increase the risk of suicide attempts.

I certify that this thesis does not, to the best of my knowledge and belief

- i) Incorporate without acknowledgment and materials previously submitted for a degree or diploma in any institution of higher education;
- ii) Contain any material previously published or written by another person expect where due reference is made in the text; or
- iii) Contain any defamatory material

Signed:	4/2/05	
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David Felton

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#### Chapter 1. The Significance Of The Study

There is a positive correlation between non-prescribed substance use and suicide risk (Hillman, Silburn, Zubrick & Nguyen, 2000). Clinical guidelines seem to be based on the view that the positive correlation between substance use and suicide indicates a causal relationship (e.g. Weiss & Hufford, 1999). A disproportionately high number of people using substances suicide; 20-30% of suicide completers were classed as having a substance misuse issue (Hillman et al., 2000). This finding does little to clarify the range of relationships that potentially exist between substance use and suicide. Damphousse and Kaplan (1998) studied the intervening factors between adolescent drug use and distress and noted that a sub-population of young people may be attracted to alcohol or other drug (AOD) use as a means to lower their level of psychological distress. Lowering psychological distress will lower suicide risk (Shneidman, 1985, 1992). Assuming that substance use equals elevated risk misses important insights into the potential functionality of drug use to suicidal ideation (e.g. Downey 1991). Furthermore, seeking a reduction in substance use might increase the level of psychological distress and therefore the short-term risk of suicide (Motto 1999).

The initial impetus for this study emerged from my own observations in clinical work with young drug users who were experiencing suicidal ideation. On one level my training stipulated that drug use indicates an elevated risk of suicide, while my conversations with clients and discussions with experienced colleagues indicated that drug use might play a more complex role in the client's presentation. The question that neither the literature nor my colleagues could answer was, does somebody's drug use simply heighten the risk of suicide, or can it act as an instrumental behaviour to meet some underlying psychological need (at least in the short term), thus reducing the possibility of a suicide attempt? This study sets out to explore whether or not, and under what circumstances, drug use acts to meet underlying psychological needs related to suicidal ideation.

The dominant view on the treatment approach to drug use in suicidal clients is represented by quadrant 2 of Table 1. This indicates that drug use elevates risk of suicide while playing no protective function whatsoever. Ideally, clinical investigations should reflect the possibility that a particular client might also be represented by

quadrant 1, 3 or 4. Clinicians need a theoretical framework that allows for all four possibilities shown in Table 1.

Table 1.

Assessing Risk and Protective Influences of Substance Use

	Protective factor		
	no	yes	
Risk factor - no	1	3	
Risk factor - yes	2	4	

The findings from the present research might indicate the potential for a variable effect of substance use on suicidal ideation. In this case there is potential for future research to be extended to develop a clinical tool for assessing the relationship between an individual's substance use and the likelihood of a suicide attempt.

#### **Chapter 2.** Review Of The Literature

#### 2.1 <u>Associations between substance use and suicidality</u>

The number of deaths recorded from suicide in Western Australia for the period 1986 to 1997 was 2,420 (1964 males and 456 females), with the cumulation of potential years of life lost standing at 75,000 (Hillman, et al., 2000). Suicide, as an act, is present across all cultures with no class of people exempt from its impact (Shneidman & Mankelkorn, 1994). Substance use has long been seen as a risk factor for suicide, with one quarter of male victims and one fifth of female victims having substance use problems (Hillman et al., 2000).

Traditionally the suicide epidemiology literature has treated drug use as a risk factor for suicide. Many studies have found an elevated level of drug use in individuals attempting (Beautrais, Joyce & Mulder, 1999; Brent, 1995; Fisch, & Lahah, 1991; Fridell, 1997; Garnefski & Wilde, 1998; Joun & Ensminger, 1997; Kirmayer, Malus & Boothroyd, 1996; Lester, 1999; Madianos, Gefou-Madianou, & Stefanis, 1994; Pages et al., 1997; Putnins, 1995) and completing suicide (Hawton, 1994; Kaminer, 1996; Lonnqvist, 1996; Mino, Bousquet, & Broers, 1999; Neeleman & Farrell, 1997; Ohberg, Vuori, Ojanpera, & Rossow, 1994). While the methodology varies across studies, the most common design used is correlational. That is, is there a positive or negative trend towards individuals using AOD being represented in suicidal populations? As the previous studies have established, there is a positive relationship between suicide-related behaviours and the presence of substance use. However, this finding does not establish causality.

Brent et al. (1993) stated that much of the increase in general population suicide rates in 15-19 year olds since 1950 in the United States was directly attributable to parallel increases in alcohol and other drug (AOD) use. A similar observation was made by Appleby (2000) for youth suicides in the United Kingdom. A large study conducted in the United Kingdom (Oyefeso, Ghodse, Clancy, & Corkery 1999) tracked the suicide rate of 70, 000 registered addicts from 1968 to 1992 (245 male and 53 female suicides were recorded in this period). What they found was a sharp decrease in the suicide rate

in this period from a high of 17.2 to 4.4 (males) and 52.6 to 11.3 (females) using a standardised mortality ratio. This represents an elevated rate of death four times that of the general population for males and eleven times that for the general population for females. In the 15-24 year age range, suicide rates were 6 times that of the general population. This study illustrates while the suicide rates dropped sharply in the registered addict population, the same sharp decline was not recorded for the general population (Higgitt, 2000). A primary contributing factor was seen to be a reduction in the prescribing of medical drugs that traditionally have provided an easy means to end ones' life (Higgitt, 2000).

Hillman et al. (2000) studied the toxicology results of all of the 571 recorded suicides by 15-24 year olds from 1986-1998 in Western Australia, 86% of which were males. The suicide rate was generally steady over the study period, although there was a sharp increase in male suicides in the last year of study. Alcohol and other illicit substance use increased amongst young people during this study period (Australian Institute of Health and Welfare, 1999). For those who had completed suicide, there was a general increase in the detection of illicit drugs over the study period. Alcohol was the most commonly recorded drug, with it being present in 44% of completed suicides for males and 36% for females. The next most common substance was cannabis with 19.6% for males and 11.1% for females. Opiates were found in 7.1% of males and 12.3% for females. Stimulants showed up in 9.4% of cases for males and 8.6% of cases for females. For those who had a positive toxicology result, 41% of males and 38 % of females were found to have a combination of two or more drugs in their system.

It should be noted that this research did not examine whether a positive toxicology result meant that the individual was intoxicated, in withdrawal, or neither at the time of death. While alcohol has a relatively short duration in the body, stimulants and opiates generally stay in the body for approximately three days, while cannabis can last up to 4 weeks for a heavy user. The implication of this is that it cannot be stated that the suicide was completed when the young person was intoxicated.

There were no significant differences in the method of suicide for those with and without illicit drugs in their system. Males most often chose hanging and carbon monoxide poisoning while females chose hanging, carbon monoxide poisoning and

overdose. Fourteen of the recorded suicides occurred while in custody. In 50% of the cases a positive toxicology result was registered.

For males who were reported as having a significant AOD problem in the three months prior to death, 56% did not have a positive toxicology result. For the corresponding female population, 54% did not have any drugs in their system at their time of death. They were neither intoxicated nor suffering from withdrawals at their time of death. Intoxication, through its effects on impulsiveness and cognitive processes, was thought to be the primary mechanisms associated with an elevated risk associated with AOD use (Hillman et al 2000). These results indicate that the majority of problematic AOD users were not under the direct effects of AOD at the time of completing suicide. This fact then raises the question of whether the absence of the drug influenced the decision to complete suicide in some problematic drug users. Alternatively, this data may indicate that the stresses associated with problematic drug-use could result in a suicidal crisis, even in the absence of intoxication.

Hillman et al. (2000) examined the precipitating circumstances that contributed to the suicidal act across gender for those with and without a positive toxicology result. For males with a positive toxicology finding, the only domains that were significantly elevated were AOD use and trouble with the law. Females with a positive toxicology result were more likely to have associated AOD problems and a psychiatric illness. None of the other stressors evaluated, including financial, relationships, family problems and unemployment, were higher for those that tested positive to AOD post mortem. This finding suggests that for those who used in the period leading up to their death, specific drug induced problems did not unduly contribute to the decision to take their own life. This does not support the theory that an increase in problems because of AOD use contributes to the decision to commit suicide.

Hillman et al. (2000) found that 25% of the male sample and 41% of their female sample had been diagnosed with a psychiatric illness. Those with a psychiatric history were no more likely to have positive toxicology results than those without such a history of psychiatric illness. There were differences however with more people with a positive toxicology result more likely to have a depressive illness than a psychotic based presentation. This might reflect relative rates of illness in the general population.

Borges, Walters and Kessler (2000) surveyed over 8000 (15-54 years of age) householders via two face-to-face interviews. The data were collected between 1990 and 1992 using the World Health Organisation Composite International Diagnostic Interview. Special attention was given to assessing substance use disorders. Suicidality was assessed for lifetime occurrence, age of onset and recency of ideation. The analysis of results was completed using a discrete time survival analysis with time-varying covariates. This was used to estimate the effects of substance use, abuse, and dependency on suicidal ideation and subsequent first suicide attempts. They found that substance use, inclusive of alcohol, analgesics, sedatives, tranquillisers, stimulants, cannabis, cocaine, inhalants, hallucinogenics and heroin, were all significant independent predictors of a suicide attempt. The odd ratios ranged from 1:7 for cocaine use to 3:6 for sedative use. Substance abuse or dependency resulted in a significant elevated risk over non-problematic use for only alcohol, inhalants and heroin.

This study found that once all the relevant variables were controlled for, the separate substances all had similar associations to risk for the first suicide attempt. The total number of substances used was more strongly associated with an increased risk, resulting in a positive association between the number of substances used and suicidal behaviour.

The finding that only current substance use, with the exception of cannabis and heroin, was related to increased risk suggests that proximal factors associated with AOD use are more important than a history of AOD use when predicting risk. The authors commented that further research is required to further understand what these factors are.

It was also found that while AOD disorders were associated with higher levels of suicidal ideation, this did not translate into having formulated a plan to attempt suicide. Though speculative, this suggests that the attempts recorded in this sample were likely to be the result of an impulsive act when intoxicated. Those who were using multiple substances, when compared to those whom were using only a single substance, were no more likely to commit an impulsive suicidal act.

#### 2.2 Pathways to increased risk

Three explanations of how the use of substances can increase suicide-related behaviours have been proposed (Weiss & Hufford, 1999). First, the lifestyle associated with using illicit substances can reduce social supports (e.g., family, friends, workplaces, educational systems) and increase the likelihood of facing significant crises. When a drug user experiences a crisis he or she is socially isolated and therefore is more likely to attempt suicide. Second, depressant drugs such as alcohol are thought to impair decision-making processes, potentially contribute to increased depression, reduce inhibitions, and increase impulsive actions, thereby increasing the risk of suicide during a crisis. Third, using stimulant drugs such as amphetamines is thought to increase chaotic behaviours and the probability of harming oneself impulsively.

Darke and Ross (2002) reviewed the literature on suicide rates, suicide risk factors and the methods employed for suicide by heroin users compared to the general population. The risk factors associated with suicide attempts for opiate users were largely the same as those established for the general population. The authors noted the higher exposure to each of these risk factors for opiate users compared to their matched peers. An example of this was one quarter to one third of their sample of opiate users met the lifetime criteria for clinical depression. It was also noted that heroin users often live in extreme social isolation and where relationships are held, conflict is common.

Darke and Ross (2002), reported a 17-40% lifetime prevalence of attempted suicide among opiate users. In the 12 months preceding the interview, 23-55% of opiate users reported experiencing suicidal ideation. Whilst males were more likely to complete suicide than females, female opiate users were three times more likely to attempt suicide than their male counterparts. This finding for sex is similar to that found for the general population.

Multiple studies have shown that annual mortality rates for opiate users are approximately 2-3 percent per annum. This represents a rate of death approximately 13 times that of matched peers. In breaking that down in gender, female opiate users run a relatively higher risk of death to matched peers than that of their male counter parts. A 10 year longitudinal study by Tunving (1988) of young drug addicts admitted to a

special AOD treatment ward found that male heroin users were 5.4 times more likely to die than the control group and male amphetamine users were 2.5 times more likely to die than those in the control group. The studies by Borges, et al. (2000) and Hillman et al. (2000) support the findings that opiate users are more likely to commit suicide than their stimulant using counterparts.

Harris and Barraclough (1997) investigated the standardised mortality ratio (SMR) for licit and illicit substances in their review of the medical literature. They reviewed 32 papers that assessed the impact of alcohol dependence and abuse and found a range of SMR's of 1-60. Those with concerns around alcohol face a 6 times greater risk of committing suicide than matched peers. Interestingly females recorded a SMR 11 times that of matched peers, whilst the males SMR was four times that of their matched peers. Overall, it was concluded that the heavier the drinking, the greater the SMR. Comorbid psychiatric problems were thought to elevate overall risk in drinkers.

The impact of opiate use and dependence in 7500 individuals was reported in 12 papers as reviewed by Harris and Barraclough (1997). Variations in the SMR between studies were 3-36 with an overall rate of 14 times that of matched peers. Prescription dependence and abuse was evaluated in three European papers. When this occurred in isolation an SMR 20 times that of the general population was recorded. This rate dropped to 16 times when alcohol abuse was a co-presenting concern. However when prescription drug abuse and dependence were combined with illicit drug abuse, the SMR jumped to 44 times that of the general population. Four studies examining the impact of poly-drug use led Harris and Barraclough to conclude that poly-drug use resulted in an SMR 20 times greater than that of the general population. For female poly-drug users with a previous history of at least one suicide attempt, their SMR was 87 times than that found within the general population.

A Swedish study of 45, 000 cannabis users, Harris and Barraclough (1997), found that heavy cannabis smokers had a suicide rate four times that of the general population. No increased risk was found for lesser use. The authors concluded that there was not likely to be a causal link between cannabis use and suicidality, instead suggesting that comorbid psychiatric illness found in heavy cannabis smokers most likely accounted for the elevated SMR. Four studies examining nearly 500, 000 tobacco smokers found that

they had an elevated rate of suicide that was positively related to dose. This elevated risk dropped significantly on ceasing nicotine use, which questions the observation that increased risk is accounted for by underlying psychiatric and personality variables. Of course, such findings might simply indicate that people tend not to give up smoking until their suicidal crises and associated problems have passed.

#### 2.3 Overdose and suicidal intent

Some authors have suggested that opiate overdoses represent an extension of suicidal behaviours, therefore representing an underlying intent to die. Farrell et al. (1996) suggested that classification systems which generally are more likely to record the cause of death as an accidental overdose, under-represent those whose intent was to end their life.

Kjelsberg, Winther and Dahl (1995) reviewed the cause of death for one thousand, seven hundred and ninety two adolescent psychiatric in-patients, for an average of 15 years after their initial discharge. This was conducted to assess the likelihood that suicides via overdoses are being misclassified as accidental overdoses in the Norwegian national statistics. Those recorded as having died from a drug overdose (39) and those that had suicided (35) during the study period were compared across a number of variables. A major finding of this research found that the suicidal group had significantly higher levels of suicidal ideation and psychotic features. Interestingly the overdose group had poorer impulse control than did the suicidal group. These findings led the researchers to conclude that while a small proportion of recorded drug overdoses are misclassified suicides, most overdoses are accidental.

Oyefeso et al (1999) tracked the method of suicide over a 25 year period for registered addicts within the United Kingdom. Drug overdoses were the most common method used to complete suicide over the 25 year period. During the period 1968-1972, barbiturates accounted for around 90% of all drug overdoses. With the decline in the prescription of barbiturates, 1988-1992, saw the highest proportion of drug overdoses from both methadone (23.5%) and antidepressants (23.5%). Across the entire study period, recorded suicides from heroin overdose were very low. Those that began the study in the age range 15-24 years were about 2 times more likely to die from a drug

overdose and hanging while 5 times more likely to die from carbon monoxide poisoning. Within this period, there were 322 undetermined deaths with 67% being from drug overdoses. Overdoses on heroin and morphine were more likely to be recorded as undetermined deaths than suicides. This led the authors to speculate that this may indicate an under-representation of drug overdoses in the suicide figures.

The research finding that most deaths occurred after an extended period of AOD use (11 years of use on average) (Kjelsberg, Winther and Dahl; 1995) is similar to the 10-12 years found by Tunving (1988) where the mean age of death was 24 and 26-28 years of age respectively. While not differentiating between causes of death, both observed that risk of death was greatest in the period adjoining heavy use in which users were seeking to cease use, sometimes through seeking professional treatment. Reasons for increased risk included the potential for overdoses to occur after a period of abstinence when a reduction in tolerance would mean a usual dose could well prove lethal. Studies by Misfelt and Byskov (1983) and Frykholm (1985) found that approximately 20% of suicides in substance users follow periods of abstinence or rehabilitation. The stress associated with efforts to remain abstinent was also seen as somehow contributing to over all stress and therefore increasing suicide risk.

Tunving (1988) also noted that some deliberate overdoses (and therefore suicides) might originate from what has been termed an abstinence violation reaction (Marlatt, 1980). This theory proposes that should a user, after a period of abstinence, relapse back into drug use, they are at an increased risk of committing suicide. This was thought to occur as a result of a sense of failure and hopelessness associated with resuming substance use.

Tunving (1988) also suggested that some young people who cease their substance use are unable, after long periods of associating with the AOD subculture, to reassimilate into mainstream society. A picture was painted of shy and lonely ex-addicts who were unable to establish conventional friendships. The loss of the networks associated with their previous AOD lifestyle and the failure to replace supports, results in social isolation, making them vulnerable to suicide.

Rossow and Lauritzen (1999) in their research of more than 2000 Norwegian addicts in treatment raised the notion that overdose may be the result of an ambivalence between living and dying. These authors suggested that users might exhibit careless behaviours that increase the potential to overdose, even in situations where the user has the knowledge and capacity to avoid such risk. This ambivalence was thought to originate in the hopelessness and poor self-esteem associated with the more socially marginalised AOD user.

Darke and Ross (2001) through research conducted with 223 methadone maintenance clients, examined the relationship between attempted suicide and non fatal heroin overdoses. The most common reasons for cited for an attempt was depression (30%), a relationship break up (18%) and either impending or recent incarceration (10%). Eighty two percent of attempters reported a major life event preceding (proximity not defined) the attempt (Darke & Ross, 2001).

Darke and Ross (2001) reported that 21% of their sample used non-opiate poisoning (predominantly prescription drugs) to attempt suicide, 20% slit their wrists, while 10% deliberately overdosed on heroin. Reasons cited for the method chosen reflected the impulsiveness of the attempts with 49% choosing their method because of its availability, while 12% looked for a means that would not be painful. The methods chosen were similar to those found in a literature review (Darke & Ross, 2002) where the predominant means to death was prescription drug poisoning. Deliberate overdoses accounted for less than 10% of both fatal and non-fatal attempts. The authors noted that heroin, a seemingly available and painless means to commit suicide, is only implicated in a small minority of suicides by opiate users. The authors noted the apparent disparity in this fact and called for further research to investigate this area.

A longitudinal study of 125 drug abusers admitted to a detoxification unit found that 45% had attempted suicide in the 5 years since their admission (Johnson & Fridell 1997). Only three of these attempts were made with their principle drug. Almost half of the suicide attempts were with prescription drugs, 6 by cutting and another 8 combining both cutting and hanging. The attempters and non-attempters were compared. Those that had attempted suicide where more likely to have had traumatic

childhoods and had more contact with child psychiatric units. Interestingly the type and level of substance(s) being used did not vary between the two groups.

Neale (2000) conducted interviews with 77 individuals within hours of them presenting to an accident and emergency setting post overdose. Of these 77 individuals, 49% stated that they had suicidal feelings before the overdose. Precipitating factors contributing to the overdose included depression (61%), relationship problems (53%) and seeing overdose as a way to deal with problems (34%). It became evident in the results that individuals were often motivated by a range of stresses and not a clear wish to die. In comparison to the group that overdosed accidentally, this group was more likely to report a history of mental health problems and not using heroin before overdosing. The authors did not report or speculate on the reasons for this.

Darke and Ross (2001) found significant gender differences in the patterns for attempted suicide in opiate users. They found that females were 18 times more likely to have attempted suicide before the period in their life were they used heroin use than in the period during their use. It was noted that these female heroin users are likely to have experienced high levels of deprivation and abuse in childhood. This led the authors to the tentative conclusion that these women when using in an attempt to cope with these childhood difficulties such as sexual abuse and it was these difficulties that were responsible for subsequent suicide attempts. In comparison, their male counterparts' suicide attempts mostly occurred after initiating opiate use. The authors concluded that these attempts were generally in response to the problems generated through their drug use.

The research by Rossow and Lauritzen (1999) found that those that had experienced an opiate overdose were six times more likely to have attempted suicide. The researchers found that there was a moderate, positive association between the number of life threatening overdoses and the number of suicide attempts. The study by Darke and Ross (2001) also found that those who had overdosed were more likely to have attempted suicide. This positive association was lost when the authors controlled for those subjects who had attempted suicide by overdosing. This finding suggests that those whom attempt suicide by overdosing were more likely to present to medical services as a result of an overdose.

The study by Hillman et al (2000) of 571 completed suicides in a West Australian sample of young people (15-24 years of age) found that it was rare for those that had completed suicide to do it via a fatal overdose of alcohol or other drugs. While 9 in the sample were considered to have a lethal level of AOD in their system, it was only the primary cause for death in three cases or less than 1% of completed suicides.

#### 2.4 <u>Adverse childhood experiences</u>

Traumatic experiences in childhood are often stated as a risk factor for the later development of AOD use, suicidal ideation and suicide attempts (Darke & Rossow, 2002). While these three presentations often have a common origin in adverse childhood experiences, it has been suggested that they initially develop as independent behaviours to cope with the difficulties associated with those early experiences (Rossow and Lauritzen 2001).

Rossow and Lauritzen (2001) studied a sample of 800 drug addicts admitted to treatment centres in Norway to assess the impact of adverse childhood experiences on subsequent suicidal ideation and attempts. Experiences in the domains of physical/sexual assaults, parental psychiatric and alcohol abuse histories (before age 18), parental separation, parental death or being removed from the family home (by age 16) were included in the assessment. Rossow and Lauritzen found that assaults, parental problems and early behavioural problems all independently predicted future suicide attempts. Higher levels of exposure to each of these were also increasingly positively related to subsequent attempts. When all of the separate domains were combined, a strong association was found to suicide risk. For those that had not experienced any of the researched adverse domains, (35 subjects) 2.9% had attempted suicide, for those who had experienced three areas, (88) 40.9% had attempted whereas those that had experienced 6 or more areas, (148) 56.1% had attempted suicide.

Breaking down the 42% of clients that had experienced suicidal ideation (ideation subgroup) within one month of their admission, 27.9% had occasional thoughts, 11.7% had high levels of ideation and 2.7% made active preparations for an attempt. Those that had attempted suicide in the past were more likely to present in the ideation subgroup.

The areas that independently accounted for significant levels of ideation were assaults, mother's psychiatric history and bullying. On combining all of the childhood domains, those clients that had not experienced any of the assessed domains, (37 subjects) 27% had suicidal ideation, those with 4 areas represented, (103) 40.8% were suicidal and those with 6 or more areas (141), 51.8% were suicidal within one month of admission.

Overall, childhood adversity was strongly associated with both suicidal ideation and suicide attempts in adult AOD users. Factors in childhood experiences that were found to be most influential were maternal psychiatric history, experience of violent/sexual assaults and a fathers alcohol abuse. A positive, graded relationship was shown to exist for both individual and combined factors for suicidal ideation and attempts.

Those that experience higher levels of childhood adversity, initiated AOD use earlier. From this the authors suggested that these individuals were using AOD in an attempt to cope with problems.

The authors recommended that policies to reduce suicidality in adults should focus on long term protection strategies for children to reduce their exposure to adverse childhood experiences. Approaches for clinical interventions with adults implied that the identification and treatment of the "psychological sequelae of a shattered childhood" would be the most efficacious in reducing risk (Rossow & Lauritzen, 2001, pg 238). No mention was made of reducing AOD use as a strategy to reduce risk in this population.

An extensive review of the literature by Spooner (1999) drew similar conclusions to that of Rossow and Lauritzen (2001). They found young people who had experienced trauma in children were at an elevated risk of illicit substance use and suicidal behaviours. Spooner discussed the notion that AOD are used to directly deal with the emotional pain of the abuse. It was thought that for those young who did not address underlying abuse issues in the relapse prevention process were likely to re-initiate use because feelings of shame, anger and guilt that had been previously alleviated by the substance use will re-emerge.

#### 2.5 Impact of coexisting mental health problems on risk

The impact of coexisting mental health disorders on suicide attempts was examined by Borges, et al. (2000). They found that these separate mental health diagnoses accounted for the majority of the suicide risk though once these were controlled, there remained significant odds ratios across the substances. This suggests that though co-occurring mental health diagnosis's account for the majority of the increase in suicide risk, substances also independently and significantly contribute to risk.

Brent et al (1993) used 23 adolescents who had a history of substance abuse and compared the lifetime risk factors with a control group. They found that the young people that had a history of substance abuse were more likely to have a family history of substance abuse and depression. Six young people in this group had developed depression before initiating their AOD use, while another 6 developed depression and AOD use simultaneously. Three subjects developed depression after initiating AOD use. This led the authors to conclude that substance use is often a complication of an affective illness that often begins in childhood. Spooner (1999) in an extensive review of the literature concluded that prior mental health problems were not a reliable or strong indicator for subsequent AOD use. Spooner also concluded that AOD abusing youth are more likely to have mental health concerns compared to matched peers. A possible explanation for this was that problematic AOD contributed to the development of these mental health concerns.

Dinwiddie, Reich and Cloninger (1992) examined the lifetime prevalence of psychiatric illness and history of attempted suicide in intravenous (IV) drug users. Results suggested that a diagnosis of antisocial personality disorder, alcoholism and depression each independently increased the odds of using substances via the IV route of administration. The use of drugs via the IV route was associated with an eight-fold increased risk in completed suicide. It was found that once these psychiatric conditions were accounted for, IV drug use did not pose additional risks to suicide when compared to other types of substance use. In this situation the underlying psychiatric illness accounted for the eight-fold increase in suicide risk found in IV users.

Proponents of social learning theory consider individuals to be rational decision makers who enact particular behaviours because of real and expected outcomes. Miller (1996) discussed the importance of cognitive representations of the consequences of use in influencing drug use behaviours. The levels and types of drug use can be directly related to desired, or perceived outcomes. Drug taking behaviours can be explained as functional, or serving a particular purpose for individuals. Initially this approach to understanding AOD use does not seem to explain why some people persist with using substances where the apparent problems associated with use outweigh the positives. The key to successfully comprehending this situation is understanding that a single positive of AOD use, such as relief from persistent intrusive post traumatic stress disorder (PTSD) symptomatology, may be more important to that person than a litany of negative consequences of use.

#### 2.6 Psychological distress increasing drug use

The notion that psychological distress is a trigger for the increased use of non-prescribed substances is widely reported in the literature. This review of the literature reflects the notion that users report either initiating or increasing AOD use in responses to distressing life events. These life events are reported to be responsible for an increase in psychological distress. The following study was conducted in Australia using a largely clinical population of young people.

The report on Young People and Drugs; Needs Analysis (State of Victoria. 1998) studied 66 Australian young people (14-21 years of age). Seventy one percent of this group had in the past or were either currently using a service for issues related to AOD use or had done so in the past. This study used a self-report format in which young people replied to questions in a survey format. The results were not specific to a suicidal population.

While two of the main reasons for AOD use reflected a sense of boredom (49%) and typical adolescent curiosity (54%), a significant theme of AOD use as a reaction to difficulties was reflected. Family arguments (38%) and school difficulties (34%) were commonly reported as an underlying reason for the use of AOD. Emotional disturbances such as feeling miserable (36%), not feeling good about oneself (36%) and

being angry (32%) were also reported as common reasons for use. A sense of social isolation in reporting no one to talk to (18%) and feeling that no one would listen (18%) also seemed significant contributors to AOD use.

This survey of adolescent AOD users found that approximately a third reported that their AOD use, at least in part, was in place to cope with relationship conflicts and/-or negative emotional states. While the efficacy of these strategies was not evaluated, this suggests that self medication style processes are evident in mainstream populations. Clinical populations, including those that were suicidal, were not investigated separately. It has been found that clinical populations are more likely to have experienced traumatic experiences and affective disturbances could be expected to more commonly occur (Gold, 2000; Van der Kolk & McFarlane, 1996). It could be hypothesised that self-medication processes would be more evident again in those that experience higher levels of affective disturbances and general difficulties that often result in suicidal ideation. This idea of regulating internal states through substance use has been developed into a theoretical construct termed self-medication theory by Khantzian (1985; 1997) (see section 2.8).

#### 2.7 Psychological distress underlying suicidal behaviours

#### 2.7.1 Suicide as a cry of pain

The notion that suicidal behaviours are the result of psychological distress was proposed by Williams and Pollack (2000). This approach incorporated a range of internal processes (personality variables and thinking styles) that are thought to contribute to the motivation to behave in a suicidal manner. For a suicide attempt to occur, certain conditions were considered to be generally present. These are underpinned by an overwhelming sense of being trapped in a situation for which there is no hope of either escaping or being rescued by another. In this scenario should the means to harm oneself be available, attempted suicide is one of a range of responses likely to be exhibited. The relative seriousness of the suicide attempt is thought to be influenced by the perception of the "escape potential" which is characterised by the subjective assessment of the probability they can escape from their stresses. The greater one's sense of being blocked, the more serious the resultant suicidal behaviours.

#### 2.7.2 Shneidman's theory of psychache

Shneidman (1993) referred to suicide as the movement away from intolerable psychological pain or unacceptable anguish. Shneidman termed this psychache. Shneidman argued that the individual who attempts or completes the act of suicide is not wishing to die, but to escape from his or her psychache. The therapist, according to Shneidman, is best advised to focus on lowering the perturbation of an individual, which will alleviate the perceived need for escape. The common goal of psycho-active substance use is to alter affective states and, in many cases, the goal is to reduce psychache (Khantzian, 1985).

Shneidman (1992) warns against confusing concomitance (events that occur at the same time as increased suicidal ideation) with causality (the events that necessarily precede the ideation because of their causal relationship). Research into substance use and its relationship to suicidal ideation has fallen into this trap. For example, while there may be an elevated level of non-prescribed drug use at the time of a suicidal act this does not automatically mean that the drug use has contributed to the suicide attempt.

#### 2.8 Theory of self-medication

#### 2.8.1 Khantzian's theory of self-medication

Khantzian (1985) proposed that individuals self-medicate via the psychotropic effects of drugs to counter the symptoms of psychiatric disturbances. Using the drugs' psychoactive potential an individual would be able to, while intoxicated, mask or suppress negative affect. Therefore as individuals discover they are able to reduce painful affect, they are more likely to repeat the act of drug administration, particularly in times of emotional pain. This allows the temporary asylum from trauma, which becomes an attractive option to an individual who habitually experiences unpleasant emotions and thoughts. It is this attempt to repeatedly regulate internal experiences that can often lead to dependant patterns of substance use, in which the costs to the user accumulate.

Khantzian (1985) argued that while substance use was not generally a long term solution to psychiatric problems, users discover that "short term effects of their drug of

choice helps them to cope with distressful subjective states and an external reality otherwise experienced as unmanageable or overwhelming" (p. 1263).

Khantzian (1997) further developed his theory of self-medication to explain why drug use persists even though it may be producing more discomfort than what it is relieving. Khantzian proposed that some predisposed individuals experience substance abuse as a regulation disorder, namely in an attempt to regulate affect. Dependent users are thought likely to be alexithymic, (those with the inability to verbalise or regulate emotional states) which primarily relates to a deficit in regulating emotional states. This results in huge swings in affect that is experienced as uncontrollable and overwhelming. It was also observed that the converse can be true where a general numbing is observed in those that have a history of trauma, particularly in childhood. This numbing was thought to be a primitive coping strategy learnt to protect the user against adverse emotional experiences.

Where initial use begins as a strategy to relieve painful affect states, Khantzian (1997) thought it likely that the motivation of the user would change over time to include the role of controlling affect. This was thought particularly relevant for those who did not have the conventional strategies available through which to offset emotional swings. The routine or cycle associated with drug dependency was thought to give a predicability and even element of control to those who otherwise felt like they were powerless to regulate painful states.

The psycho-pharmacological specificity or choice of a particular drug is said to be determined by three factors, personality characteristics, inner states of psychological suffering, and the main action of the drug. Opiates were thought to attenuate rageful and violent states, often associated with past experiences of trauma. Other central nervous system depressants such as alcohol were thought to break down defences that guard against intimacy and dependency both of which are though to produce anxiety and loneliness. This was thought to be most relevant for those who experienced a generalised numbing for which moderate doses of alcohol where thought to be the most effective in overcoming these prior learnt defences. In these cases self medication was not so much about covering hurt feelings, more so about allowing one to feel something. Stimulants were thought to have a dual role. In those who were depressed

it was seen to be used to lift mood, while for those who were hyperactive it was used to calm themselves.

Khantzian (1997) drew on the previously observed actions of these three classes of substances to comment on their utility to offset the symptoms of affective flooding, numbing and hyperarousal associated with PTSD. Opiates were noted for their capacity to calm and contain rage, while low doses of alcohol can reverse numbing and detachment associated with PTSD. High doses of alcohol can be used to dampen emotional flooding. Stimulants such as cocaine were thought to offset the negative symptoms associated with PTSD such as affective flattening.

#### 2.8.2 <u>Arguments against self medication theory</u>

Goldsmith (1993) holds that while the SMT holds a popular position with many therapists, it ignores the findings of research exploring the biology of drug addiction. Goldsmith presented research findings that suggest that depressed and anxious moods can be the result of AOD use (Frances, 1997) whereas those diagnosed with depression are no more likely to go onto develop an alcohol addiction. Goldsmith notes that drug induced mood disorders are often misdiagnosed as independent conditions for which AOD is then used to medicate. Whereas the SMH generate a position which suggests AOD use will continue to offset the symptoms associated with this state, Goldsmith suggests that abstinence is the most effective treatment for this apparent mood disorder (Frances, 1997).

Goldsmith (1993) argues that dosage is an important factor in determining the impact of AOD use on mood. He goes onto to give the example of a few alcoholic drinks often resulting in the experience of relief. However when this is increased to large doses of alcohol, mood often changes dramatically to a morose, even suicidal state. Goldsmith goes onto explore the apparent compulsive nature of AOD use in dependent users, suggesting they are unlikely to be able control the amount of the substance used. This holds that dependant individuals do not use substances in a careful dosed manner, but more in a compulsive fashion, which heightens the probability of negative consequences. Goldsmith also drew attention to the research that has found that the childhoods of alcoholic males were no more likely to hold incidents of trauma or

differential attachments to their mothers than control groups. Goldsmith finally draws attention to the dangers associated with accepting the client's versions of their AOD histories as they seek to rationalise their behaviours (Frances, 1997).

#### 2.8.3 Research examining self-medication theory

Schinka, Curtiss and Mulloy (1994) examined the self-medication theory (SMT) in an AOD clinic in-patient sample (predominantly male) of 478 adults. The psychological profiles of alcohol, cocaine, cocaine and alcohol and poly-drug dependent individuals were developed and compared to assess whether these profiles were in line with SMT predictions. Scales that tapped the mood disturbances such anxiety, depression and mania did not play a significant role in discriminating types of AOD used. This study did not support the notion that individuals would be drawn to certain types of drugs to offset specific disturbances.

The self-medication hypothesis was examined in the study by Pederson and Lavik (1991) in an adolescent sample (1230 young people) who used benzodiazepines. The major finding was that the majority of young people reported using these prescription drugs to cope with life stresses such as relationship break ups, death of a loved one and other stressful life events. This use was overwhelmingly occurring on an irregular basis and overall these young people showed little likelihood of problems associated with dependence. The young people who reported using these drugs for self-medication purposes were most likely to be supplied by their parents, suggesting parents were important in modelling the use of drugs to reduce psychological discomfort.

A longitudinal study by Newcomb, Vargus-Carmona and Galaif (1999) of 470 community adults examined the relationship between psychological distress and polydrug use. Through the use of a self-administered questionnaire it was found that early psychological distress predicted later substance abuse. More specifically earlier suicidal ideation predicted later substance use as they attempted to self-medicate their suffering through poly-substance use. The authors also found that substance use also predicted later psychological problems such as anxiety, suicidality and decreased purpose in life. The authors stated that the findings of this research supported the self-medication hypothesis. Newcomb, Vargus-Carmona and Galaif (1999) theorised that the earlier

drug use negatively impacted on the subject's ability to negotiate developmental milestones, which resulted in further problems.

Windle and Windle (1997) studied the inter-relationships between suicidal behaviours, depressive symptoms and substance use behaviours in 975 adolescents. They made no attempt to map the relative onset of depressive symptoms, suicidal thinking and substance use so one cannot ascertain causation. It was found that those who had reported suicidal behaviours reported using alcohol to cope with their problems more so than did the ideation only group. The level of alcohol use did not significantly vary across those whom had attempted and those who had experienced only suicidal ideation. Those who did report difficulties associated with their alcohol use were more likely to have attempted suicide. Family supports were also perceived to be lower for individuals attempting suicide than for the ideation only group.

A study by Dampousse and Kaplan (1998) examined the relationship between (1) the mediated effect of antecedent psychological distress on adolescent drug use, and (2) the mediated effect of adolescent drug use on later psychological distress as an adult. These were examined using a survey of 7600 adolescents followed by face-to-face interview in their mid twenties for over 6000 of the sample. The research found no association between early distress and later AOD use. AOD use was not directly associated with later psychological distress. What was found was a strong association between early distress and subsequent deviant behaviour. Deviant behaviour in turn increases the likelihood of association with a deviant peer group. Affiliation to a deviant peer group is associated with later AOD use. This gravitation was hypothesised to occur as a result of early negative social evaluations that decrease their motivation to conform to conventional social standards. Engaging in deviant behaviours provide alternative selfconcepts that are comparatively positive to those images which focus on their inability to conform to conventional social standards. A stated shortcoming of this study is that it did not have the capacity to evaluate the short-term impact of AOD on distress and delineate various impacts of different categories of AOD on distress. This research suggests that AOD use is a by-product of association with deviant peer groups, whose membership was sought to offset psychological distress associated with rejection by conventional social structures. While this research does not contradict the selfmedication hypothesis as it does not evaluate short-term impacts of AOD use on

distress, it does give rise to the notion that association with deviant peers may have a variable impact on risk in the short and long term.

A study by Weiss, Griffin and Mirin (1992) empirically examined the self-medication hypothesis by examining the motivations of drug use in 494 admissions to a private inpatient AOD clinic. The majority of clients (63%) claimed to use substances to relieve symptoms consistent with depression. While most of these individuals (71%) reported the AOD use did alleviate some of their depressed symptoms, some (26%) reported a worsening of mood through substance use. This study, contrary to the self-medication theory, did not find a specific matching of the substance used to that of the psychological disturbance. Roughly equal numbers of people reported using opiods, sedative-hypnotic drugs and cocaine to offset depressed mood.

#### 2.9 <u>Current clinical interventions</u>

To date, clinical interventions found in the literature have relied heavily on the findings of correlative studies that AOD use directly increases suicide risk. These findings have generally been used to offer the "one size fits all" approach of seeking to reduce substance use to increase safety within a clinical intervention. Individual differences in the interaction of suicide risk and AOD use are only given a brief mention. No papers reviewed attempted to incorporate these individual differences within clinical intervention.

Weiss and Hufford (1999) in The Harvard Medical School guide to suicide assessment and intervention outlined an intervention approach for reducing suicide risk in the chemically dependent. The first objective was to work towards achieving and maintaining a drug free status. Studies that found completed suicide was much more likely to occur in periods of active use, coupled with the doubling of the remission from comorbid depression were quoted to support this stance. The authors noted the potential for a sub-population of users to plunge into a lethal depression on abstaining from AOD use. The triggers for this elevation of risk were not explored by the authors. The treatment of co-existing psychiatric conditions, especially depression, was noted as being important to reduce overall risk. The use of medications such as antidepressants was thought to have merit as a way to treat both pre-existing mental health concerns and

also drug induced conditions. The authors finally noted the importance of linking people back into psychosocial support structures that may have been eroded in the period of AOD use.

Lestor (2000) drew the conclusion, based on his review of the literature, that substance abuse is a self-destructive and in some sense a suicidal behaviour within itself. This stance held that the detection and successful treatment of this condition may then prevent suicide from occurring. Murphy (2000) drew the conclusion that the negative consequences of substance abuse precipitate suicide in many cases. While Murphy noted that the most effective means to reduce risk would be to intervene in the AOD use, he noted that to date this has proven difficult for clinicians to facilitate. Murphy proposed that an active approach targeting the likely co-morbid affective condition was the best method for reducing suicide risk. The use of pharmacological approaches for this, such as antidepressants, was the only method discussed to reduce the affective disturbance.

The Guide for Counsellors Working with Alcohol and Other Drug Users published by the Best Practice in Alcohol and Other Drug Interventions Working Group (2000) directly discussed interventions with suicidal AOD users. It was noted that 70% of adolescent suicides occur in the context of AOD use. While a comprehensive assessment process was recommended along with various intervention strategies, no mention was made on the influence of AOD use on suicide risk. Subsequent to this, no directive was given as to how to assess and intervene with AOD use in order to reduce suicide risk.

#### 2.10 Conclusions

To date no research has examined the self-medication hypothesis within a suicidal population. Downey (1991) discussed the issue using clinical observations:

In short, drugs are used to insulate one from feelings of hurt, isolation, loneliness, emptiness, anger, shame, confusion, guilt, low self-esteem, and depression. Drugs are the remedy for coping with unvented emotions in the hope that the pleasurable sensations deaden the excruciating pain (p 265).

Downey then extended this line of reasoning to suicidal populations "When chemicals fail to provide the sought after release and the solution to one's problems, suicide can then become the one and only way out-THE LAST EXIT" (p 266). The core ideas of Shneidman's (1993) theory of psychache and Khantzian's (1985) theory of self-medication have been linked in this way.

Motto (1999) made the observation that alcohol use may have a transitory stabilising effect for the suicidal individual. The effects of alcohol such as sedation, euphoria and anaesthesia were thought to help one cope with levels of psychological pain that would otherwise be unbearable. For those individuals that are coerced into stopping alcohol use, suicide risk can escalate as otherwise contained distress threatens to overwhelm the abstinent individual. To guard against this occurring, Motto suggested building up the other supportive networks surrounding the person to compensate this loss. Motto drew attention to the fact this protective influence of alcohol is short term in nature as the negative consequences of drinking accumulate to add to the overall stress of the individual.

While an integration of Shneidman's theory of psychache with Khantzian's supposition of self-medication has an intuitive appeal and clinical support, there are only passing references in the research literature attempting to link the two models. Several authors have noted the potential for suicidal individuals to utilise the properties of psycho-active substances to reduce the discomfort originating from psychiatric conditions in suicidal populations, although such observations are restricted to passing comment in discussion sections.

No research paper was found that directly examined the potential range of influences AOD use has on suicide risk from the perspective of a client population. There was also no research found examining clinician's views on the impact of AOD on suicide outside of AOD use increasing risk. While critics of the SM theory highlight the discrepancies in client self-report data and clinician observations, no obvious attempt has been made to reconcile these differences within one theoretical position.

Social learning theory incorporates the view that both positive and negative aspects of AOD use can be concurrently present, with the subjective importance placed on each

factor determining the characteristics of AOD use. The basis for the decision regarding drug use is thought to be based on an appraisal of both the positive and negative aspects of use. While this theory extends current views to include potential multiple impacts of AOD use on suicidality, it does not offer a specific testable hypothesis for examining the relationship between substance use and suicide.

In the absence of a suitable guiding theory to examine the relationship between AOD use and suicide, clinicians and clients were interviewed in order to develop a theoretical framework that can be tested in subsequent research. The rational for selecting these populations originates from the view that these subjects have been assessing the dynamics between these two variables in a detailed manner, often for extended periods. Initially through a separate analysis of clinician and client reports, followed by combining the generated themes, a global theoretical construct was generated. The development of this theoretical statement should begin a process by which the divergent views of the research literature, the clinical guidelines generated through this literature, clinical approaches and client reports can begin to be brought closer together.

To translate the observations of clinicians and clients into a conceptual framework a thematic analysis was conducted. As no unifying piece of research has been conducted to guide examinations in this domain, a semi structured interview process was most suited to capture all of the possible relationships in this complex area. This style of research allowed the potential co-occurring risk and protective influences of AOD use on suicide risk to be assessed. A pre-emptive quantitative study, narrow in scope risked missing the full range of potential relationships.

The results of these interviews enabled the development of core themes that examined the interplay between suicide and non-prescription AOD use. This thematic conceptual framework can be used to guide future hypothesis testing research that examines specific domains within this research question

## 2.11 Research aims and objectives

Clinical guidelines contained within the literature that are based on correlative studies do not reflect the clinical practice of many experienced clinicians. These clinicians contend that substance use has the capacity to act as a protective factor, through the reduction of psychache, against suicide related behaviour. While the research cited has established that individual's report using substances to cope with stresses, this line of inquiry has not been extended to suicidal populations in detail. Therefore the objectives of this study are: (1) to understand clients' perspectives on the relationship between substance use and suicidal ideation; (2) to gather key practitioners' perspectives on the relationship between substance use and clients' suicidal ideation; (3) to gather information on key practitioners' current clinical approaches when working with suicidal clients that use substances.

### Chapter 3. Method

### 3.1 Methodology and design

The absence of a coherent theory that explains both the positive and negative impacts of non-prescription substances on suicidal people led to the decision to undertake an exploratory study using a qualitative research methodology. Qualitative designs enables the researcher to gather, analyse and report data where there is no pre-existing framework to provide guidance (Martin & Turner 1996). In particular the use of a grounded theory approach was chosen because of its utility in developing theory from multiple-case conversational interviews (Burgess-Limerick & Burgess-Limerick, 1998).

Conversational interviews across subjects reflect a process by which subjective realities are brought together to build knowledge in an area of interest. These stories are often complex and contradictory, requiring careful review in order for the researcher to create a sound and meaningful shared reality that reflects the participants' experiences (Burgess-Limerick & Burgess-Limerick, 1998). A person's experience of AOD use is highly individualistic and as such these experiences are not readily reduced to cause and effect suppositions. Through a careful refining of the narratives into concepts and then into core themes one can achieve a higher level understanding of the data.

In the initial formulation of grounded theory, Glaser and Strauss (1967) directed the researcher to approach the formulation of theory from the data without preconceived views. This ensured that the theory was wholly generated from the subjects' information. More recently, Strauss (e.g., Strauss & Corbin, 1990) and other authors (e.g., Burgess-Limerick & Burgess-Limerick, 1998; Pidgeon & Henwood, 1997) have noted the inevitability, and indeed utility, of the researcher's own ideas in both the interview and analysis process. This later view holds that while the primary theory development is derived from participants' data, emerging conceptual frameworks held by the researcher guide both their questioning of subsequent interviewees and the categorisation of data.

I came into the research domain well versed in current theory examining the impact of AOD use on suicide risk. This knowledge was also paired with over 7 years of clinical

experience in working with the targeted client group. From these experiences I developed the view that other processes in the relationship between AOD use and suicide risk might exist for clients that were not readily explained by current empirically driven theory. So while no clear alternative theory was evident in mind, several possible options were noted, one being that AOD use might provide a protective influence on those who are suicidal.

Pidgeon and Henwood (1997) described a process of "breaking out" in which traditionally held views can be challenged through the use of non-traditional research methodology. In their view, such a process needs to occur when a particular view-point has been generated from a single powerful source that may not accurately represent the domain. The popular view that AOD use is solely a risk factor for suicidality has used correlational studies. Taking a different approach to examine this issue has the potential to generate an alternative conceptual position.

### 3.2 Participants:

Two samples were used in this study; a sample of clinicians who work with young adult drug users with mental health issues (including suicidal ideation and behaviour), and a sample of young adult drug users who have a recent (past three months) history of clinically significant levels of suicidal ideation. This enabled the process of theory development to be influenced by both the clients' and clinicians' perspectives.

#### 3.2.1 Clients

The sample of young people (19-25 years of age) was drawn from both an AOD counselling agency and a specialised youth mental health service. The AOD service provided a free counselling service in a community setting for those experiencing problems with their substance use and their family members. The youth mental health service worked with high risk young people on an intensive, outpatient basis.

Ten client participants were interviewed, with an equal number of males and females participating. Ages ranged from 19 to 25 years. The clients were required to meet DSM IV criteria for either substance dependence or abuse within the period of being

suicidal. Six clients (four female) met the criteria for substance dependence with the remaining four (three male) meeting the criteria for substance abuse. Alcohol was the primary drug in four cases (three male) while amphetamines were in three (two female) and cannabis in a further two cases (one male, one female). One client met the criteria for poly-substance dependence. In all but one case the subjects were using at least two substances in the period being investigated.

The typical client participating in this research was somebody who had been in contact with a range of service providers over an extended period of time. They generally had a long history of abusive relationships that then contributed to experiencing severe problems in current relationships. All but two of the clients were living independently of family members at the time of the interview. During contact with mental health services, many of the clients had been given a personality disorder diagnosis (e.g., borderline). Fitting with this diagnosis, their suicidal histories reflected long-term chronic patterns that were commonly occurring alongside other non-lethal self-harming behaviours. Overall this client population represents those who require intensive support from those around them. While two individuals had progressed to tertiary studies, ongoing difficulties had significantly impacted on their ability to study. This had resulted in courses being undertaken part-time.

Clinically significant levels of suicidal ideation were required to be present within the previous three months before the interview for clients to be eligible for the research. Clinically significant was defined by the client frequently having thoughts about killing him or her self, and having made clear plans for suiciding. The referring clinician had to assess the level of risk as serious enough to require frequent monitoring, and in some cases, hospitalisation. In seven cases the subjects had attempted suicide in the three months leading up to the interview. A suicide attempt was defined as "a potentially self-injurious behaviour with a non-fatal outcome, for which there is evidence (either explicit or implicit) that the person intended at some (non-zero) level to kill himself/herself" (O'Carroll et al, 1996, p. 246-247). A suicide attempt may or may not result in injuries. All of the clients had attempted suicide at some point.

### 3.2.2 Key clinicians

Clinicians who had extensive experience (a minimum of seven years) working with substance using, suicidal youth were also interviewed. A wide range of disciplines was drawn upon that included clinical psychology (four subjects), counselling psychology (one participant), psychiatry (one participant), social work (two participants) and counselling (two participants). These clinicians were currently employed in either the alcohol and other drug field or mental health services.

### 3.2.3 Sampling procedures

A saturation sampling methodology was used to determine the size of the samples for both clients and clinicians. It was anticipated that at least six participants would be required for each group. Interviewing of additional participants continued until no new concepts were generated in three consecutive interviews; this is known as saturation. For the clinicians this occurred after 11 interviews while for clients this occurred after 10 interviews.

Clinicians from the two participating agencies were approached to refer clients to the study. It is important to note that, excluding one clinician who participated in the therapist interviews, they were not aware that the study included the examination of the potential protective influences of AOD use on suicidality. This ensured that clients who showed this pattern were not preferentially selected to participate. All of the clients referred by the clinicians were interviewed and included in the sample.

When a potential participant met the inclusion criteria for the research, their treating clinician gauged their preparedness to participate in the study. If this was gained, the researcher approached the client and organised a suitable time for the interview to occur. Within the initial stages of the interview, the suitability of the participant was reassessed to ensure that they met the criteria for the interview. An assessment was also completed to ensure that they were emotionally stable enough to complete the interview.

### 3.3 Interviews

### 3.3.1 Procedure for the interviews

Interviews began with an outline of the interview process and then noted issues such as confidentiality, expected use of the information and general rapport building. The informed consent sheet (see appendix C) that was signed at the beginning of the interview aided in this process. The audio-taping of the sessions was noted and discussed. No participant declined to be audio-taped.

By utilising a methodology that allows for questioning, the interviewer was able to explore lines of responses. Through this approach there is ample opportunity to gather relevant data. A tape recording was made of each session to allow later full transcription and thus facilitated a comprehensive data analysis.

### 3.3.2 Structure of the interviews

The information was collected via semi-structured interviews, (see Appendix D) developed and administered by the researcher. The questions were developed using a funnelling strategy, where general non-leading questions are asked in the early part of the interview before more and more focussed questions were used to explore increasingly specific domains. The questions were non-leading in the sense that they allowed participants to raise issues of interest without these specific topics being raised by the interview until later phases. In this instance, general questions about risk and protective factors were asked, followed by questions on the impact of AOD use on suicide risk. Finally the proposition that AOD use may act in a protective manner was raised for comment. This allowed participants to initially voluntarily offer unsolicited perspectives on the relationship between substance use and suicidal ideation early in the interview, which had not been directly asked for by the researcher. If observations pertaining to the more specific focus of later questions were raised by the interviewee, then this is taken to indicate that those issues are more salient for the interviewee than if the same comments had been made only in response to the specific questions on those issues. The questions towards the end of the interview were constructed through

reference to Shneidman's (1993) theory of suicidal behaviour and Khantzian's (1985; 1997) theory of self-medication.

For clinicians, the interview was broken down into three phases. The first phase explored their perceptions of the risk and protective factors relating to suicide. In this phase the researcher did not raise the issue of substance use. The second phase of the interview explored the clinicians' perspective of the impact of non-prescription substance use on suicidality. The third stage directly explored the idea as to whether the clinicians thought substance use could be protective in some instances when used by suicidal people. The interviews lasted for 50 to 75 minutes.

For clients the interview was broken down into 5 phases. The first and longest phase explored the perceptions of both protective and risk factors associated with the period of being suicidal. Factors associated with their lifestyle were also explored in this phase. In the second phase of the interview, client's substance use while suicidal was explored. In the third phase of the interview clients were asked about the impact of their AOD use on suicidality. In the fourth phase clients were asked whether the client thought that AOD use could be protective for someone who was suicidal. The fifth and final phase explored the clients' views on clinical approaches for helping this client population. The interviews lasted for 50 to 75 minutes.

As indicated by the semi-structured nature of the interview schedule, questions not appearing on the interview list were asked of interviewees. These questions were used to ensure the client elaborated on themes of interest. The themes associated with future phases of the interview were not raised unless the interviewee had previously raised them. Where an interviewee independently raised a theme that was to be tabled later in the interview, non-directive questions were used to further explore their views.

### 3.3.3 Setting for the interviews

The research was conducted within the Holyoake Institute of Alcohol and Other Addictions and YouthLink, a specialist youth mental health service operated under Inner City Mental Health Services. Most of the youth interviews were conducted within

Holyoake and YouthLink agencies. Some clients, for whom transport was difficult, were interviewed within their homes.

Most of the clinicians were interviewed within their work settings. Two clinicians were interviewed within the Holyoake Institute.

### Chapter 4. Results

### 4.1 Analytic process

The qualitative analysis of the data was guided by Pidgeon and Henwood's (1997) work on focused conceptual development. The core function of this approach is to categorise and then further refine an unstructured set of data through the use of theoretical codes, concepts and researcher interpretations. This approach is described as particularly useful for new fields of research where theory development is a core aspect of the research. Through the development of a core theme a new theory can be developed that encapsulates the data, hence the findings are grounded in the research.

The initial stage in this research was to collect data through the interview process (see appendix D). The sessions were audiotaped and transcribed into verbatim written form. Throughout the transcribing process a numerical code was inserted to identify paragraphs and pages.

Through a process termed open-coding, the data was assembled into first level themes. Theme definitions were used to describe the individual themes generated. Some of these definitions were lengthy as it was important that they captured the essence of what was said by the participant. Most of these definitions were generally more abstract than the raw data as this allowed for the refining process to begin. When new ideas emerged in the data, new themes were added. If a subsequent transcript contained a similar idea to an already developed theme, it was placed into the existing theme. Periodically an existing first level theme was either split into two separate themes or alternatively two themes with similar content were collapsed into a single first level theme. This was done repeatedly in order to better capture the information.

The development of second-order themes required the first order themes to be integrated into groupings that were linked through a higher-level shared idea. The second-order themes were given a definition that illustrated the connection between included first level themes at a higher order of abstraction. This served to further reduce the volume of the data.

Once no new second-order themes were generated in successive interviews, data was assessed as being saturated. Once this had been achieved, the next step was to place the second-order themes into the predetermined domains of (1) AOD use increasing suicide risk (2) AOD use decreasing suicide risk (3) AOD use as either not having a significant impact or mixed impact on suicide risk (4) Clinical implications. These domains are represented in the following result sections for the clinicians and clients. Themes shown within each of the domains are second order.

### 4.2 Clinician results

Second-order themes generated by clinicians relating to the impact of substance use on suicidality were categorised into three areas. The first third-order theme (or domain) of substance use can be associated with an increased risk of suicide was noted by all of the clinicians interviewed (11 clinicians 200 references). The second, third-order theme comprised themes relating to the idea that substance use can decrease the risk of suicide through the regulation of emotional states (11 clinicians, 254 references). The third, third-order theme that substance use may not have a clear or significant impact on suicide risk was raised by 10 clinicians (52 references), and comprised themes related to clinical strategies. Each of these four themes is discussed in turn.

### 4.2.1 AOD use increases the risk of suicide

### 4.2.1.1 Introduction to AOD use increasing suicide risk

The idea that AOD use can increase the potential for suicidal ideation and, in some cases, for a suicidal act to occur was raised by all of the clinicians with a total of 200 separate references to this theme. The essence of this set of themes is that AOD use can increase the potential of a suicide attempt, predominantly through the effects of intoxication (e.g., dis-inhibition) or from problems arising from AOD use (e.g., relationship conflict) overwhelming coping resources.

Nine clinicians (57 references) raised this issue in the first phase of the interview when the issue of AOD use had not yet been raised by the interviewer. All clinicians mentioned this theme (60 references) in the second phase when they were asked to reflect on the impact that AOD use has on suicidality. The main factors mentioned in

regard to this elevation in risk were the immediate effects of intoxication on behaviour such as, impulsiveness and the accumulation of problems associated with a drug using lifestyle such as financial hardships. All of the clinicians noted that individual differences in the impact of AOD use on risk are important. The individual second-order themes that contributed to this domain are outlined in Table 2 and discussed in this section.

Table 2.

Second-Order Themes Pertaining to AOD Use Increasing Suicide Risk

Themes Number of references [and clinicians] in			
Themes			
Individual differences influence the impact	each phase  1 <sup>st</sup> phase 4 [2]; 2 <sup>nd</sup> phase: 4 [3]; 3 <sup>rd</sup> phase		
of AOD on risk	16 [9]; total 24 [11]		
Dis-inhibition/impulsiveness resulting	1 <sup>st</sup> phase 17 [6]; 2 <sup>nd</sup> phase 8 [5]; 3 <sup>rd</sup> phase		
from intoxication may increase risk	7 [5]; total 32 [8]		
Speed use can increase the risk of an	2 <sup>nd</sup> phase 12 [5]; 3 <sup>rd</sup> phase 8 [3]; total 20		
attempt	[7]		
Problems resulting from AOD lifestyle	1 <sup>st</sup> phase 7 [5]); 2 <sup>nd</sup> phase 4 [3]; 3 <sup>rd</sup> phase 6		
may increase suicide risk	[4]; total 17 [8]		
AOD use increases risk	1 <sup>st</sup> phase 19 [7]; 2 <sup>nd</sup> phase 31 [11]; 3 <sup>rd</sup>		
	phase 22 [7]; total 72 [11]		
AOD use may trigger a mental illness that	1 <sup>st</sup> phase 7 [5]); 2 <sup>nd</sup> phase 4 [3]; 3 <sup>rd</sup> phase 6		
is then a risk factor for suicide	[4]; total 17 [8]		
Alcohol use increases risk	3 <sup>rd</sup> phase 5 [4]; total 5 [4]		
A person attempting while intoxicated	1 <sup>st</sup> phase 1 [1]; total 1 [1]		
would have tried at some point even if			
straight			
Intentions in use resulting in overdose may	1 <sup>st</sup> phase 2 [1]; total 2 [1]		
be ambivalent between intoxication and			
death			
Externalisation of control (ie possibility of	3 <sup>rd</sup> phase: 1 [1]; total: 1 [1]		
overdosing found in heroin use is			
attractive to some			

### 4.2.1.2 Individual differences influence the impact of AOD on risk

The presence of individual difference factors (either state or trait) such as depression and or inherent impulsiveness were thought to be important in influencing the overall levels of suicide risk in AOD users. It was raised by several clinicians that for those who were naturally impulsive, the use of substances would increase the risk to a dangerous level, which could lead to a suicide attempt. Two other clinicians raised the possibility that for those already depressed, depressant AOD use may initiate suicidal thinking. This position was challenged by other clinicians, who stated that AOD use does not create suicidal ideas but rather increases the potential for those already harbouring suicidal intentions, to enact on those tendencies. (T10, 1st phase) "It's not as if alcohol or drugs makes them do what they would not have done anyway but it certainly adds impetus to carrying out something".

Gender differences acting to influence the impact of AOD use on suicide risk was raised by two clinicians in the first phase of the interview who observed that males tended to binge use (use large quantities in a single session) more than females. This resulted in an increased risk of a suicide attempt occurring. (T1, 1<sup>st</sup> phase) "I have not seen a lot of clients that are women, that are into the same degree of bingeing behaviour that guys are". This idea was not developed further, although the underlying reasons may be in the different social standards which are more accepting of binge related behaviours in males.

One clinician in the first phase of the interview, presented the observation that suicide risk may increase following a relapse, depending on individual differences in self-evaluation. The proposed mechanism for this was a sense of hopelessness that they had reverted back to an old habit that they were trying to change. This sense of failure was seen to be sufficient to bring about a suicide attempt. (T5, 1<sup>st</sup> phase) "It could just be people saying 'well I have gone and stuffed up again, I am worthless, people are going to be angry at me so I may as well end my life'". This sense of failure was thought to be compounded by a sense that those around them have been let down by their relapse, resulting in otherwise supportive people reacting negatively.

Should an individual's expectation that his or her circumstances will improve on ceasing substance use not be met, then this was thought to be a potential trigger for increased risk of suicide. One clinician observed that on ceasing use, a person's general situation might deteriorate. It was felt that this deterioration would be more likely to occur if an individual was not securely linked with conventional social support structures. For those individuals whose whole identity and support network were tied up in the using subculture, the sudden loss of identity may lead to a sense of alienation and isolation. (T10, 2<sup>nd</sup> phase) "I think that for some people their identity is, I am Fred and I am an addict. All their identity and lifestyle is linked up with that so you strip them of all that identity when you get them straight and they are going to feel more alone and more alienated".

Clinicians consistently indicated that to understand the influence of AOD use on suicide risk, other variables need to be taken into account. (T4, 3<sup>rd</sup> phase). "I think when you are talking about individuals and their drug use patterns and their suicidal ideation you have to look at each individual and the facts that are involved for each person. I don't think that you can automatically apply a blanket rule for everyone". These observations focused on how the substance in question interacted with the individual characteristics of the user and his or her wider circumstance. Several participants made direct or indirect references to the interaction model by (Zinberg 1984). (T10, 3<sup>rd</sup> phase). "And I still think that the drug, set and setting model is the best one to adopt. So you have lots of drug effects, you have got lots of individual mood effects and lots of setting effects". The notion presented here was that to assess the impact of AOD use on suicide risk, attention must be broadened out from just focusing on the substance being used to also include the individual's characteristics and his or her environment. This would then enable a more accurate view of suicide risk to be established.

# 4.2.1.3 <u>Dis-inhibition/impulsiveness resulting from intoxication may increase</u> risk

Intoxication was thought to increase suicide risk through several means. The observation that intoxication can heighten impulsiveness in those with high trait impulsivity and reduce inhibitions was consistently raised by eight clinicians (32 references) across all three phases of the interview. Attempts were made to separate out

impulsivity and dis-inhibition. Reduced inhibitions were associated with an unplanned attempt that likely resulted from experiencing a stressor while intoxicated. This was thought to be limited to the period of intoxication. Attempts resulting from increases in impulsiveness were thought to occur where there was a pre-existing orientation towards suicide. Several clinicians indicated that for those already committed to the notion of committing suicide, the excessive use of AOD allowed them to overcome otherwise protective factors. (T4, 2<sup>nd</sup> phase) "I think that sometimes when somebody is suicidal they (sic) will prime themselves (sic) with their drug of choice so they act on it, the Dutch courage stuff". These protective factors may include the fear of completing the behaviours that would result in death such as jumping or not wanting to hurt loved ones.

One clinician in the first phase of the interview raised the perspective that dis-inhibition associated with intoxication comes from socially learned behaviours and not the physiological effects of the drugs. It was proposed that this 'artificial' dis-inhibition was the excuse that allowed the breaking of social injunctions against suicide. (T10, 1<sup>st</sup> phase) "What I think we have learnt culturally in western society, which is quite Protestant ethic and rule bound, in areas such as sex and this is we must not do it therefore the drugs serve as a social licence".

It was hypothesised that when acutely intoxicated, dis-inhibition and impulsiveness significantly impairs problem-solving skills (2<sup>nd</sup> phase, four clinicians, seven references) especially for those with pre-existing poor judgment (T6, 2<sup>nd</sup> phase). "I think that AOD use will also cloud judgement so it will make someone less able to problem solve, think of other ways of dealing with it". For an individual already experiencing problems, intoxication can result in a mind-set that reduces the ability to see solutions to those problems. This may result in a belief that the only options are to endure the perceived intolerable life circumstance or commit suicide.

### 4.2.1.4 Speed use can increase the risk of an attempt

The potential for amphetamines to elevate suicide risk was noted by seven clinicians (20 references) across the second and third phases of the interview. It was observed that intoxication from amphetamines often results in increases of impulsivity. As discussed in the previous section, impulsivity, triggered by life stressors, was thought to result in

unplanned suicide attempts. One clinician extended this line of thinking to indicate that these suicide attempts were due to impulsivity rather than psychological distress.

Methamphetamine, which has become commonly available in the state of Western Australia, was singled out for its potential to increase the risk of suicide. One clinician noted the possibility of long-term damage to neurochemistry for the heavy methamphetamine user. Damage to receptor sites in the brain was linked to an extended experience of depressed mood. This drug was also associated with high levels of druginduced psychosis.

The crash period following the use of amphetamines was associated with irritability, poor sleep patterns and depressive presentations lasting several days. This is commonly associated with both the physical and psychological recovery period after a general depletion of the bodies resources associated with speed use. This is then followed by a withdrawal period that includes the presence of strong cravings for the drug. These periods were described as high-risk for suicide as the positive feelings associated with intoxication gave way to what is generally the opposite mental state. For one clinician it was this comparison between opposing states that can lead to a suicidal state. (T8, 3<sup>rd</sup> phase) "The only problem I can see with that is again that contrast effect how they feel with the drugs and how they feel when they are straight and how that is interpreted. Because it can be interpreted as I feel like a really miserable being unless I am on drugs therefore I am a miserable human being".

## 4.2.1.5 Problems resulting from AOD lifestyle may increase suicide risk

Problems originating from the lifestyle associated with substance use were seen to potentially elevate suicide risk (ten clinicians, all three phases; 46 references). This view drew upon the observation that a drug using lifestyle, especially illicit use, creates many psycho-social stresses for the user. (T11, 3<sup>rd</sup> phase) "The continuing behaviours or harms that occur through the drug abuse results in a whole spectrum of other experiences in life, whether it be a loss of licence, loss of work, loss of a relationship which I think would then result in periods of thinking I am hopeless". These stresses were thought to be wide ranging in nature and include relationship breakdowns, health concerns, vocational hardship, identity loss and a reduction in social standing. One

clinician stated that substance use is relevant to suicide risk primarily through the problems it brings to the user.

Suicide risk was also thought to increase when the person became intoxicated and experienced drug induced hardships. (T4, 2<sup>nd</sup> phase) "Once that intoxication has worn off, things like having a hangover or feeling terrible or regretting things or being in trouble with other people for getting that drunk". In this case, the risks associated with intoxication combined with the stresses may be enough to trigger a suicidal act. It was also proposed that problematic behaviours, such as risky sexual behaviours and criminal activites occurring while intoxicated could also present the user with additional problems.

It was widely stated that illicit in comparison to licit drug use generates a more extensive range of problems for the user. It was suggested that is was not due to the actual properties of the drug, but rather the community's treatment of the substance and its user. These individuals, who are often the already marginalised members of society, are often caught in pattern that results in further social alienation. (T4, 3<sup>rd</sup> phase) "But there is the legal/illegal distinction as well, they may acquire a whole lot of other problems if they get caught doing something illegal". The act of obtaining and using the drug makes the user a criminal and as such they are likely to be further alienated from social support structures such as family and vocational/educational facilities.

### 4.2.1.6 AOD use increases risk

The second order theme of AOD use increasing suicide risk encapsulated blanket observations that suicide risk was increased through the use of AOD's. In some instances, clinicians noted that while AOD use may have a SM aspect, generally this was negated by its overall tendency to increase suicide risk. (T6, 3<sup>rd</sup> phase) "I do not think it is super effective in my opinion. It may be at times and for short times. It's a bit iffy. But the problems are likely to come along. So that is going to be a bigger thing than the protection". While attempting to reduce negative affect, the user ends up accumulating problems that then generate more discomfort than what the AOD use can offset. For clinicians a simple cost-benefit ratio that captured the relative pros (perceived reduction in discomfort experienced) and the cons (increase in problems and

the resultant anguish experienced) was used. For most, the problems associated with use were seen to outweigh the benefits and thus increase the likelihood of suicidal ideation being increased.

### 4.2.1.7 AOD use may trigger a mental illness that is then a risk factor for suicide

Eight clinicians across all three phases of the interview (17 references) indicated that substance use may induce a mental illness, which then was a risk factor for suicide. Psychosis and depression were thought to be the mental illnesses most likely to result from substance use.

Three clinicians drew attention to the unique differences that can result from the use of the same substance across individuals. For instance where a substance such as cannabis may provide an effective means to "mellow out" for one user, it may put another into a psychotic episode. For those people who experience adverse mental health conditions through drug use, it was stated they should cease their drug use. Seven clinicians indicated that when present, drug induced mental illness contributes to an elevated level of suicide risk. One clinician proposed an alternative view that while drug use may produce psychotic symptoms this did not translate into elevated suicidal behaviour. (T10, 2<sup>nd</sup> phase) "You know that LSD is not necessarily going to make you suicidal, it may make you psychotic, but it will not make you suicidal".

The potential for substance use to result in a mood disorder was reported with depressant drugs being singled out as the most likely to result in depressed thinking. One clinician observed that SM processes soon gave way to increased levels of depressed mood and suicidal ideation. (T3, 2<sup>nd</sup> phase) "AOD use would increase negative thinking via affecting mood so yeah so as your mood goes down you get more negative so you are more likely to experience suicidal ideation". An alternative pathway leading to depression was thought to originate from dependent AOD use. It was hypothesised that a user may feel trapped in the cycle of dependency and not see any avenues to escape his or her situation. This sense of hopelessness was thought sufficient to spark depression and potentially suicidal ideation.

### 4.2.1.8 Minor themes relating to AOD use increasing risk

The second-order themes for which there were a limited amount of references will be discussed in this section.

One clinician (third phase) hypothesised an attraction to taking near lethal doses of a drug, thus is circumventing a clear decision-making process about death. This resulted in the choice between life and death being left to chance. (T10, 3<sup>rd</sup> phase) "Crank up a good hit, you might die and for some people it's a lottery they are prepared to take. Either I will be dead in the morning or I won't. And I think there is a nice externalisation of control which is beautiful if you are feeling in a real mess". The risky behaviours of experienced opiate users, who were thought to be over-represented in the statistics for fatal overdoses, was used as evidence to support this position.

Clinician two stated that a user may-be ambivalent when using large quantities of substances (especially opiates) between achieving acute intoxication or death. The attraction in this instance is not so much the removal of oneself from the decision making process, but more so reflects drive to obtain an intense experience, thus risking a fatal overdose. (T2, 1<sup>st</sup> phase) "Quite often they will say I took a lot of speed or LSD or whatever and I thought if I die then so what and if not at least I would knock myself out for a little while".

Four clinicians (five references) reported that alcohol had the potential to increase the risk of suicide. The elevation in suicide risk was thought to primarily occur while intoxicated, most often in the context of binge use. (T4, 3<sup>rd</sup> phase) "I think that being really drunk and out of it, makes it more likely that somebody is going to have the energy to get up on the bridge or walk in front of traffic". These bingeing behaviours were thought to happen more often in males and also in rural settings.

One clinician in the first phase of the interview suggested that individuals who attempted suicide when intoxicated would have done so anyway at some point in their lives. (T10, 1<sup>st</sup> phase) "It's not as if AOD makes them do what they would not have done anyway". This holds that AOD use does not increase the lifetime risk of suicide but instead influences the circumstances it occurs.

### 4.2.1.9 Integrating AOD use increasing risk

The interaction model (Zinberg 1984) has been widely adopted when trying to understand the range of experiences associated with substance use. It would seem to provide a sound framework with which to conceptualise the impact of AOD use on suicide risk.

The characteristics of the drug itself were noted as important in determining the impact on suicide risk. Seven clinicians quoted amphetamines (including methamphetamine) as being the AOD most likely to increase suicide risk. This was thought to be the result of the drug's potential to increase both impulsivity and dis-inhibition. Amphetamines were also linked to psychotic and depressive states, which were also thought to increase overall suicide risk.

The characteristics of the individual were thought to be influential in determining suicide risk through the observation that personality traits will interact with the pharmacological properties of the drug to influence risk. Important individual difference factors included psychiatric history, problem-solving skills, affect-regulation skills, developmental history, impulsivity, and gender.

The environment in which the individual exists was described as an important influence on suicide risk. Consideration to the supports surrounding the individual, community attitudes towards AOD use, environmental stresses and legal frame-works were all noted for their capacity to directly influence risk.

There was a strong emphasis on the potential for substance use to increase suicide risk, especially in the intoxication phase. This section highlighted the need to assess the three domains of the substance, the individual and the environment when assessing AOD's impact on risk. As the name of the interaction model (Zinberg 1984) suggests, importance also was placed on the reciprocal impacts of each variable within and across each domain (drug, set, and setting) on determining overall risk.

### 4.2.2 AOD use as protective

Two higher-order themes emerged that related to the possibility that substance use may reduce suicidal behaviour. The first is substance use as coping (223 references 11 clinicians). Within the first phase of the interview two clinicians made 13 references to the theme that AOD use can be protective. By the second phase of the interview ten of the clinicians through 81 references had noted the potential for AOD use to be protective, most often in the context of using it as a primary coping strategy to deal with distress. The second higher-order theme is drug-using lifestyle as a protective factor (7 references 3 clinicians). This view holds that the chaos associated with a dependent using lifestyle enables a distraction from underlying psychological issues. Each of these two higher-order themes is discussed separately prior to being integrated.

### 4.2.2.1 AOD use as coping

The theme of AOD use as protective can be summarised as AOD use forms a core strategy to cope with negative affect or underlying psychological issues. This often results in a decreased risk of suicide. The effectiveness of this strategy is variable and usually of only short-term value.

Table 3. Second-Order Themes Pertaining to AOD Use As Coping

Themes	Number of references [and clinicians] in	
	each phase	
A range of people seek to self-medicate to	2 <sup>nd</sup> phase: 1[1]; 3 <sup>rd</sup> phase 21 [10]; total 22	
Trange of people seek to self medicate to	2 phase. I[1], 5 phase 21 [10], total 22	
alleviate various sufferings	[10]	
All kinds of sources influence self-	3 <sup>rd</sup> phase; 6 [2]; total 6 [2]	
medication expectations, which may or		
may not be met		
AOD is used to self-medicate mood/affect	1 <sup>st</sup> phase 6 [2]; 2 <sup>nd</sup> phase 19 [7]; 3 <sup>rd</sup> phase	
	6 [3]; total 31 [10]	
AOD use allow a distancing from the	3 <sup>rd</sup> phase 2 [1]; total 2 [1]	
underlying issues		
AOD may be used to self-medicate	2 <sup>nd</sup> phase 4 [4]; 3 <sup>rd</sup> phase 13 [3]; total 17	
symptoms of a mental illness	[5]	

AOD through reducing negative affect can	2 <sup>nd</sup> phase 29 [8]; 3 <sup>rd</sup> phase 45 [10]; total 74	
decrease suicidality, though this influence	[10]	
can be short term		
AOD use can become the preferred option	1 <sup>st</sup> phase 7 [2]; 2 <sup>nd</sup> phase 9 [4]; 3 <sup>rd</sup> phase 1	
for coping with problems	[1]; total 17 [6]	
Should AOD use become the singular	2 <sup>nd</sup> phase 1 [1]; 3 <sup>rd</sup> phase 3 [1]; total 4 [1]	
coping style, problems are likely		
Alcohol and other depressants are	2 <sup>nd</sup> phase 5 [1]; 3 <sup>rd</sup> phase: 10 [6]; total 16	
generally considered effective to self-	[6]	
medicate		
Cannabis may be used as an effective	3 <sup>rd</sup> phase 9 [6]; total 9 [6]	
means to self-medicate		
The use of amphetamines can have	2 <sup>nd</sup> phase 6 [4]; 3 <sup>rd</sup> phase 2 [2]; total 8 [6]	
positive consequences		
An increasing range of AOD has provided	3 <sup>rd</sup> phase 1 [1]; total 1 [1]	
more opportunity to self-medicate		
Duration of effectiveness for self-	2 <sup>nd</sup> phase 4 [3]; 3 <sup>rd</sup> phase 17 [6]; total 21	
medication is variable and dependant on a	[7]	
variety of factors		
Risk may increase on ceasing use	2 <sup>nd</sup> phase, 3 [1]; 3 <sup>rd</sup> phase 9 [3]; total 12	
	[4]	
AOD use may be one of several strategies	3 <sup>rd</sup> phase 5 [3]; total 5 [3]	
attempted to self-medicate		

## 4.2.2.1.1 A range of people seek to self-medicate to alleviate various sufferings

A view held by eight of the clinicians was that clinical populations have poor general coping strategies prior to initiating substance use. (T5, 2<sup>nd</sup> phase) "I do think that the kids who become dependent, problematic users have not had them (self soothing strategies) in the first place. They have not developed because of the pathways leading up to it. There has not been good role modelling". It was theorised that for these individuals, deficiencies in the ability to self-sooth via conventional means led to a reliance on AOD use to regulate affect.

The hypothesised pathway by which an individual came to rely on AOD use as a core coping strategy focused on early childhood experiences and then later social modelling from significant others (six clinicians). Childhood experiences that contributed to the use of AOD for coping were hypothesised to partly originate from unsatisfactory attachments to primary care-givers. (T5, 3<sup>rd</sup> phase) "Attachment, poor attachment irregular attachment, anxious attachment and primary care givers not being there in the first three years". The reasons for the failure to develop secure attachments were hypothesised to originate from parental and or environmental difficulties. This resulted in an individual who is unable to efficiently identify, verbalise and regulate emotional experiences.

One clinician drew attention to the fact that the population accessing clinical settings is not representative of the broader population. It was suggested that suicidal AOD users may have experienced significantly elevated levels of trauma (disrupted attachments and omission-commission abuse such as deprivation or sexual abuse). (T10, 2<sup>nd</sup> phase) "It could be the fact that they have had a childhood which is so atrocious that both drug use and suicidal ideation and depression are generated by the appallingness of the sexual abuse or whatever that happened to them when they were young". This clinician notes that AOD use and suicidality both have their beginnings in experiences that may either disrupt the development of, or overwhelm coping strategies.

A single clinician in the second phase of the interview observed that AOD use "Is terribly useful for people who have no support" (T9, 2<sup>nd</sup> phase). This view holds that the protective function of AOD use is important for those who lack traditional sources of support. These sources were thought of as family, friends and connections to conventional social systems. This observation did not hold that AOD use was necessarily responsible for the original loss of supports, but more likely be used by an individual who did not have access to these supports in the first place.

One clinician noted that the non-clinical population use substances to SM suicidal ideation for extended periods. (T8, 3<sup>rd</sup> phase) "I would know about them or they would be acquaintances or people that I run into but they are not in therapy because it is working to some degree". These people were hypothesised to maintain control over their substance use and therefore did not significantly suffer from the costs associated

with an AOD using lifestyle. This population was thought to generally be able to give the perception to others that they are functioning quite well by meeting many of their responsibilities such as, employment and financial commitments. It was further hypothesised that if the costs were to rise significantly, such as a relationship breakdown, it would then move them into accessing a clinical service.

# 4.2.2.1.2 All kinds of sources influence self-medication expectations, which may or may not be met

The process by which an individual realises that their otherwise poorly-controlled emotional world can be regulated through AOD use was thought to be varied (six references two clinicians). (T6, 3<sup>rd</sup> phase) "This is what it will do, pure X will do this kind of thing, because I have read about it, it did last time, my friends said. So there is an expectation that it will. And it might not, it might". Role modelling, through peers, media, or family is important in generating a belief that substances can change emotional experiences. If those around them cope through avoiding or invalidating emotions (including uncomfortable feelings such as anger, guilt or shame) the child is likely to gravitate towards these modelled strategies.

Two clinicians (third phase) drew attention to the fact that expectations of gaining relief via AOD use may or may not be met. In the case that they are not, it was thought this may lead to a sense of 'even the drugs do not work for me' which then may push the individual into a higher risk state. (T6, 3<sup>rd</sup> phase) "Now if it does not (relieve symptoms) then I think then it becomes another risk factor, a lack of what you expected to happen. A lack of a kind of buffering would bounce it even more into suicidal behaviour, even the drugs do not work now".

## 4.2.2.1.3 AOD is used to self medicate mood/affect

Early discussions with the clinicians (three clinicians 1<sup>st</sup> phase) raised the possibility that AOD may be used by clients to reduce negative affect or manage underlying psychological problems. At this phase no direct reference was made to a reduction in suicidality occurring as a result of AOD use. In the second phase of the interview, nine clinicians discussed SM related functions of AOD use. The most commonly cited

observation was that AOD use provides a means to regulate mood (seven clinicians) in those whose emotional experience is uncomfortable or overwhelming.

Clinicians saw young people using these substances to regulate mood without an awareness of the processes by which this occurred. (T1, 1<sup>st</sup> phase) "If a guy or a girl was feeling really horrible and using some kind of substance as a way of feeling better, its without much knowledge about what the hell is going on". Clinicians in this interview did not propose pathways by which substances induced a more comfortable emotional experience.

One clinician observed that the expectation of feeling better with the administration of a substance decreased despair. (T8, 3<sup>rd</sup> phase) "It gives them something to look forward to. It gives them hope of feeling better. So in that sense it could be considered helpful". This clinician postulated that the hope for future improvement in affect generated through drug use was at times enough to keep a sense of hopelessness below a critical point in which a suicide attempt may result.

## 4.2.2.1.4 AOD use allows a distancing from underlying issues

In the first phase of the interview, four clinicians (13 references) described substances being used in an attempt to deal with underlying issues and their associated negative affect. (T3, 1<sup>st</sup> phase) "For the young people that I see, smoking pot and drinking are quite common and quite commonly resorted to as a way of self-medicating and dealing with issues". The presentation most commonly linked to this style of coping was PTSD. In these cases the clinicians speculated that the properties of the substances were effective in swamping out intrusive re-experiencing of the trauma.

## 4.2.2.1.5 AOD may be used to self-medicate symptoms of a mental illness

Five clinicians (17 references) indicated that AOD use is utilised to cope with mental illness. Illnesses included attention deficit hyperactivity disorder, anxiety and depression. (T10, 2<sup>nd</sup> phase) "I mean some people are suicidal because they have got a depressive disorder and they drink or drug to relieve the depressive disorder". This quote indicates that substances are used in a direct attempt to reduce the

symptomatology of a depressive experience that has triggered a suicidal state. As one of the clinicians indicated, users "do titrate their substance against their DSM IV symptomatology" (T10, 3<sup>rd</sup> phase). Individuals through experimentation or peer discussions gradually come to realise what is going to beneficially interact with their experience of that diagnosis.

# 4.2.2.1.6 AOD through reducing negative affect can decrease suicidality, though this influence can be short term

Clinicians made a link between AOD use and decreased suicidality (10 clinicians; 74 references). This theme was raised by eight clinicians (29 references) in the second phase of the interview. The interviewer had not tabled this concept in the second phase of the interview. (T7, 2<sup>nd</sup> phase) "Yeah I think that I have often heard myself saying to people that I work with that if they had not used something I am sure that they would not be alive today, and again I guess that is about coping".

The clinicians saw this reduction in suicide risk being the direct result of the substance's potential to reduce painful affect in the user. (T8, 2<sup>nd</sup> phase) "They learn what drugs would moderate their suicidal ideation". Intoxication resulting in a distancing, detachment, or numbing from emotional pain was seen as sufficient to reduce suicidal intent to a non-lethal level. By the third phase of the interview, all except one clinician raised the potential for this to occur. For a discussion on the duration for which this SM process is effective, see the section 'duration of effectiveness for self medication is variable and dependant on a variety of factors'.

# 4.2.2.1.7 AOD use can become the preferred option for coping with problems

It was observed (six clinicians 17 references) that over the individual's history of AOD use, substance use may become increasingly relied upon to cope with problems. (T5, 2<sup>nd</sup> phase) "It becomes a coping strategy and usually the only coping strategy they have got, at times". This increased reliance may be associated with a simultaneous reduction in accessing original strategies, such as social support structures, leisure activities, work or school environments, traditionally used to cope with difficulties.

The reduction in the range of coping strategies utilised was, in part, due to an alienation of supportive others by the lifestyle associated with substance use. Behaviours such as stealing, lying and the distress generated by watching a loved one put themselves at risk was thought responsible for previously supportive others becoming unavailable to provide support. This then requires the user to call upon a diminishing range of strategies to cope, of which AOD use becomes central. The relative ease and efficiency by which AOD use can provide respite from distressing states also makes it an attractive option. Even if other more conventional strategies are learnt to deal with emotional distress, few can match the ease of intoxication in regulating these states.

# 4.2.2.1.8 Should AOD use become the singular coping style, problems are likely

One clinician observed should AOD use, like any coping strategy, becomes the only option exercised, then problems are likely to occur. (T7, 3<sup>rd</sup> phase) "So I think once we have got to the extreme if their coping method is the same thing over and over irrespective of what you are dealing with then at some level it is the coping method that will become problematic". This clinician stated that a reliance on one strategy to the detriment of other alternatives would inevitably lead to complications. This is relevant in that clinicians had previously noted that AOD often becomes the preferred coping strategy to deal with problems

# 4.2.2.1.9 Alcohol and other depressants are generally considered effective to self-medicate

Six clinicians (16 references) suggested that alcohol and other depressants (heroin, benzodiazapines and cannabis) were generally the most efficacious for SM. (T4, 3<sup>rd</sup> phase) "I think that the benzo's, alcohol and possibly cannabis seem to be very appealing to people with a great deal of emotional turbulence like you might see in somebody with personality disorders, such as borderline". It was observed that depressants allowed a "time out" experience, which was a welcomed reprieve from intrusive imagery and its associated emotional content. In some cases, the period of intoxication provided a total cessation of unpleasant experiences. (T10, 3<sup>rd</sup> phase) "People with post traumatic stress disorder will use alcohol particularly to swamp out

the nasty intrusive thoughts". It was described that while users may still be conscious of the trauma material when intoxicated, it either does not evoke an emotional reaction or if it does, it is as if the "volume" is less intense.

### 4.2.2.1.10 Cannabis may be used as an effective means to self-medicate

Six clinicians (9 references) discussed the notion that cannabis use provided an effective means to SM. One clinician observed that due to the relatively mellow effects of cannabis it could be used to dampen negative affect while still allowing the user to function in daily life. (T7 3<sup>rd</sup> phase) "Then they tend to be in a low affect state. They are not necessarily feeling great nor or they are away from what they were feeling beforehand but they have taken the edge off it. And it does not really matter and I don't find that they ever get out of that state where is does not really work". This clinician observed this strategy that could be used effectively over a number of years.

### 4.2.2.1.11 The use of amphetamines can have positive consequences

Six clinicians (8 references) from both the second and third phases of the interview drew attention to the positive effects of amphetamine use. The most commonly noted benefits of use were intense feelings of well-being, reduced concern regarding everyday stresses and increased confidence. These clinicians expressed that these positive feelings had the potential to offset the pain and hopelessness that accompanies the suicidal state. (T10 2<sup>nd</sup> phase) "If you are using a drug like methamphetamine, which is very popular at the moment then it's great for a while. You will feel ten feet tall and bullet proof". It was this line of reasoning that was used to deduce this improvement in mood is likely to then reduce suicidal intent.

# 4.2.2.1.12 An increasing range of AOD has provided more opportunity to self-medicate

One clinician in the third phase of the interview made the observation that a growing range of 'designer' substances has increased the potential for successful SM to occur. (T8, 3<sup>rd</sup> phase) "So people have always self managed to some degree with drugs since the beginning of time. So it should not be surprising with all the different number of

kinds of drugs we have available that people have more chances to successfully self-manage". It was hypothesised that as a result of a wider range of pharmacological options in the "market place" it was more likely that individuals would find a match to their psychological need.

# 4.2.2.1.13 Duration of effectiveness for self-medication is variable and dependant on a variety of factors

This discussion relates to both a single experience of SM through administrating a substance and also to its expected 'life span' in a career of AOD use. Most clinicians were of the view that a reduction in suicidality through SM was obtained only in the period of intoxication. Therefore the ability of substance use to reduce suicidality was generally thought of only in the time frame of hours. (T10, 3<sup>rd</sup> phase) "But I think short term is somewhere between minutes to probably 12-16 hours max". It was suggested that once the intoxicating effects of the drug were lost, the individual would return to the suicidal state, or perhaps a state of increased risk, until the next administration of the drug.

Clinicians did not reach a clear agreement over how long an individual could SM through repeated administrations of a substance over time. One view held by five clinicians stated that the effectiveness of SM to successfully regulate mood was short-term. For some, short-term meant it could begin to loss its effectiveness within a matter of weeks. This loss was theorised to occur in the context of increasing neuroadaption to the pharmacological effects of the substance. Neuroadaption combined with the psycho-social costs associated with substance use resulted in the negatives associated with their substance use beginning to outweigh the positives. (T8, 3<sup>rd</sup> phase) "And I think also building up their level of tolerance, they need more to get the same level of self-medication, that causes problems".

It was speculated that while the substances may be effective in reducing the emotional impact of past events, the accumulation of new stresses associated with drug use will most often supersede the benefits of such use. (T6, 3<sup>rd</sup> phase) "So the risks are going to get more and greater and the problems are going to get larger so I think the protective factors are only protective for a very short time when you talk about drug use".

It was suggested that the type of substance used and its general acceptance by the wider community will, to a significant degree, influence how long it can be used before it loses its potentially protective influence. The more a substance is marginalised by the community and the traditional support structures surrounding the user, the quicker the costs can be expected to accumulate. Three clinicians did raise the possibility that alcohol and cannabis may be used to SM quite successfully for long periods, sometimes several years. A reason given for this observation was that these substances are less likely to incur as severe costs due to either their legal status or in the case of cannabis, broad acceptance by the general community.

### 4.2.2.1.14 Risk may increase on ceasing use

Suicide risk increasing on stopping substance use was discussed by four clinicians (12 references) across the second and third phases of the interview. On ceasing AOD use individuals may be left vulnerable to emotional distress resulting from the resurfacing of "covered up". (T4, 3<sup>rd</sup> phase) "It is really interesting hearing people who have recently tried to stop using, how much worse they feel at first, you know the distress that then comes to the surface. It has been there all along but it has been quite effectively covered up through the really intense career that heroin addiction has about it". In one clinician's view, ceasing AOD inevitable led to an increase in suicidality. (T4, 3<sup>rd</sup> phase) "I do think the risk goes up for a lot of people pretty much straight away after they cease their drug of choice, I think that is fairly inevitable".

The observation that while ceasing AOD use in itself may not necessarily see an elevation in suicide risk, the first subsequent crisis may spark a suicidal state. In the light of diminished coping strategies (the absence of their AOD use) significant problems were thought to be encountered in regulating the resultant emotional pain.

Two clinicians suggested that where substance use is heavily relied upon as a primary coping strategy, it should to be retained in spite of any related problems it may be causing. (T5, 2<sup>nd</sup> phase) "If you take away the one coping strategy they have got, you are going to leave them totally raw, totally exposed and increase their risk". This directive provides a dilemma to clinicians as there are often competing interests to be

considered when intervening with a client. There may be pressure on the clinician to reduce AOD use and therefore criminal activities from statutory bodies and family members but in doing so it was suggested that they may unwittingly increase the risk of a suicide attempt occurring. (T5, 2<sup>nd</sup> phase) "So I think that is why we can be more damaging at times when you say to someone you have to stop using drugs because of criminal activity, prostitution. But the flip side to that is it could also be saving their life so in dysfunction there is function".

### 4.2.2.1.15 AOD use may be one of several strategies attempted to self-medicate

Self-medication through AOD use has functional parallels with other behaviours that are employed to regulate affect as indicated by three clinicians (five references 3<sup>rd</sup> phase). (T10 3<sup>rd</sup> phase) "I am not sure there is much difference between self-harming and drug use in this regard as an emotional regulator". The most commonly cited strategies other than AOD use to regulate mood were cutting, other forms of self-mutilation and eating.

## 4.2.2.2 <u>Lifestyle as protective</u>

Table 4.

The idea that the consequences of a drug using lifestyle can be protective against suicide was raised by three clinicians (seven references) in the third phase of the interview. One of these clinicians went onto indicate that while they did see the lifestyle as having protective qualities, it did not provide an effective or reliable form of protection against suicide.

Second-Order Themes Pertaining to Drug Using lifestyle as Protective

Themes	Number of references [and clinicians] in each phase
Drug using lifestyle can be protective against suicide	3 <sup>rd</sup> phase:7 [3]; total 7 [3]
Chaos of lifestyle is not an effective protective factor	3 <sup>rd</sup> phase:3 [1]; total 3 [1]

### 4.2.2.2.1 Drug using lifestyle can be protective against suicide

The impact of the lifestyle associated with drug dependency on suicide risk was discussed by three clinicians in the third phase of the interview (10 references). These three clinicians noted that the dependant use of substances, most notably via injection, is often associated with a lifestyle that revolves around raising the required funds for the drug, trying to secure the drug, using and experiencing withdrawal. (T4, 3<sup>rd</sup> phase) "You know the everyday trying to score, and those problems, all the things the person has to do, it keeps them so busy or so stoned, one or the other".

Three of the clinicians noted there is the potential for a chaotic lifestyle to act as a protective factor against suicide risk. (T1, 3<sup>rd</sup> phase) "The avoidance of what is going on by this displacing this into a whirlpool of chaos is a good way of avoiding it, you have no more thinking capacity". This quote outlines the potential for the emerging issues associated with the drug dependent lifestyle to swamp the consciousness and therefore facilitate the avoidance of underlying issues such as past trauma. By being so absorbed in surviving the daily dramas associated with use, there is little opportunity to reflect on "other" problems.

The user may experience these set of problems associated their AOD use as more manageable and less likely to create the hopelessness associated with a serious suicidal state. (T4, 3<sup>rd</sup> phase) "As chaotic as that lifestyle may be it is more appealing. It's a more manageable way of living and it provides distractions. In some ways if that person does not want to face other things the distractions may be a comfort because they are so focussed on scoring and so focussed on where they are going to be able to obtain the drug. It takes their mind off other forms of distress that are just churning away".

Khantzian (1997) discussed the idea that substances may be used to control feelings rather than relieve suffering. It was his view that the alexithymic individual whom experiences emotions as nameless or uncontrollable will be attracted to substances use to regulate mood. Using clinical observations I would like to extend this line of thought that this regulation can also be achieved through the manipulation of lifestyle. The

routine associated with a severe AOD dependence can be simplistically summarised as, "wake up in withdrawal, scam money to buy drugs, search out the drugs, get on, go to sleep". On the surface it could seen a routine that would result in significant fluctuations in moods that could well increase suicide risk. It is the author's clinical observation that this lifestyle provides a means through which to regulate, or at least predict, mood for those that do not have the conventional means to do so. The user knows that 6-8 hours after using they will be in withdrawal and it will feel like X. But perhaps more importantly they also know they can banish those uncomfortable feelings with an administration of Y. So an individual that was psychologically ill equipped to regulate mood now has the means to do just that. This regulation of mood through manipulating a structured routine of intoxication and withdrawal, when combined with the ability of the AOD using lifestyle to distract from underlying issues as noted by clinicians puts forward a parallel means to self-medicate.

The "weakness" in this approach to mood management lies in the likelihood that at some point their drug supply will be cut off for extended periods. In this case, periods of extended withdrawal reduce their ability to regulate mood. In such cases the loss of a primary coping strategy could well increase suicide risk.

#### 4.2.2.2.2 Chaos of lifestyle is not an effective protective factor

One of the clinicians could not confidently state that a drug using lifestyle was a reliable protective factor. (T4, 3<sup>rd</sup> phase) "It may be in some ways but I do not think it is much of a protection, I really think if it is a protection, I don't think it is one you could really rely one".

## 4.2.2.3 Integrating substance use as coping and drug using lifestyle as protective

The primary idea that emerged over the two themes was that substances were often used in an attempt to regulate mood. The hypothesised pathways by which an individual comes to rely on intoxication or a substance using lifestyle to regulate mood focused on early life experiences that resulted in a diminished ability to regulate mood via conventional means. The lifestyle that often accompanies dependent substance use results in a further alienation from internal and external sources of coping. This loss of

"other" strategies to regulate mood moves the user to become increasingly reliant on substance related strategies. Once the substance has become a central strategy to regulate mood, its loss can be experienced as a serious suicidal real crisis. In the lifestyle section, the hypothesis was that it was not so much around the reduction in painful states, but rather the distraction that a chaotic lifestyle provides from underlying issues. It was suggested that the distraction from these painful experiences potentially was sufficient to stop a suicide attempt.

The effectiveness of substances and the associated lifestyle to regulate mood and displace negative affect was thought reduced by the observation that such strategies will often result in an accumulation of a new set of problems. It was thought that these problems would then add to the original stresses that initiated the suicidal state. So theoretically a situation develops whereby substances are being used to manage emotional states, most often when there are deficiencies in conventional coping strategies. A likely end result of this approach to coping is an accumulation of additional problems whereby the coping strategy itself adds to overall stress. It was generally thought that the situation is likely to develop where overall substance use increases suicide risk, even in those who use it to SM suicidal states.

### 4.2.3 AOD use as not significantly impacting on suicide risk

Two higher-order themes emerged, AOD use not decreasing risk and some AOD use not related to suicide risk. The two themes will be discussed separately before being integrated.

## 4.2.3.1 <u>AOD use not decreasing risk</u>

Table 5.				
Second-Order Themes	Pertaining to Alcol	hol or Other Drug	Use Not Decreasing Ris	k

Table 5

Secona-Order I nemes Periaining to Alconol or Other Drug Use Not Decreasing Risk		
Theme	Number of references [and clinicians] in	
	each phase	
AOD use does not provide a viable self-	2 <sup>nd</sup> phase: 1[1]; 3 <sup>rd</sup> phase: 21[7]; total 22	
medication option and as a result does not	[7]	
consistently act to decrease risk		
Stimulants/Hallucinogenics do not dampen	2 <sup>nd</sup> phase 2 [1]; 3 <sup>rd</sup> phase: 13[7]; total; 15	
negative affect or provide a viable self	[7]	
medication option		

# 4.2.3.1.1 AOD use does not provide a viable self-medication option and as a result does not consistently act to decrease risk

This theme did not consistently emerge until the third phase of the interview, where seven of the participants made a total of 21 comments that questioned whether AOD use is likely to reliably decrease the risk of suicidal behaviour. Participants recounted observations that (1) self-harm risk increases during drug withdrawal, (2) problematic consequences of drug use reduce the psychological benefits to the user, and (3) stimulants and hallucinogenics do not provide a viable means to SM.

One clinician made the observation that SM acute and intense psychological distress requires a high level of AOD use and this results in a significant level of discomfort in the withdrawal period. (T10, 3<sup>rd</sup> phase) "If you are very distressed you have to use a lot of substances to stop your distress, making you more distressed the next day". Participants suggested that what was initially a positive or a SM experience then gave way to a period of elevated risk. Further reference was made to the fact that while intoxication may provide some protection from a suicidal act from occurring, the problems associated with AOD use do not allow such a state to occur in a smooth, ongoing manner. It was suggested that the psychological roller coaster effect of intoxication and withdrawal contributed to elevated suicide risk. (T4, 3<sup>rd</sup> phase) "They will not be maintaining a equal stone the whole time. They are going to be experiencing some withdrawals at some time. They are going to feel pretty bad some of the time".

Other clinicians observed that the chaotic lifestyle and its resultant problems reduce the SM benefits of AOD use. These clinicians indicated that while SM can reduce suicidal risk, this is largely offset by the accumulation of drug-induced problems. (T4, 3<sup>rd</sup> phase) "But the higher intensity/frequency of use and more risk taking involved, or the more you go along that end of the spectrum then the less effective they (drugs) are ultimately in reducing distress in a person's life".

Clinicians were noting the scenario in which the positives of the AOD use were counter-balanced by the problems created by such use. Several clinicians reported that more often than not, the problems outweighed the benefits of use, particularly as the duration of drug use increased. (T4, 3<sup>rd</sup> phase) "But it comes back again to this distinction I want to make between substance use that is problematic for the person in a range of ways and or substance use that has not reached a problem level for the person". It was noted that for some individuals the balance may still be weighted towards the positive in spite of associated problems.

# 4.2.3.1.2 <u>Stimulants/Hallucinogenics do not dampen negative affect or</u> provide a viable self-medication option

Seven participants (15 references) indicated that speed and hallucinogenic substances do not provide a viable SM option. (T6, 3<sup>rd</sup> phase)"*They do not seem to describe using speed to put a blanket on the pain*". This position is somewhat at odds with other observations that speed use may decrease suicidality due to its potential to increase feelings of wellbeing and confidence in the user as discussed in AOD as coping. A clinician commented that fluctuations in the quality of speed, made it difficult for users to predict the drug effects and therefore regulate their experience.

## 4.2.3.2 Some AOD use is unrelated to risk

The theme that, for some people substance use is not strongly associated with an elevated suicide risk, was reported by seven clinicians (15 references). This was evenly raised over the second and third phases of the interview. Much of the discussion focussed on how AOD use and suicidality may develop as separate conditions.

Table 6.

Second-Order Themes Pertaining to Some substance use is unrelated to risk

Themes	Number of references [and clinicians] in each phase
Some AOD use is not related to increased	1 <sup>st</sup> phase: 1 [1]; 2 <sup>nd</sup> phase: 3 [2]; 3 <sup>rd</sup> phase:
risk	7 [4]; total; 11 [5]
Self medication is a minor issue in the	3 <sup>rd</sup> phase: 1 [1]; total; 1 [1]
bigger picture of the individuals situation	
Chronically suicidal people have generally	2 <sup>nd</sup> phase: 2[1]; total; 2[1]
had long history of psycho-social stresses	
leading up to their AOD use and	
suicidality	
Low level ideational people use AOD at	2 <sup>nd</sup> phase; 1 [1]; total 1 [1]
low levels over a long period of time	

#### 4.2.3.2.1 Combined discussion of some substance use is unrelated to suicide risk

The notion that substance use and suicidality may be independent, coexisting conditions was raised by seven clinicians. (T10, 2<sup>nd</sup> phase) "And some people can just have two independent conditions". One clinician noted that chronically suicidal individuals tend to have a life history of psycho-social stresses that predates both the AOD use and suicidality. (T5, 2<sup>nd</sup> phase) "It is a different population to those that are in a situational crisis. Talking of the ones that are more chronic there has been a long lead up to the pathways to suicidality, and AOD use. Be that abuse, neglect, over controlling parents, poverty, school bullying or a multitude of factors". This observation drew attention to the potential for earlier life experiences to contribute to both subsequent AOD use and suicidality.

Another clinician made the observation that while some harm may result from substance use, in this case LSD, this does not necessarily translate into an elevated risk of suicide. (T10, 2<sup>nd</sup> phase) "you know that LSD is not necessarily going to make you suicidal, it may make you psychotic, but it will not make you suicidal". This position goes against the idea that problems associated with AOD use increase suicide risk.

Another scenario in which AOD use was thought not to significantly impact on suicide risk was in the case of the occasional user who also happened to be suicidal. (T8, 3<sup>rd</sup> phase) "And of course for the occasional user where they may have some suicidal ideation it may not be all that harmful". It was also put forward by another clinician that for those who experienced low level, chronic suicidality, drugs may be used in a way that would not increase risk.

### 4.2.3.3 Integrating AOD as not significantly related and not significantly impacting on suicide risk

The idea that substance use may not have a clear influence on suicidal ideation and subsequent risk was generated in the themes of *AOD use not decreasing risk* and *some AOD use is not related to suicide risk*. Clinicians in both of these themes identified that the way in which substances were used was important in determining its influence on subsequent risk. For those whom experienced low levels of chronic suicidality and used AODs in a controlled fashion, it was thought that AOD use would not have a significant impact on suicide risk.

For those who had high levels of distress, corresponding high levels of AOD use would be required to regulate their distress. While this was seen to potentially to have an initial protective influence, competing risk factors would soon accumulate to negate, even perhaps reverse this protective function. Therefore if an initial assessment of AOD use on the impact on suicide risk shows a protective influence, this may either immediately or over time, also contain competing risk influences.

These observations suggest that assessing only for a one way influence of AOD on suicide risk may fail to uncover a more complex and changeable interaction between these factors.

#### 4.2.4 Clinical considerations

The clinical approach for both assessing and intervening with substance using, suicidal clients was widely discussed by all of the clinicians. Recommended approaches

reflected individual views on the likely impact of substance use on risk. What was generally agreed upon was the complex nature of the clinical presentation that then required a broad and intensive approach.

#### 4.2.4.1 Complexities of assessment

All of the clinicians in the second and third phase of the interview collectively made 66 references regarding assessment. It was noted that assessing the impact of AOD use on suicide risk is complex and difficult to undertake. Most clinicians supported the notion of collecting a wide range of information to guide assessments.

Second-Order Themes Pertaining to Complexities of Assessment

Table 7.

Themes	Number of references [and clinicians] in each phase
There are general difficulties in assessing	1 <sup>st</sup> phase; 2 [1]; 2 <sup>nd</sup> phase; 2 [1]; total 4 [2]
for self-medication in clients	
A careful assessment should explore the	2 <sup>nd</sup> phase; 28 [9]; 3 <sup>rd</sup> phase; 11 [4]; total 39
impacts of AOD use, including its impact	[10]
on risk	
The client and the therapist may hold	2 <sup>nd</sup> phase; 1 [1]; 3 <sup>rd</sup> phase; 4 [2]; total 5 [3]
opposing views on the impact of AOD and	
risk	
Gaining intentions in overdose from	1 <sup>st</sup> phase; 1 [1]; total 1 [1]
victims is difficult	
There is a circular relationship between	3 <sup>rd</sup> phase: 1 [1]; total 1 [1]
AOD and mental health	
AOD may be the cause of death (whether	2 <sup>nd</sup> order 6 [3]; 3 <sup>rd</sup> phase 7 [4]; total 13 [6]
instrumental or accidental)	
Suicidal people have personality traits that	3 <sup>rd</sup> phase 1[1]; total 1 [1]
increase their risk that is not related to	
their substance use	
Self-medication is complicated because	(3 <sup>rd</sup> order: 1 [1]; total 1 [1]
users do not use the term self medication	
People use AOD because they feel like the	3 <sup>rd</sup> order: 1 [1]; total 1 [1]
benefits of intoxication outweigh the	
negatives of use	

### 4.2.4.1.1 There are general difficulties in assessing for self-medication in clients

Two clinicians (four references) noted the apparent difficulties associated with assessing the presence of a SM function to AOD use. One clinician indicated that while clients may report SM through use, such claims were hard to verify in the assessment process. The same clinician went onto state that it is also difficult to chronologically order the

development of problems and the use of AOD. (T2, 3<sup>rd</sup> phase) "Quite often it is hard for mental health to work out. The chicken and the egg thing, what came first, the mental health thing or the drug thing". Broadly speaking there were three possible relationships between AOD use and the mental health presentation discussed; (1) the presenting problem was triggered off by the AOD use (2) both the condition and AOD use developed independently of each other (3) the AOD use developed in response to the mental health complaint. In any of these scenario's there is the potential for SM to be occurring with varying degrees of success.

One clinician in the third phase of the interview stated that while some could SM successfully through AOD use, anticipating who was a very difficult task. It was felt that a clinician could not with certainty, predict who would be able to successfully SM their presenting problems via AOD use. No clinician was able to offer a 'typical' profile or characteristics of those more likely to be able to successfully SM.

# 4.2.4.1.2 A careful assessment should explore the impacts of AOD use, including its impact on risk

There was a consensus that a careful assessment of the impact of AOD use on suicide risk was important. Ten clinicians indicated that a broad range of information was required to make such an assessment. Information areas to be collected included visual cues and the client's reports of perceived control over their circumstances (T7, 2<sup>nd</sup> phase). Suggestions for the assessment process included matching tools to the client's cognitive abilities and the clinical situation while utilising a range of alternative strategies for collecting information. It was noted that this assessment process was not restricted to the initial stages of the intervention but held its importance over the duration of the clinical contact. (T4, 3<sup>rd</sup> phase) "You do a thorough one to start with but you do not think of it as a finite thing, you continue to assess as things change as they go along".

Two clinicians in the second phase of the interview noted (2 references) using the stages of change model (Prockraska & Declementes, 1992). This guided their assessment of the client's motivation to change their AOD use. The clinicians indicated that based on the findings of this assessment they would target their intervention accordingly.

# 4.2.4.1.3 The client and the therapist may hold opposing views on the impact of AOD and risk

Views on the perceived accuracy and resultant utility of client's reports were divided among clinicians. There was a perception among three of the clinicians (5 references) that while the client may commonly report a SM function for their AOD use towards their suicide risk it was the clinicians experience such reports was inaccurate. One reason for this perceived inaccuracy was because of the complexity in the interrelationships between AOD use and suicidality and the resultant difficulty in teasing out such links. One process by which a clinician suggested this could be done was to do a temporal analysis in which the order of the AOD use and suicidality emerged.

One clinician noted that some users may comment that without their drug of choice, they could not envision their lives continuing. (T4, 3<sup>rd</sup> phase) "I think about people who are, for example long term heroin users may not be able to envisage their lives without using heroin, and this is the only way they are hanging their whole life together and in some ways that is true but I don't think it reduces their risk of suicide". While the clinician sympathised with the client's perspective, they disagreed with their conclusions.

In opposition to this view of double guessing the client, one clinician noted the importance of seeking and following the insights of the client. (T10, 3<sup>rd</sup> phase) "So for me you have to accept the clients reality as they are the best experts themselves and if you do not accept that you end up in a non-therapeutic alliance. So I will buy the clients view of their relationship between their drug use and their depressive disorder or their suicidal thinking". This quote suggests that for the clinician to remain within an effective relationship with the client, they must give weight to the client's views.

#### 4.2.4.1.4 Gaining intentions in overdose from victims is difficult

A clinician (1<sup>st</sup> phase) identified that it was their experience that clients are often unable or unwilling to identify whether an overdose was the result of an accident or a suicide

attempt. It was felt that there is the potential for a user to either minimise the importance of conscious decisions leading to the overdose or alternatively discount the overt nature of a suicide attempt as a way of protecting significant others or avoiding unwanted attention from hospital staff. The absence of a clear understanding of the motivation further complicates gaining an understanding of the relationship between substance use and suicidality

#### 4.2.4.1.5 There is a circular relationship between AOD and mental health

A difficulty identified in the assessment process was unravelling the complex interplay between mental health and substance use. One clinician drew attention to the fact that causality is very difficult to state with confidence when discussing the precipitating factors leading to mental illness. This clinician observed that it was likely a two-way influence was present in which SM occurred to offset mood disturbances while simultaneously having a detrimental effect on mood. So for those clients where SM is assessed as occurring, further investigation needs to take place to then assess for possible negative impacts.

#### 4.2.4.1.6 AOD may be the cause of death (whether instrumental or accidental)

Three clinicians in the second phase of the interview commented that substances are often the means to complete suicide rather than the underlying cause for the attempt. For many, the notion of a lethal overdose can be an attractive alternative to more violent means to end their life. (T9, 2<sup>nd</sup> phase) "I would say that when drug use is a factor, it's more instrumental than the driving force. I think it would be more the method or the means".

#### 4.2.4.1.7 Minor themes; complexities of assessment

Within the third phase of the interview, three separate references were noted by a single clinician. These were (1) The observation that people continue using their substances because they feel as though the benefits of use are more important to them than subsequent the problems. (2) Suicidal people have personality traits that contribute to

suicide risk which are unrelated to their AOD use. (3) SM is difficult to assess due to the clients using a different terminology that does not include the term SM.

#### 4.2.4.2 Intervention considerations

#### 4.2.4.2.1 Introduction for intervention considerations

The process of conducting an intervention with a suicidal AOD user was widely discussed across 10 clinicians with 72 references made in total. Most references occurred in the second (25) and third (35) phase of the interview. While interventions with suicidal AOD users can be difficult, the basic principles of intervention are the same as other clinical populations. For those clients where AOD use is a key part of coping resources, then the therapist needs to assist them to develop less risky coping strategies.

While the difficulties working with this client group were noted, some consistent considerations and approaches were generated. These included that more intensive interventions beyond weekly counselling are generally needed, wider practices used with suicidal people should be employed and the interplay between AOD use and suicidality should be sought out. There was opposing views on how the AOD use should be approached to reduce the risk of suicide.

Table 8.

Second-Order Themes Pertaining to Factors Related to Intervention

Themes	Number of references [and clinicians] in
Agencies should provide a range of	each phase  3 <sup>rd</sup> order 5 [2]; total 5 [2]
services to suicidal young people	5 order 5 [2], total 5 [2]
	and 1 4511 and 1 a 511 4 4 6 521
Factors around AOD use make	2 <sup>nd</sup> order: 4 [1]; 3 <sup>rd</sup> order: 2 [1]; total 6 [2]
interventions difficult, though intensive	
approaches may be more effective	
Intervention approaches with suicidal	2 <sup>nd</sup> order 1 [1]; 3 <sup>rd</sup> order; 15 [3]; total 16
AOD users include wider generalised	[4]
practices	
Would assess AOD for contribution to	2 <sup>nd</sup> order 5 [4]; total 5 [4]
suicide risk and if unrelated would not	
focus on it in intervention	
AOD use is functional, the functions of	1 <sup>st</sup> order: 1 [1]; 2 <sup>nd</sup> order: 12 [5]; 3 <sup>rd</sup> order:
which should be replaced with equivalents	6 [3]; total 19 [7]
within the intervention	
Some suicidal young people may not have	1 <sup>st</sup> order: 1 [1]; 2 <sup>nd</sup> order: 1 [1]; 3 <sup>rd</sup> order: 5
acquired age appropriate coping strategies	[3]; total 7 [4]
which needs to be redressed via an	
intervention	
It is difficult to get mental health services	2 <sup>nd</sup> order 2 [1]; 3 <sup>rd</sup> order 2 [1]; total 4 [1]
for AOD users	
Though self medication and medical	1 <sup>st</sup> order: 9 [2]; total 9 [2]
interventions have similar objectives,	
appropriate use of prescription	
medications is more protective than self	
medication	

### 4.2.4.2.2 Agencies should provide a range of services to suicidal young people

Three clinicians noted that clients experiencing extensive difficulties require broad based interventions. While the notion of one to one counselling (where

developmentally appropriate) was seen as valuable, the inclusion of other strategies such as mentors and attachments to other suitable social structures was deemed important. It was also noted that services such as drug and alcohol clinics should have more ready access to mental health practitioners to aid them in their work with the client.

In the case where those requiring a broad and intensive intervention only receive one to one counselling, one clinician raised the potential for negative outcomes to occur. Should no therapeutic gains be made, the young person was seen at risk of potentially forming the belief that they are not capable of being helped. For this client type, residential programs through which ranges of services are typically offered were thought to be a better option.

### 4.2.4.2.3 Factors around AOD use make interventions difficult, though intensive approaches may be more effective

Two clinicians drew attention to the possibility that while a client may be SM through their AOD use, this may be reducing the client's potential to benefit from a therapeutic intervention. (T1, 3<sup>rd</sup> phase) "You won't do any significant therapy whilst that is occurring but it is maintaining you". In this instance either the AOD use should become the focus of the intervention or a referral should then be made to address the AOD use. This position holds that while SM allows a distancing from underlying issues, this separation gets in the way of the client processing and resolving those things that are being managed through substance use.

One clinician did note resolving underlying issues was not in itself sufficient to resolve coexisting AOD issues. In this instance it was felt that AOD use should be concurrently addressed in any intervention. This situation poses a dilemma to the treating clinician of how to best approach the AOD use so that suicide risk is not exacerbated but therapeutic efforts are not negated.

A clinician working in a mental health setting drew attention to the difficulties retaining clients in treatment once their levels of suicidality had reduced. They proposed that once the crisis had dissipated the motivation to address underlying issues surrounding

the substance use or suicidality was not maintained. These people then move out of the mental health arena until such a time that another crisis ensues. Another clinician did note even if the client stayed in treatment, the task of managing their AOD use was difficult.

# 4.2.4.2.4 Intervention approaches with suicidal AOD users include wider generalised practices

Four clinicians (16 references) made the observation that any intervention to reduce suicide risk in AOD users should retain the general practices used when working with any suicidal individual. References to the importance of an empathetic, therapeutic relationship to engage and work with clients were made. It was also stated that a suicide assessment tool, diverse in its domains should also be employed. The use of motivational interviewing to move the clients through the stages of change was employed by one of the clinicians.

Four clinicians (third phase) identified the importance of linking AOD use to increased suicidality with the client. Three of these clinicians, who assumed AOD use was elevating risk, favoured an approach by which the clinician directly told the user that their AOD use was increasing their overall suicide risk. Several strategies were employed to achieve this from direct comment to showing relevant literature. The overall goal of these approaches was to create cognitive dissonance within client over the efficacy of AOD use as a tool to manage psychological discomfort. One clinician noted the difficulties in getting some of the clients to see the link that the clinician believed to be present between AOD use and risk.

An alternative approach drew the client into discussions around their use and how they saw its relationship to suicide risk. (T10, 3<sup>rd</sup> phase) "I would try to get them to articulate the impact of their drug use on their psychological state and then I would get them to look at their suicidal thoughts in relation to their drug use. What is the connection". This approach favours the client reaching their own understanding of relationships between AOD use and suicide risk.

Four clinicians indicated that they would seek to actively reduce AOD use in clients with the primary goal being a reduction in suicide risk. In this instance the clinicians saw that a reduction in use would increase the safety of the client. (T4, 3<sup>rd</sup> phase) "I would want to work quite quickly with the substance use because I see it having quite a significant impact on the likelihood of suicidal behaviour". The amount of time and resources spent on seeking a reduction in use varied from merely pointing out the elevated risks associated with substance use to making it the primary focus of therapy. Two clinicians went as far as to state that if they saw AOD use as being central to elevated risk they would consider hospitalising the client to ensure their access to the drug stopped.

### 4.2.4.2.5 Would assess AOD for contribution to suicide risk and if unrelated would not focus on it in the intervention

Four clinicians indicated that they would not necessarily seek a reduction in AOD use as they felt this might not automatically result in a decrease in suicide risk. Some felt that if the assessment process indicated (often after consultation with the client) that resources would be better spent on other domains they would focus on these areas. (T4, 3<sup>rd</sup> phase) "I think I would have to base my decision on how acutely suicidal they were at that time. If they came in and they were acutely suicidal I would be trying to get that person into a safe space irrespective of their substance use". One clinician noted that in her work with suicidal AOD users she was yet to feel the need to say that someone must stop their use. Another clinician indicated that she may not focus on substance use if the suicide risk was high as she felt that risk may best be reduced by spending time on other issues. (T6, phase 2) "In terms of getting treatment for them I would try to say okay what is the priority here and it may well be that the drug use isn't".

### 4.2.4.2.6 AOD use is functional, the functions of which should be replaced with equivalents within the intervention

It was noted by seven clinicians that AOD use enables certain psychological needs to be met so therefore AOD use in this context is said to be functional. In the face of reducing or ceasing AOD use, the need to learn functionally equivalent strategies to offset the loss of the functional aspects of their substance use was discussed by seven

clinicians (19 references). The term functional equivalent was used in the sense that the functional aspects of the drug use (ie distress regulation) should be taught to be achieved by other strategies. This could include relaxation, using support networks or cognitive restructuring. These clinicians were of the opinion that such work should be generally completed before a move was made to reduce substance use in a suicidal client.

One clinician did recognise that the immediacy and effectiveness of substances to regulate mood is unlikely to be replicated by other strategies, particularly in the short term. It was suggested therefore that temporary, easy to learn strategies such as progressive muscle relaxation is taught to partially offset the loss of their AOD use. This observation is particularly relevant to in-patient treatment settings which do not allow a large time frame to learn such skills.

### 4.2.4.2.7 Some suicidal young people may not have acquired age appropriate coping strategies which needs to be redressed via an intervention

Four clinicians (7 references) indicated that young suicidal AOD users may not have acquired age appropriate developmental milestones and coping strategies. While the role of inadequate early environments were acknowledged it was also felt the influence of substance abuse and related lifestyle could also result in delays in development.

Due to these deficits, the young person may not be developmentally ready for a direct therapeutic intervention, therefore efforts should focus on alterative strategies to allow them to gain these skills. (T5, 3<sup>rd</sup> phase) "Some of the these kids are operating at the age of three. You are going to have quite a bit of work to get them up to a level of being able to use coping strategies you would expect of a 14/15/16 year old". The approaches that allow for this improvement in functioning were not elaborated on outside of the influence of the therapeutic relationship and gaining self-soothing strategies. It was noted that through the young person interacting in a healthy, responsive relationship with the clinician they would develop appropriate interpersonal skills and a more positive sense of self.

#### 4.2.4.2.8 It is difficult to get mental health services for AOD users

One clinician (4 references) noted difficulties for AOD using suicidal clients in accessing mental health services. These clients may exhibit symptomatology from a sexual assault or a psychosis but may be excluded from services on the assessment that the presentation is the result of drug use. (T2, 2<sup>nd</sup> phase) "That's where I think it gets hard and where mental health services quite often say no this person has got a drug induced psychosis but they may not actually have it. Maybe it will drug induced down the line but it may have started a different way." The approach taken was to advise clients that if they were to give up their AOD use for a period, mental health practitioners would be able to more readily identify what was drug related and what was the result of an underlying mental health issue. By doing this it was thought that these clients would be more likely to be picked up by mental health services.

### 4.2.4.2.9 Though self-medication and medical interventions have similar objectives, appropriate use of prescription medications is more protective

Two clinicians generally considered the prescribing of medical drugs to be more protective than SM via non-prescribed substances. This was due to them having been properly researched and evaluated for efficacy. They also noted that the prescribing of appropriate medications offsets the need for the individual to SM via other means. (T1, 1<sup>st</sup> phase) (through prescribing medications it) "avoids slipping into that realm of being hopeless and helpless and that need to medicate through alcohol. So you avoid the potential for self-medicating".

#### 4.2.4.3 Integrating assessment and intervention

A theme that consistently emerged in discussions around assessment and intervention was of complexity and the resultant difficulties that emerged in this work. To offset some of these difficulties, it was generally felt that a broad, intensive assessment process was required to uncover the complex interplay between AOD use and suicidality. The commonly described assessment process was then followed with a range of interventions, some of which focused on reducing AOD use as a means to

reduce risk. Others tended to primarily focus on correcting earlier life experiences that were thought to have contributed to an individual's inadequate coping abilities.

Of note is the diversity in clinical approaches described by clinicians to the issue of substance use. There was not a central approach described across clinicians, but instead a spread of responses from not addressing AOD use in the intervention, intervening depending on assessed impact on risk, to it being the primary target within the intervention. Though all of the clinicians made reference to the need for a comprehensive assessment process, there was evidence that interventions were more likely to be guided by pre-existing views on the relationship between AOD use and suicide risk. An exception to this was the clinicians that highlighted the functionality of AOD use and the role of the intervention to find strategies to replace these functions as a means to increase coping and therefore reduce risk.

Other discussions drew attention to the fact that interventions with this client type included the use of generalised approaches. Approaches included motivational interviewing and an emphasis on the importance of the therapeutic relationship in maintaining safety and addressing past experiences. One clinician noted that approaches that did not believe the clients account of the impact of AOD use on suicidality risked a disruption to the therapeutic alliance.

#### 4.2.5 Integrating clinician section

Clinicians generally described AOD's being used to offset deficiencies in affect-regulation in those who are suicidal. This process can be termed self-medication. These deficiencies were described as potentially originating from poor primary attachments, trauma or a more recent reduction in the utilisation of alternative coping strategies. SM was also thought to occur in those with adequate coping skills but for whom personal experiences or social modelling has shown the potential for intoxication to change painful emotional experiences with relative simplicity.

The process by which this regulation works was not described in detail. However, clinicians noted that it generally occurs in the intoxication phase and to a lesser extent through the effects of the lifestyle associated with dependant use. Intoxication is

thought to allow either a partial or full covering-up of painful affect that is associated with current circumstances or the re-experiencing of past trauma. The lifestyle associated with dependent illicit AOD use allows more a regulation of affect, which is attractive for those that otherwise are unable to control their emotions.

The idea that the respite from overwhelming emotional experiences obtained in the "window" of intoxication was sufficient to avert a suicidal act was expressed. The sense of hope that respite was possible from intolerable states was also noted to be potentially sufficient to offset the sense of hopelessness that accompanies suicidal states.

The effectiveness and potential duration of regulating suicidal states through SM is contingent on the type of substance used, level of use and any problems associated with use was noted by clinicians. Such was the potential for concurrent opposing influences of risks and protective aspects, it was assessed that for some people, either over the course of their use or in certain periods of use, there may-be no clear impact of AOD use on suicide risk. Substances with depressant qualities that are used in such a way as to minimise any associated problems was thought to be the most effective SM approach. Generally this coping strategy was seen as sufficient to reduce suicidality and subsequent attempts only in the short term. The inconsistency in which a SM state was able to be obtained was sufficient for many clinicians to question the viability of AOD use to reliably decrease the risk of suicide.

Should the substance being used to SM became unavailable a sharp increase in the risk of suicide was thought to occur. This was instigated with the onset physiological withdrawal coupled with the loss of a central coping strategy. This loss was seen as especially significant should any new stresses occur that could then overwhelm a reduced coping capacity.

Increased neuroadaption (tolerance) associated with regular AOD use was seen to reduce the effectiveness of the drug's capacity to SM. The rational was that as more of the substance was required to gain the same effects, associated problems with acquiring the drug would increase. In the initial stages of use, these problems, to varying degrees, were thought to offset the protective benefits associated with SM. It was speculated that

for most users, the problems over the period of use, increase to outweigh the SM aspects of use to then collectively add to the overall risk. It was noted that due to social and legal injunctions against those that use illicit substances, costs are more likely to accumulate in a destructive manner. This observation led to the position that licit substances such as alcohol and the more socially accepted drug of cannabis had more potential to be effectively used for SM purposes in the long term.

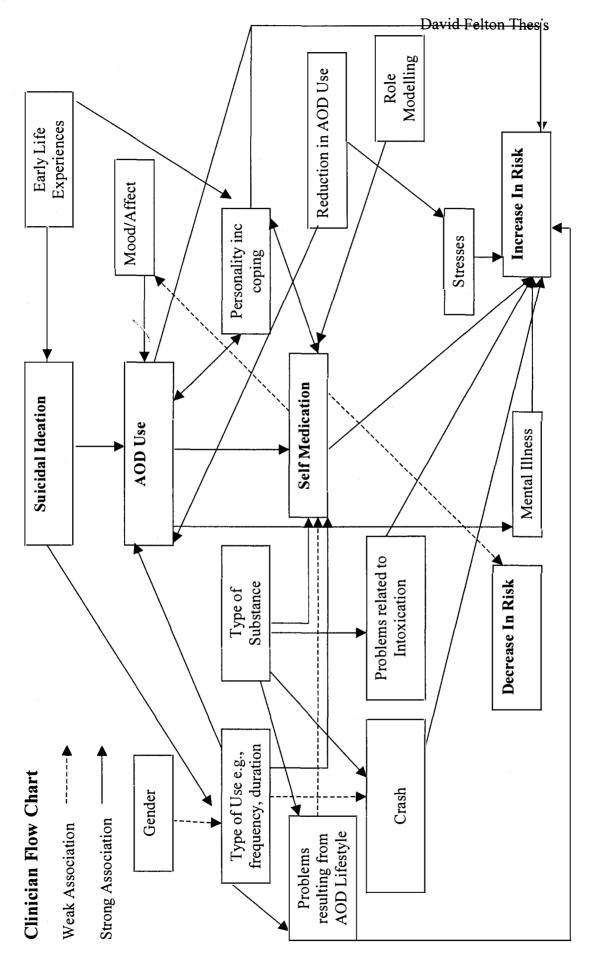
It was noted that in some situations, intoxication may increase the risk of suicide, instead of promoting a SM state. The different outcomes of intoxication were partially accounted for by the type of substance being used. Depressant substances such as heroin, alcohol and cannabis were considered to be the most effective for eliciting SM states within the intoxication phase. Stimulant drugs such as amphetamines and methamphetamine were generally thought to have little or no SM potential and instead induce impulsivity and reduce inhibitions. For example those individuals, who normally would not act on suicidal impulses because of the salience of protective factors, may then use stimulants to reduce the perception of importance of these protective factors.

The required assessment process to uncover the relationship between AOD use and suicide risk was seen as broad and ongoing in nature. To offset the complexity of this task, an approach that was guided by the central tenets of the interaction model (Zinberg 1984) was seen as the most beneficial. Taking this approach into account requires the practitioner to assess the domains of the drug, the individual and their environment, then assess how each of these variables interact to effect change on suicide risk. As previously noted by the clinicians, these relationships will inevitably change over the duration of use so therefore this assessment process will need to be virtually constant in nature. The reader should also be mindful of the possibility that an independent relationship exists between AOD use and suicidality, especially for those with a traumatic childhood and low levels of substance use.

All of the clinicians noted the importance of the assessment process to guide interventions. What was evidenced though, was a tendency of pre-existing views on the links of AOD use to risk being strongly reflected in the nature of the intervention. Within these interventions, commonly held notions such as the role of the therapeutic

alliance and common strategies such as the utility of motivational interviewing were noted. A common approach that involved both the assessment and intervention phase explored the functional aspects of the substance to that individual. So for those that were using in such a way to offset deficits in affect regulation skills, interventions would focus on increasing alternative strategies to meet these needs before efforts were made to reduce AOD use.

Figure 1 represents the possible pathways that originate from AOD use to then influence subsequent suicide risk as uncovered in the interviews with the clinicians. The solid lines represent pathways that were frequently referred to in the interviews as common or important. The dotted lines show either a weak or uncommon pathway between factors. The arrows identify whether an influence is in either a single or dual direction.



#### 4.3 Introduction to Client Results

Themes generated from the ten client interviews regarding the impact of AOD use on suicidality fell into three main domains. A fourth domain that provided an explanation for the variation in the reported impacts of AOD use on risk while a fifth theme outlined recommendations for clinical interventions. The three domains are (1) AOD use increasing risk referred to the idea that AOD use is responsible for an increase in suicide risk. All ten clients through 217 references contributed to this theme. (2) AOD use as protective against suicide referred to the notion that the effects of intoxication enables a SM process. This was widely reported by all ten clients through a total of 233 references. (3) AOD use unrelated to risk referred to the notion that their AOD use is either independent to or not significantly related to their suicidality. Nine clients through 36 references indicated these ideas. (4) Factors influencing suicide risk identified the importance of variations in context that would then alter the drug experience thus, informing suicide risk. This theme was reported by nine clinicians in 32 references. (5) Intervention strategies proposed by clients covered the recommendations generated by clients for clinical intervention in this domain. Overall 46 references within this theme were made by nine clients.

#### 4.3.1 AOD use increasing risk

#### 4.3.1.1 Introduction to AOD use increasing risk

All ten clients reported their use of alcohol or other drugs as having had a negative impact on suicide risk at some point in their lives. Nine of the clients had raised this concern (50 references) within the first phase of the interview prior to the researcher raising AOD as an issue. The remaining client had also raised this issue by the second phase of the interview with an overall total of 79 references in this phase. Overall 218 references were made that referred to AOD use contributing to suicidal ideation and or attempts over the five phases of the interview. This suggests that AOD use is a significant factor that contributed to suicide risk in this population.

Table 9.

Second-Order Themes Pertaining to Alcohol or other drug use increasing suicide risk

O	0 0
Themes	Number of references [and clients] in
	each phase
Alcohol and other drug use negatively	1 <sup>st</sup> phase 9 [5]; 2 <sup>nd</sup> phase 1[1]; 3rd phase 1
effected decision making which increased	[1]; 4 <sup>th</sup> phase 2 [1]; total 13 [5]
risk	
AOD use was having a negative impact on	2 <sup>nd</sup> phase 3 [2]; 3 <sup>rd</sup> phase 1 [1]; 5 <sup>th</sup> phase 1
self	[1]; total: 5 [2]
AOD use causes a deterioration in mental	1 <sup>st</sup> phase 9 [4]; 2 <sup>nd</sup> phase 31 [5]; 3rd 10
state, at times by the amplification of pre-	[6]; 4 <sup>th</sup> phase 3 [3]; 5 <sup>th</sup> phase 4 [2]; total:
existing issues	57 [7]
Problems associated with use increased	1 <sup>st</sup> phase 15 [6]; 2 <sup>nd</sup> phase 9 [2]; 3 <sup>rd</sup> phase
life stresses	7 [4]; 4 <sup>th</sup> phase 4 [2]; 5 <sup>th</sup> phase 2 [2]; total
	37 [9]
Would be at increased risk when	1 <sup>st</sup> phase 1 [1]; 2 <sup>nd</sup> phase 8 [2]; 3rd 4 [2];
intoxicated	total 13 [3]
Suicidality would increase in the	1 <sup>st</sup> phase 14 [4]; 2 <sup>nd</sup> phase 5 [1]; 3 <sup>rd</sup> phase
comedown phase	6 [4]; 4 <sup>th</sup> phase 4 [2]/ 5 <sup>th</sup> phase 1 [1]; total
	30 [6]
Alcohol use increases suicide risk	1 <sup>st</sup> phase 2 [2]; 2 <sup>nd</sup> phase 22 [3]/ 3 <sup>rd</sup> phase
	15 [5]/ 5 <sup>th</sup> phase 2 [2]; total 41 [6]
Pot use had a negative effect on risk	3 <sup>rd</sup> phase 6 [2]; 4 <sup>th</sup> phase 1 [1]; total 7 [2]
Speed use was generally considered to	3 <sup>rd</sup> phase 8 [4]; 4 <sup>th</sup> phase 7 [4]; 5 <sup>th</sup> phase 1
have had a negative impact on suicide risk	[1]; total 16 [6]

# 4.3.1.2 Alcohol and other drug use negatively effected decision making which increased risk

The notion that substance use had a detrimental impact on the decision making process that then resulted in a suicide attempt was discussed by five clients (13 references) by the first phase of the interview. A total of 13 references were made by five clients across the interview relating to this theme.

The perception that the use of amphetamines led to loss of logical thinking, resulting in irrational thought processes was discussed by two clients. (C1, 4<sup>th</sup> phase) "The way they alter your thoughts, you think logically, you take speed for an extended period and all logic goes out the window. Everything is just irrational". This loss of logic was also present for client nine in the crash from speed after extended amphetamine use. (C9, 3<sup>rd</sup> phase) "And you get extremely irrational. Irrational is the only word I can use to coin it. You get irrational". Client nine went onto discuss that while in the crash from amphetamines, he held the belief that killing himself was a good way to punish an ex-partner whereas up to that point his desire to not hurt his family had been sufficient in stopping this act.

The notion that heavy cannabis, alcohol or amphetamine use can negatively impact on thinking styles was noted. It was stated that these types of substances can create a perception that suicide is the right decision in the face of current stresses. The process by which this position is arrived at was discussed by client eight in the first phase "I was handling it all right, as best as I could handle the situation. Until I started on the drugs very hard where it confused me and I got tunnel vision into thinking that it was the only thing to do". In this instance, while suicidal thoughts predated AOD use, it was not until they were influenced by AOD use, that suicide was seen as the only solution to underlying problems.

Client one (1<sup>st</sup> phase) also noted the logic of suicide while drunk "It seemed quite logical at the time but I was really drunk". What was a variation in this situation was the apparent absence of a decision making process leading up to the act. (C1, 1<sup>st</sup> phase) "I do not remember what started it for me to cut myself, I do not remember what started it, I just began to cut myself. I just kept cutting". This act seems to be highly impulsive and the client explained that the cutting evolved into an attempt to kill herself without any deliberation about that decision. This impulsive decision was then acted on without a consideration of protective factors.

#### 4.3.1.3 AOD use as having a negative impact on self

Client eight discussed reaching the realisation, through observing his own functioning and that of his friends, that AOD use was not going to be beneficial in the long term. (C8, 5<sup>th</sup> phase) "It got to the point where I was going to spiral down very fast or pick myself up. I could see my friends, see how they spiralled so fast, knowing I could do that myself very easily". This client described this process occurring after a period of using substances to cope with a painful relationship break up.

Client nine highlighted the negative impact AOD use was having on her self-image. (C9, 2<sup>nd</sup> phase) "Just guilt and disappointment in myself. You know it makes me feel really disappointed". This quote referred to a realisation that her speed use was having a range of negative impacts on her life which then added to an already existing poor self-concept. Her amphetamine use was also contributing to a growing sense of self-pity and powerlessness. (C9, 3<sup>rd</sup> phase) "Selfish like it is all about me, me, me, you know about how I feel. Why me, why did I get to this point, why did I not have the support of my family. Where were they, why can't they see it". These feelings reduced the sense of personal power and belief she was able to positively change her situation. This increasing sense of helplessness resulted in an exacerbation of suicidal feelings.

### 4.3.1.4 AOD use causes a deterioration in mental state, at times by the amplification of pre-existing issues

The use of AOD resulting in the deterioration of mental state was reported by seven clients (57 occasions), mostly in the first and second phases of the interview. The majority of references referred to AODs tendency to result in a deterioration of mood in the period while recovering from intoxication. Some references however were made to this occurring while intoxicated.

Client 10 on getting stoned, after a period of four months not using cannabis, reported becoming very negative about her life which lead to a suicide attempt. (C10, 1<sup>st</sup> phase) "I had a smoke and everything I thought about, I thought I was doing wrong". This same client reported a similar reaction when she combined her methadone with benzodiazapines.

Client two (second phase) described a process by which her cannabis use caused a sense of not caring about her circumstances and ultimately whether she lived or died "Yeah it was just like a vicious cycle I suppose. The more I used the less I gave a shit and the closer I came to doing something". Her cannabis use contributed to an overall sense of being in a rut through spending less time on those things that had previously been important to her.

With the exception of client one who identified the come-down from cannabis as distressing, most references to increased risk were for amphetamines. The process of "crashing" after a speed binge was repeatedly linked to a rapid deterioration in mental state. (C2, 2<sup>nd</sup> phase) "Yeah the come downs, you just feel like shit. You just get really emotional. Absolutely bowling my eyes out". Client 10 contrasted the confidence associated with the effects of speed to the emotional fragility in the come-down phase. (C10, 2<sup>nd</sup> phase) "There is the whole come down thing. It is just not nice. It makes me hypersensitive, things a few hours I could talk about and not get upset about, I think about and I just get really upset. Everything is dark". This client went onto explain that this situation was not simply a drug induced state, but a compounding of the mood that existed before use.

A total of six clients referred to their substance use as attenuating negative states that either began before their use of substances altogether or alternatively before using on a particular occasion. (C8, 5<sup>th</sup> phase) "Mainly anything you are feeling before you take the drug is going to be amplified ten times after taking drugs". This amplification was most often associated with depression with three clients reporting this for both alcohol and cannabis use. (C4, 3<sup>rd</sup> phase) "Which added to the depression I was feeling before I started drinking. It just amplifies it, making me feel worse". Client two reported initially using cannabis to cope with the trauma of observing her mum attempting suicide when she was a young child. Her cannabis use in the long term exacerbated her pre-existing depression. (C2, 1<sup>st</sup> phase) "Cause I suffer from clinical depression and the dope makes it worse, makes me more depressed".

Client four noted that the amplification of negative mood state included existing guilt whereas client nine talked about her anger being much more evident while on speed.

(C9, 3<sup>rd</sup> phase) "Like I told you before I get volatile, angry, very, very angry about stuff in my past and I will project it onto the now". This projection of anger associated with sexual abuse onto current circumstances may be the result of losing inhibitions that normally restrict expressing her anger.

Client eight discussed the impact of problematic thinking resulting from amphetamine use on suicide risk. (C8, 5<sup>th</sup> phase) "You are not thinking rationally and when you are thinking like that, you think that you are going to think like that for the rest of your life". This client observed this thinking style created the perception that current stresses were more significant than what they were in reality. (C8, 1<sup>st</sup> phase) "And then start thinking about things that become huge, big mountains instead of little mole hills which they were earlier". This altered style of thinking when combined with the fear that it would be permanent, elevated suicide risk as the desire to end this situation increased. This client indicated that gaining insight into the fact amphetamines were the cause of this thinking style was protective.

Three clients identified their amphetamine use resulted in mental health problems, most often psychosis. While in some cases this was enough for the person to cease using, one client described making the conscious decision to keep using in a manner known to induce psychosis. This was driven by a desire to avoid the come down phase. This client also described her experience of psychosis on dexamphetamine (used without a script) as more problematic than what her street amphetamine was causing. One client vividly described her thinking at the end of a speed binge. (C9 1<sup>st</sup> phase) "I would get in these terribly psychotic modes you know where I had not slept for 8 days. But I just went into very selfish mode. You don't, you can't think of your family, that the police are going to discover your body how many weeks later and the flat is going to smell".

Client 10 described herself becoming highly suicidal in the crash from amphetamines, though she was only able to make the link several days after the effects of the drugs had worn off. This client went onto describe pushing aside this awareness on future occasions to allow herself to use again. (C10, 2<sup>nd</sup> phase) "Because that would mean that I may not get the drugs which is really what I want to do sometimes. The day that I am going to get on, there are a lot of things that I ignore".

#### 4.3.1.5 AOD use resulting in an increase in life stresses

The lifestyle problems often associated with high levels of AOD use were identified by six clients across the five phase of the interview. The types of problems described were wide ranging from relationship difficulties, financial and work related. These problems often resulted in a reduced positive self concept and in some cases, an increase in suicidality. (C10, 3<sup>rd</sup> phase) "There was so little left of my life which was worth living for that I just did not care if the next hit was too big. I just could not give a shit. I didn't not play guitar anymore, I did not do anything positive at all. Nothing left". This observation that the lifestyle associated with opiate use had resulted in the loss valued things resulted in ambivalence about dying.

Three clients reported that on realising that they had developed the lifestyle of an "addict", their suicide risk increased. This awareness further denigrated their sense of self and increased feelings of worthlessness. (C10, 3<sup>rd</sup> phase) "Definitely, because when I think about reasons to hate myself, the fact that I use drugs is one more reason, less respect for myself. On my list of evidence that I am a bad person". For several of these clients their poor self image was present before their realisation that then served to further reinforce a negative self-concept. (C1, 3<sup>rd</sup> phase) "Oh yeah, anything to get down on myself". The notion of an already poor self-concept being reduced through being an addict was further explored by client 10. (C10, 1<sup>st</sup> phase) "Yeah and I enjoyed that. That is probably what I like most about it. And the fact that other people would see it as well. Not to worry about me but know that I was doing something bad. It is a very twisted thing". She describes "enjoying" indirectly punishing herself through the problems associated with being an addict, while having other people observe this process.

Three clients made a range of observations regarding the negative impact their heavy cannabis use was having. A common problem related to the impact of cannabis in reducing general energy and motivation levels. This resulted in clients not completing required daily tasks. (C8, 3<sup>rd</sup> phase) "You have all these things that you have to do, then you put it off until tomorrow. A couple of weeks later you still have not done them". It was through this process of not meeting various responsibilities that client five observed that in the long term heavy cannabis can lead to problems. This situation

was described as a rut by client two who in the second phase of the interview made this observation, "Everyday one after another, getting stoned or if I could not get stoned, get drunk. Where am I going? I am not going anywhere. I am stuck in a rut. You feel like the only option to get out is to die".

For client five, excessive cannabis use led to withdrawing from social settings, resulting in problems in interpersonal relationships. This erosion of social support networks increased a sense of isolation that then reduced his access to supports in periods of crisis and increased suicidality. (C5, 1<sup>st</sup> phase) "So it was also amount of pot I was smoking, the arguments I was having with my girlfriend at the time. I could not leave the room without telling her where I was going what I was doing and how long I was going to be". For this individual cannabis use had significant impact on his partner's ability to trust him while for two other clients a total breakdown in relationships was described.

Three clients (five references) discussed their decision to either avoid or reduce problems associated with their alcohol use by reducing consumption. As daily use was a benchmark indicating problematic use they kept below that, in spite of the desire to use more often. (C6, 2<sup>nd</sup> phase) "I would not let it get to the stage where I was drinking every day. The urge is always there to have a drink. It never gets that out of hand that I will actually sell my stuff or borrow some money to get some alcohol". Another client discussed controlling her alcohol use so that she avoided the problematic hangover period. (C1, 2<sup>nd</sup> phase) "I make sure I pace it, have Beroccas next day. I have stuff like that in case I am feeling a bit yuk. I am never drunk to the point of hangover".

#### 4.3.1.6 Would be at increased risk when intoxicated

Three clients (13 references) described their risk of suicide increasing in the period of intoxication. Client one made the observation that alcohol intoxication gave her the courage to go through with a pre-existing decision to attempt suicide, in a way providing "Dutch courage". Client six made the observation that he was less likely to become suicidal while intoxicated than he was when straight. However, when he did become suicidal the probability of acting on those thoughts increased as did the lethality of any such attempts. "(C6, 3<sup>rd</sup> phase) "It switches in that regard, I would be more

likely to act on it, if I am drunk than if I am straight and do something quite serious". The serious nature of the attempt was described in terms of cutting behaviours, which due to a reduced sense of pain were much deeper (C6, 2<sup>nd</sup> phase) "Because I do not feel it and I can cut as deep as I want". This client observed that it is unlikely that he would remain suicidal after intoxication.

Client three described not remembering his suicide attempts and other self-harming behaviours when intoxicated. He could not recall a conscious decision-making process leading up to these behaviours and as such he was not clear on his motivation for the behaviours. (C3, 2<sup>nd</sup> phase) "you know I would wake up, probably in the morning with a slashed wrist and not even remember doing it. You know just look at my wrist and go what the hell, what happened?". Another client made the observation that there was a general sense of not caring while intoxicated, and this appeared to reduce the salience of otherwise protective factors against suicide.

#### 4.3.1.7 Suicidality would increase in the comedown phase

Six clients (30 references) over the entire five phases of the interview described their suicidality increasing in the crash phase of substance use. Most of these references were related to amphetamines (27 references). The crash phase for amphetamines was reported to be associated with much higher levels of suicide risk than when intoxicated. (C9, 3<sup>rd</sup> phase) "it's all in the crash". Generally the individual was left highly emotional and feeling as though they are unable to cope with the situation at hand. (C2, 2<sup>nd</sup> phase) "Yeah the come downs you just feel like shit. You just get really emotional. Absolutely balling my eyes out".

Three clients identified experiencing the stark contrast between the positive feelings associated with intoxication to coming back to reality as very difficult. In some situations this was enough to elevate suicidality. (C6, 4<sup>th</sup> phase) "LSD, when I took it I was fine but when it was coming off, I did not want to come back to reality cause I hated it. I was fine when I was on it but when I came off it, I would start crying and feeling suicidal". For these clients it was not so much the "crash" associated with recovering from the drug use but the return to their problems that they had "escaped" through intoxication. (C8, 1<sup>st</sup> phase) "So you start coming down and that is when reality comes

back at you. You have got all the problems that you thought you had run away from and they are there and hit you ten times harder". Of note is the observation that the feelings associated with these problems are amplified, at times, by being compared to the problem free intoxication period. Client six went onto suggest that alcohol and tobacco due to their limited capacity to distort reality were good to use as it was not so difficult to come back to reality after being intoxicated. (C6, 5<sup>th</sup> phase) "because it is not distorting reality too much. When you come back to it, it is not that bad".

Three clients related a similar idea when describing feelings that were present before AOD use being amplified in the crash period. For one client feelings of self-hatred reoccurred after the initial rush from amphetamines was over. (C2, 3<sup>rd</sup> phase) "It just brings back even more intense the thoughts that were already there." For this client these feelings translated into a higher suicide risk that on occasion would culminate in an attempt. (C8, 3<sup>rd</sup> phase) "If it was 7/10, after the drugs it might be 10/10 coming down". For this client suicidal feelings present pre-speed use would cease for several days while on a speed binge only to return at an even greater level after the drug started to wear off.

Client nine described a suicide attempt in the crash phase from speed as a psychotic and impulsive act in which she did not think of other-wise protective factors. Client two described the experience of being psychotic in the comedown from speed as the primary motivator for her attempt. (C2, 3<sup>rd</sup> phase) "In a speed psychosis you just flip out start hearing and seeing things so in that sense I was on something. It was like I got to get out of this. I tried to throw myself out in front of a car".

#### 4.3.1.8 Alcohol use increases risk

Alcohol increasing the risk of suicide was described by 6 clients, (41 references) predominantly in the 2<sup>nd</sup> and 3<sup>rd</sup> phase of the interview (a combined 37 references). The elevated risk through drinking was described by client three (3<sup>rd</sup> phase) "I found myself more suicidal after those amount of beers during that week compared to when not having had that amount of beer". Client three described being in control up to approximately 12 standard drinks after which he became very emotional and lost control over his thoughts. When client five felt suicidal before drinking he ensured that he

drank enough so he literally could not move. This was in response to feeling as though drinking anything less potentially had an unpredictable effect on suicide risk. Client four reported becoming more at risk when drinking but was unsure of the amount most likely to result in an elevated risk.

Two clients described the process of linking their alcohol use to increased risk. For one client this awareness came after a period of drinking in an attempt to make himself feel better. (C4, 2<sup>nd</sup> phase) "When I used to be like that, I did not realise it was the alcohol. I thought it was the alcohol that was making me feel better". This awareness was brought about by tracking his mood in the days post-drinking and then comparing it to when he was not. From this he realised his mood was worse in the days after a binge. The awareness that his alcohol use, though being used to SM, was paradoxically increasing his suicide risk prompted this person to stop drinking. This experience closely resembled that of client 3 who instead of ceasing drinking altogether used his insight into his patterns associated with increased risk to develop a safer way of drinking. (C3, 3<sup>rd</sup> phase) "I know that certain types of alcohol are not good for me and certain types are ok. And how much I should be having. And that's what I have been doing now where I have set myself a limit on drinks".

Three clients described increased levels of impulsiveness as a result of having used alcohol. Two of these clients described pre-existing levels of impulsivity within their personality, which seemed to further potentate when intoxicated. (C3, 3<sup>rd</sup> phase) "When I am drunk a lot of suicidal tendencies, feelings and emotions would come a lot faster than when I am sober". For client four there was a sense of being dis-inhibited when intoxicated that enabled him to act on his underlying suicidal feelings. (C4, 2<sup>nd</sup> phase) "Initially I can control my emotions, my anger and all that sort of thing. But after a drink I can't. I just act the way I feel. Holding nothing back". This statement is closely aligned to client one's observation that her use of alcohol did not create her suicidal thoughts, but instead gave her the courage to overcome otherwise protective factors. (C1, 1<sup>st</sup> phase) "That just gave me the courage I think. It did not alter my decision because I wanted to die".

Client four described becoming depressed and agitated several days after stopping drinking. This is in contrast to the periods of intoxication which were very positive.

Client three reported that there were not any positives associated with alcohol use in the period of being suicidal. For client seven the observations that she was beginning to develop a drinking pattern like her mother was enough to prompt a suicide attempt. (C7, 3<sup>rd</sup> phase) "I did not want to turn out like her. So that really had something to do with it. I overdosed on sleeping pills, that's why I would not turn out like her, because I would not be here".

#### 4.3.1.9 Cannabis use had a negative effect on risk

Two clients discussed the negative long-term impact cannabis use had on their lives. Both clients drew a contrast between the apparent short term benefits that centred on a respite from emotional states to the gradual build up of negative things such as depression and a failure to resolve relationship problems. (C10, 4<sup>th</sup> phase) "I realised it was not an instant thing like that, have a bong and become suicidal, but the built up effect of it, it was making me worse. More depressed, it is definitely not good for you". This client went onto say that she felt cannabis was the worst drug for suicidal people due to the accumulation of the previously stated negatives.

Client ten described attempting suicide after smoking cannabis and becoming paranoid. This was after an extended period of not smoking and was described as a one off incident. (C10, 4<sup>th</sup> phase) "It had been 4/5 months since I had smoked anything and I had just that one bong and it went really bad, but it was kind of the exception". There were no other reports of people becoming suicidal when intoxicated on cannabis.

### 4.3.1.10 Amphetamine use was generally considered to have had a negative impact on suicide risk

Amphetamine (including Methamphetamine) use was described as having a negative impact on suicide risk by 6 clients (16 references, mostly in the third and fourth phases of the interview). General statements that amphetamine use directly increases risk for suicidal people were widely made. (C8, 3<sup>rd</sup> phase) "Cause I think that if I was not taking those drugs at the time I would not have attempted suicide". Three clients reported that amphetamines, and in one instance ecstasy, was the worst drug for a suicidal person to use. Further to this, one client extended the observation that this type

of drug use was especially dangerous for psychiatric populations who are on medications. Two clients directly described the negative effects of speed use on their brains that resulted in increased emotionality and a decrease in inhibitions towards committing suicide, although it is unclear how they determined such neurological damage.

One client reported that her amphetamine use indirectly brought forward (in time) her suicide risk as it increased her awareness of prior traumatic experiences. (C9, 3<sup>rd</sup> phase) "I never would have hit a suicidal point until I was about 50. So it has had a negative impact in the sense that it has pulled me close to wanting to kill myself a few times". This client went onto describe the benefits of identifying and working towards resolving these underlying issues at an earlier age than she thinks would have otherwise occurred.

Client two reported that after the initial pleasant rush associated with use, intoxication on amphetamines was negative. She described speed use as a self-harming behaviour in itself. (C2, 3<sup>rd</sup> phase) "I think taking the speed in itself is hurting myself. Because you take it and you feel good for the first 3 or 4 minutes there is a rush and that might be really good. After that is over, I feel like shit. You feel like absolute shit. That was pretty self-destructive for me". Client eight had previously made the link between amphetamine use and a deterioration in mood and indicated that he was therefore less likely to use amphetamines if he was suicidal.

#### 4.3.1.11 Integrating AOD use as increasing risk

It was evident that AOD use, through a range of processes, had periodically been perceived as increasing the suicide risk of all the clients interviewed. The processes seen to be responsible for this increase in risk varied across and even within clients. Relevant factors contributing to increased risk included the type of substance being used, suicidality prior to using, and accumulated stresses associated with use.

Generally it was held that AOD use did not create suicidal thoughts but instead, in certain situations, made individuals more likely to act on existing feelings. Suicide attempts were often described as impulsive acts that were enabled through the temporary reduction of normally protective factors.

While most of the clients interviewed qualified as poly-drug users, they generally only reported certain types of substances increasing suicide risk. Alcohol use (six clients) and amphetamine use (six clients) were the main substances associated with increased suicide risk. Of note is the fact that cannabis use was only reported by two clients as increasing risk. This was generally associated with increases in existing levels of depression and with the failure to meet daily responsibilities.

There was only limited reporting of suicide risk being present when intoxicated. In the cases where it was reported it was described as being unusual or the result of the client failing to observe known strategies to minimise their risk in intoxication. On becoming suicidal when intoxicated, the suicide risk of clients was described as greatly increased.

Suicide risk was consistently reported to be elevated in the crash phase of use, predominantly after using amphetamines (six clients). While some of the increased risk was associated with a drug induced psychosis and emotional fragility, the vast majority of risk was linked to the perceived attenuation of pre-existing negative mood, including suicidality. While intoxication, through providing emotional numbing, was generally successful in masking these states, the sharp contrast associated with returning to the uncomfortable state of "sobriety" was significant. This contrast was often described as a catalyst for suicidal behaviour.

An increase in problems associated with heavy AOD use (e.g., relationship breakdowns, financial problems, a deteriorating self-concept) often increased risk through increasing overall stress levels while simultaneously reducing existing supports. These problems, in combination with a deterioration in mental state, were seen as significant contributors to overall suicide risk.

### 4.3.2 AOD use as protective against suicide

#### 4.3.2.1 Introduction to AOD use as protective against suicide

Themes that contributed to the notion that AOD use may act to reduce the risk of suicide were commonly reported by all ten clients (233 references). These themes were

generated across all five phases of the interview with all of the clients (131 references by the second phase) having raised this relationship by the second phase of questioning. This is important to note as by the second phase the interviewer had not linked AOD use to suicidality nor raised the concept that it may have the capacity to be protective. Included in this section was the observation by four clients that using AOD is not a viable long-term strategy to cope with suicidality (six references).

A range of AODs are capable of being used to manage painful states that originate from underlying issues. This form of emotion regulation often occurs in those with limited conventional affect-regulation strategies. AOD use was perceived to be often responsible for a reduction in suicide risk. Some participants considered this not to be a viable long-term option.

Table 10.

Second-Order Themes Pertaining to AOD use as Either Directly or Indirectly

Protective Against Suicide

Themes	Number of references [and clients] in
	each phase
The use of AOD as a protective strategy	1 <sup>st</sup> phase 9 [2]; 2 <sup>nd</sup> phase 8 [5]; 3 <sup>rd</sup> phase
acts to reduce suicide risk	25 [7]; 4 <sup>th</sup> phase 39 [8]; total 81 [9]
AOD not protective against suicide (in the	4 <sup>th</sup> phase 6 [4]; total: 6 [4]
long term)	
Period of suicidality associated with heavy	2 <sup>nd</sup> phase 11 [5]; 3 <sup>rd</sup> phase 2 [2]; total 13
AOD use	[6]
Intoxication is associated with positive	2 <sup>nd</sup> phase 1 [1]; 3 <sup>rd</sup> phase 2 [2]; 4 <sup>th</sup> phase 3
mental states	[2]; total 6 [4]
AOD used to avoid underlying issues	1 <sup>st</sup> phase 1 [1]; 2 <sup>nd</sup> phase 20 [6]; 3 <sup>rd</sup> phase
	6 [3]; 4 <sup>th</sup> phase 3 [2]; 5 <sup>th</sup> phase 3 [3]; total
	33 [10]
AOD were used to cope with painful	1 <sup>st</sup> phase 41 [5]; 2 <sup>nd</sup> phase 27 [8]; 3 <sup>rd</sup> phase
feelings	15 [6]; 4 <sup>th</sup> phase 1 [1]; 5 <sup>th</sup> phase 1 [1]; total
	83 [10]
Alcohol use generally had a positive	2 <sup>nd</sup> phase 1 [1]; 3 <sup>rd</sup> phase 9 [1]; 4 <sup>th</sup> phase 1
impact on self	[1]; total 11 [2]
Poly-drug use used to offset symptoms	3 <sup>rd</sup> phase 2 [2]; 4 <sup>th</sup> phase 1 [1]; total 3 [3]
associated with use	
Would drink when no other drug available	3 <sup>rd</sup> phase 1 [1]; total 1 [1]
AOD used to improve functioning in a	1 <sup>st</sup> phase 3 [2]; 2 <sup>nd</sup> phase 5 [4]; 3 <sup>rd</sup> phase 3
range of situations	[1]; total: 11 [6]
Reduction or stopping AOD use is often	1 <sup>st</sup> phase 3 [2]; 3 <sup>rd</sup> phase 3 [1]; 5 <sup>th</sup> phase 6
associated with difficulties	[2]; total 12 [4]

### 4.3.2.2 The use of AOD as a protective strategy acts to reduce suicide risk

This was a major theme generated within the interview with nine clients raising it a total of 81 times. Four clients made statements that clearly indicated they felt that their AOD

use was responsible for them still being alive today. (C5, 2<sup>nd</sup> phase) "I reckon if I did not smoke pot, I would be dead". Client four described peers that focus all their attention on gaining the drug that provides them with a sense of feeling better. (C4, 4<sup>th</sup> phase) "I know some people, their lives depend on drugs. You know it like makes them feel better then afterwards all they live for is the next hit". This powerful drive to use substances was in part explained by client one who described feeling like she was in the situation where she either used drugs to change her emotional experience, or she killed herself. (C1, 4<sup>th</sup> phase) "It just felt like I had no where else to go. It was either death or drugs. God that sounds bad. Yeah that is what it came down to. That's how bad it was". After a build up of problems associated with use, it was then explained that neither intoxication nor being drug free was successful in controlling suicidal feelings. (C1, 4<sup>th</sup> phase) "Yeah, I could not live if I was not off my face, but when I was off my face I could not live".

Client's one and two noted that coping through AOD use was most likely only to be effective in the short-term. This knowledge did not seem to deter them from using this strategy as it was viewed as somewhat of a temporary strategy until other alternative measures were put into place. (C1, 4<sup>th</sup> phase) "I still drink and stuff to get through and I know it will not be forever, but this is what I need right now to get me through". This client noted that negative reactions regarding her AOD use from those around her were not helpful and instead suggested that they took a more understanding view of substance use. (C 4 1<sup>st</sup> phase) "I think that people are a lot more negative when they should be a lot more like if this is what is helping you through then this is great. But as long as you do not see it as a long term thing. As long as you see that it is not the answer to all your problems".

Two clients discussed the experience growing up in environments where family members role modelled AOD use (and in one case suicidal behaviour) as means to cope with difficulties. (C2, 4<sup>th</sup> phase) "So it has been passed down from generations. So she has watched her parents cope with it that way so I watched her cope with it that way". When client one was asked about how she came to know that AOD would help her when feeling suicidal her response was (4<sup>th</sup> phase) "My parents were alcoholics, and my grandparents and my uncle and aunties. The whole family was addicts of some kind. My grandfather was actually a speed freak and died of a heart attack. I do not know, I

just always knew". This experience seems to closely mirror that of client two who reported (4<sup>th</sup> phase) "Lots of uncles and aunties are alcoholics. You see them, that is their belief, that is their way cope with it and stuff like that. Then of course they cope with it by drinking, I will cope with it by using as well". Both of these experiences illustrate the impact that role modelling by significant others had in initiating AOD use as a coping strategy when suicidal.

The observation that AOD use reduced suicidal thoughts was widely made. The idea that intoxication can help in that moment of being suicidal by either stopping or reducing suicidal thoughts was described. (C10, 1<sup>st</sup> phase) "But like I said, it can help you get through that moment". The use of alcohol was widely reported as an effective means to reduce risk (C4, 3<sup>rd</sup> phase) "If I was suicidal, it would go right down again. I actually went for three months going through two cartons of Woodstock a day. I was just constantly off my face". Clients six and four identified low doses of alcohol as being protective against suicide as it gave the required effects of intoxication but did not bring about the negative consequences of use. (C4, 4<sup>th</sup> phase) "They just social drink to get things off their mind for awhile. And after it is less in their face, less urgent sort of thing". This describes an experience in which alcohol provided a means to gain respite from the stresses underlying suicidality.

Reports of other substances such as cannabis, prescription drugs (without prescription), and nicotine were described as being responsible for reductions in suicidality. (C9, 3<sup>rd</sup> phase) "They sort of numbed everything. They numbed everything. They never pushed me towards it. If anything they pushed me away from it" (non-prescribed benziodiazapines). The same was experienced through the use of both amphetamines and ecstasy for client eight. (C8, 3<sup>rd</sup> phase) "If I was very suicidal and took these drugs, I would think everything was fine for a couple of days".

Two clients observed that they had reduced sensitivity to the stresses that would otherwise push them towards a suicidal act. Client six discussed the impact that new stresses occurring while intoxicated would have on him. (C6, 3<sup>rd</sup> phase) "Because I do not care as much when I am drunk it takes a lot to annoy me, something really bad has to happen". Client two referred to the impact of ongoing stresses that when straight were responsible for the suicidal feelings. (C2, 3<sup>rd</sup> phase) "I am conscious of them, but

I do not care about them. Because I am in the mood I do not care. I just do not care". However for client seven, a new stress occurring while drinking would result in a burst of anger, that once it had subsided would initiate a suicidal episode.

Client's two, five and eight described a process of reviewing negative perceptions on becoming stoned. (C8, 3<sup>rd</sup> phase) "Not really, because I can work myself into a state, I would then sit down and have a few cones and think it is not as bad as I think it is". This described a re-assessment of the situation that resulted in a calmer, less impulsive attitude towards the issue at hand. At times this translated into a reduction in suicide risk. (C5, 1<sup>st</sup> phase) "Its like all the times I tried to do it I would be like smoking pot and it would always make me think, do I want to do it?".

Four clients described being at increased risk when either stopping or not having access to substances. (C2, 3<sup>rd</sup> phase) "As long as I was not straight. Straight was, I would freak out. I wanted to self-harm, I would want to die". This client described being more conscious of self-hatred when straight, that then was the catalyst for her suicidal thoughts. Client six described becoming more at risk if he did not have access to cigarettes while experiencing a suicidal episode. Client five described when being reminded of past traumas he would use substances and if he didn't use it felt like the only other option was to die. (C5, 1<sup>st</sup> phase) "When it is like you have people reminding you what happened, of course you are going to try and get yourself drunk, have a smoke and if not, do yourself in". Client 10 described becoming suicidal only after ceasing her heroin use. (C10, 3<sup>rd</sup> phase) "I do not know if it is a coincidence of the time, but it was not until I came off the heroin that I got suicidal". This client described a problematic lifestyle while using but thinking that she was happy at the time as she was too "stoned" to notice the problems.

Four clients described the benefits of their substance use began with intoxication and only lasted for its duration. Intoxication lasted generally a matter of hours. (C6, 2<sup>nd</sup> phase) "It makes me feel good for three or four hours but it does not last so I usually go to sleep". It was observed that SM through intoxication is short-term and as such it then requires the ongoing use of substances to maintain that state.

Client six made the point that his preference for substance use originated from the experience of it being more reliable than people. (C6, 3<sup>rd</sup> phase) "Whereas like alcohol, it is always around, there is always a way to get it. It's always permanent. Because I am so used to people and things just leaving on me, therapists". For this person the most reliable source of support was alcohol as it was experienced as available, unlike people with whom a keen sense of abandonment was felt.

Client one did identify that the use of AOD to SM resulted in a cycle in which she began to use to also cope with the problems associated with AOD use. (C1, 4<sup>th</sup> phase) "I would have to take more drugs and have to compensate for being so low, then I would be hassled more and my work would be suffering more and it was just a vicious cycle". In this instance the original reasons of using AOD to cope with past traumatic experiences soon included using to cope with the problems that resulted from her AOD use.

## 4.3.2.3 AOD use not protective against suicide (in the long term)

Four clients noted (six references) that AOD use may not be an effective protective strategy for people, particularly in the long term. Three of these clients had previously identified that AOD use did in certain instances serve to reduce suicidality. Statements contained in this section referred to either the negative longer-term influence of AOD use on risk or an overall sense of the impact of AOD use on risk.

While it was noted that for some people, AOD use may assist them in getting through difficult moments in their lives, overall it had a detrimental impact. (C10, 4<sup>th</sup> phase) "And even though drugs may help you get through that moment, there are a lot of other ways that do not have come-downs, which would be better to do. Yeah I think there is more bad than good". An example was given of individuals known to the clients in which AOD use was seen to be a destructive influence in their lives. (C3, 4<sup>th</sup> phase) "He passed away when he was 21. He hung himself. During that time, a few hours before he killed himself he ended up drinking three cartoons and smoking nearly a whole stick of pot".

## 4.3.2.4 Period of suicidality associated with heavy use

Increased AOD use was described by six clients as occurring in the period of being suicidal (13 references). For three of these clients, increases in use was a direct attempt to cope with their suicidal feelings. (C4, 3<sup>rd</sup> phase) "It was the reason that I actually started drinking. At that time everything started stuffing up. I just resorted to alcohol to cope". Client eight reported using very heavily in the period directly after a relationship break-up as he attempted to cope with the feelings associated with this experience. (C8, 2<sup>nd</sup> phase) "The time in that month, that was the heaviest I had ever used". Attempts like this to cope with suicidal feelings by increasing AOD use may, in part, account for the elevated rates of AOD use in those who either attempt or complete suicide.

Three clients reporting heavy AOD use in the period of being suicidal did not attempt to explain the reasons for this increase. As such, no conclusions can be drawn about the underlying reasons for this. (C2, 2<sup>nd</sup> phase) "Yeah I was, the drug use was through the roof". Client seven described drinking heavily during the day, to only return home at night to continue drinking. (C7, 2<sup>nd</sup> phase) "My ex and I would go through at least \$300 per day. And then take a bottle home".

During a period of heavy alcohol use, client six reported feeling that they're drinking got to the level where it was out of control. This period of heavy drinking for client three was associated with a reduction in caring about what occurred during drinking sessions. (C3, 2<sup>nd</sup> phase) "If I drink until I drop, then I will drink until I drop. And not thinking about the consequences during that time or what happens". This reduction in caring could influence suicide risk by either reducing the impact of current stresses or alternatively reduce the influence of protective factors that were keeping the person from attempting suicide.

## 4.3.2.5 Intoxication associated with positive mental states

Four clients made six references about intoxication resulting in positive mental states. For three of these clients, this was gained with misusing prescription drugs and at times mixing these substances with alcohol. (C6, 4<sup>th</sup> phase) "It creates a false sense of

happiness. You are just so relaxed all the time. You do not care". This was in reference to the use of opiate based pain killers. When tranquillisers were mixed with alcohol they resulted in a depressive effect, often leading to the client falling asleep. Inducing sleep was generally the desired outcome. (C9, 4<sup>th</sup> phase) "If I had two glasses of wine on three valium at night I would be over the limit, even on a full stomach, though it does have a calmative effect in that sense". Another effect of intoxication described by client two was gaining a "foggy head space". Here it provided a comfortable sense of detachment that was enjoyable.

## 4.3.2.6 AOD use to avoid underlying issues

The idea of using AOD as a means to avoid being confronted with underlying issues was reported by nine clients (33 references) across all five phases of the interview. It was most often reported in the second phase of the interview where the interviewer had not yet linked AOD use to suicidality or raised the notion of SM.

Client five described a general sense of being overwhelmed with issues that were beyond his coping capabilities. (C5, 5<sup>th</sup> phase) "Because the people that brought me into this world is so screwed up, and they are treating me like shit, why would I want to stay in it? It is just one of those things, you are trying to find a way to cope". Client one noted that while AOD use created difficulties for other people, it was a core aspect of her coping strategies when suicidal. (C1, 2<sup>nd</sup> phase) "I can not speak for other people because people die from drug overdoses people die from whatever but, for me yeah, it really helped me. It really got me through. It still does".

In this section the most common position put forward by clients was that AOD was used to deal with problems through becoming intoxicated. (C2, 2<sup>nd</sup> phase) "That's all I could think about was killing myself or wanting to get away, the easiest option to get away was to smoke the pot and to get away in that sense". This need to gain a respite from their problems resulted in a binary decision that would enable a break, complete suicide or use cannabis. While client three identified his use of alcohol as being associated with significant problems, there also was the acknowledgment that it had on several occasions enabled him to get through some difficult periods. (C3, 2<sup>nd</sup> phase)

"There was probably one or two times that it got me through, a day or night. Putting away problems and swamping them out. Just a technique."

When intoxicated, some clients described being conscious of their problems, but not being effected by them. Most clients however described that intoxication enabled them to forget their problems altogether for that period. (C8, 5<sup>th</sup> phase) "Because you can have cones and sit back and watch TV for a couple of hours. Not thinking about it, but if you don't you can sit there and think about it again and again". When client two was asked whether AOD use could help someone if they were suicidal she identified that cannabis would be beneficial. (C2, 4<sup>th</sup> phase) "If they were that highly strung and that determined to do it then if you gave them pot it would calm them down, mellow them out and they could probable not give a shit any more".

Three clients identified that while their AOD was used to cope with underlying issues, it also had the effect of creating an attitude where they did not care about the problems arising out of their AOD use. (C10, 3<sup>rd</sup> phase) "When I was doing heroin I had a lot on the bad list and not a lot on the other list. But fortunately I was so stoned I did not remember". For client two high levels of cannabis use resulted in a reduction in caring about personal hygiene and other responsibilities. (C2, 2<sup>nd</sup> phase) "Like the pot, just gives you a sense of I do not give a fuck,. So like when I take it I do not care, I do not care about anything. I do not care if I shower, I do not care what I look like, I just do not care".

For client two the use of alcohol and antidepressants enabled her to sleep which was experienced as respite from her concerns. (C2, 2<sup>nd</sup> phase) "So I could go to sleep and block it out. So I did not have to deal with it. Gave me a break". Client nine identified that while AOD use was blocking out the problems it was also getting in the way of resolving the underlying issues in therapy. (C9, 5<sup>th</sup> phase) "I would rather deal with it. And deal with it painfully, like the tattoo's and get through it, rather than be numbed and only half get through it." Here the client describes having difficulty resolving issues while she felt numbed by her AOD use.

#### 4.3.2.7 AOD use to cope with painful feelings

The notion that substance use was used to cope with painful feelings was widely reported by all ten of the respondents by the second phase of the interview (68 references). A total of 83 references across all five phases were recorded. A central theme that AOD manifested itself, if only for discrete periods of time, as a core coping strategy to offset both suicidal and more generalised painful affect was generated. (C6, 5<sup>th</sup> phase) "They are pretty infatuated with using drugs to try to cope with the suicidal feelings". For some of these clients the choice to use AOD to cope with feelings was a direct result of a lack of alternatives. (C8, 1<sup>st</sup> phase) "I do not want that any-more, trying to make myself happy and not knowing how to do it. I am not going to say no to these drugs any-more because shit, I am not happy". Client one told a similar story while normalising her choice of AOD use to cope. (C1, 2<sup>nd</sup> phase) "I have always been prone to some sort of substance abuse cause that is the only way I know how to deal with what I have gone through. So some people work a lot, I use".

For client seven the availability of AOD and their apparent ability to reduce negative affect was important in choosing this method for managing the feelings of being scared and sad. For client eight, a relationship break up meant that he was left trying to fill the void that was left in his life. (C8, 1<sup>st</sup> phase) "Just trying to fill the void of happiness that the relationship gave me. And taking drugs was the only thing I thought that came close to doing that. So I just kept taking more and more". For client five the increasing intensity in painful affect associated with childhood sexual abuse was the catalyst to smoke more cannabis as a means to manage this emotional experience.

The motivation to reduce psychological pain, rather than gain the euphoric effects commonly associated with substance use was repeatedly referred to by clients. The absence of pain, through the blocking out of consciousness seemed to be a primary motivator. (C10, 2<sup>nd</sup> phase) "On speed I can sit and paint a circle for hours and hours, all night just painting the same circle and not think about anything other than that circle. And that is such a relief sometimes. Just have nothing in my mind. There is no pain there". For this client, the normally invasive re-experiencing of traumatic memories was largely absent in these intoxicated moments. Client one described a levelling out of her emotional range through heavy cannabis use that enabled her to be

less effected by otherwise suicide-inducing emotional states. (C1, 1<sup>st</sup> phase) "If I got terribly sad I would just have a couple of cones and it like just dulled everything. I was not terribly happy, I was not terribly sad, I was not anything at all. But very stable to sit like a vegetable. It did not matter, you know". For client eight, the efficacy of AOD use to block out problems was clear. (C8, 1<sup>st</sup> phase) "The drugs just block them out so you do not have to think about them. You just do not".

The use of alcohol was described as an effective measure to reduce psychological discomfort. For client seven, this discomfort originated from witnessing the illness of her father, concurrent with other multiple stresses. (C7, 2<sup>nd</sup> phase) "I started drinking when I was living with my dad. He was very sick. I drank to drown the feelings". For client four, daily drinking was motivated by the experience of only being happy while drunk, resulting in an extended drinking binge that lasted for three months. Client one equated drinking to reduce psychological discomfort to that of taking Panadol for physical pain. (C1, 1<sup>st</sup> phase) "If you need to take the edge off it cause if you have a headache you take Panadol. So if you have a soul ache you need something to take the pain away so I would take a couple of drinks".

Client two described the impact that intoxication had on her sense of self. (C2, 3<sup>rd</sup> phase) "Probably when I was straight the thoughts were clearer. More defined. When I was straight I realised how much I hated myself. When I am stoned I do not care. I still hate myself, but hey". Although she was still conscious of her self-hatred, it did not have the normal effect of increasing her suicidal feelings.

Three clients noted that the feelings gained through intoxication motivate people to repeat taking the drugs. These individuals described only being able to find respite from uncomfortable feelings through substance use. (C9, 2<sup>nd</sup> phase) "I remember the feeling of what it was like last time I had a few drinks, that makes me want to do it again". Clients commonly grew to associate the needle with the feelings of intoxication and as such described becoming addicted to the actual injecting equipment. (C10, 2<sup>nd</sup> phase) "I do enjoy like the five seconds of the rush from having a hit. That is why I do it. There have been times that I have mixed up empty bags and hit up water, it's that craving for the needle". Client one identified that she became addicted to her substances in the period that she was using to cope with her suicidal thoughts. In

essence, she saw that being suicidal led her into addiction, rather than addiction leading her into a suicidal crisis.

Client one described craving speed, even after long periods of not using. The idea of craving the feelings associated with use was further clarified by client 10. She described her cravings increasing in periods of stress which were historically times where she has used substances to cope. (C10, 3<sup>rd</sup> phase) "So the upset comes before the cravings. I will be mildly upset and getting more upset before I go and score. The days that I am happy or okay, I do not think about drugs". Descriptions of craving in times of emotional difficulty extended to periods of suicidality, when her desire to use substances to cope seemed strongest.

While coping by using substances to cover up feelings associated with underlying issues was described as effective, it was also noted that until these issues were directly addressed they would always be there. (C1, 1<sup>st</sup> phase) "You can disguise it with drugs or sleeping or whatever but until you actually deal with it is never going to go away". For client eight the development of problems associated with his substance use when combined with pre-existing concerns added to overall stress levels. The idea of going through the counselling process to resolve underlying concerns such as sexual abuse was seen to be an immensely difficult undertaking. Therefore simultaneous use of AOD was utilised to manage that discomfort. (C1, 2<sup>nd</sup> phase) "You need something to take that pain away. They talk about having that counselling and having all that stuff like having an operation. You can not have an operation unless you are knocked out". Client five reported a similar view regarding cannabis use during this process. (C5, 1<sup>st</sup> phase) "But then as I tried to come to terms with everything I come to realise if I had the odd occasional smoke, its like I would keep sane, but if I didn't I knew I would go insane".

Client one acknowledged that there was an inevitable amount of emotional pain that would need to be experienced as a part of the counselling process. So rather than avoid it altogether she spoke of titrating the pain, according to how much she felt able to cope with. (C1, 2<sup>nd</sup> phase) "And gauge hey I am not coping, I can have a couple of drinks, now and then maybe tomorrow will not and just feel the pain a bit". This client expected the need to use alcohol in this way would reduce over time. Of interest was

the observation by this client that her use of alcohol enabled her to control the degree of numbing more accurately than antidepressants.

Participants also identified another side to this aspect of SM. Five clients described problems resulting from using AOD to cope with painful feelings. Client three described drinking at home by himself to avoid his emotions that then often resulted in increased suicide risk. This increase in risk often extended to the days following alcohol use. Client four described the short-term effects from alcohol as positive, but he had begun to see the negative effect it was having on his overall mood and risk levels. For this client it had reached the point where he was drinking to offset his depression created by his drinking. (C4, 3<sup>rd</sup> phase) "It's like after I drink I start to become more depressed a couple of days after I drink, so I start drinking again".

## 4.3.2.8 Alcohol use as generally having a positive impact on self

Two clients (11 references) reported alcohol use as having a positive impact. The benefits that alcohol provided in intoxication included calming down the suicidal drinker and facilitating an unconditional acceptance of others. Client four's suicidality and other negative emotional states were not present as long as he kept drinking. (C4, 3<sup>rd</sup> phase) "So if I keep drinking I feel fine". This idea was further explained by the observation that when intoxicated, he wasn't thinking about the past or future but was just in the present. Forgetting past problems and potential future issues allowed the client to just enjoy the altered sense that intoxication provided.

Client six reported using small amounts of alcohol to cope with various problems. Here it was described as an option that could be called upon if required. (C6, 3<sup>rd</sup> phase) "I have always got a drink if I am feeling like shit or yeah it is something to fall back on." For this client it was thought of as a positive option if used in controlled amounts.

Client four described that while she is drinking she has a sense of hope and that the future looks positive. This sense of hope was reported to be absent when not drinking. (C4, 3<sup>rd</sup> phase) "Then I think: that is it. Things are going to keep on the way that they are." Hope, or the absence of it, is often a critical issue in determining whether contemplations of suicide progress to suicide attempts.

Client four stated that while alcohol use was a successful short-term coping strategy, in the longer term it had a negative impact. (C4, 3<sup>rd</sup> phase) "It's something that works very short term but should not be used. It works there on the spot but after it makes things worse". 'After' referred to the likelihood that his mood would deteriorate in the days after drinking, often to the point of feeling depressed. A cycle then developed in which a new drinking episode was initiated to offset the symptoms of the depression and this was repeated over time.

## 4.3.2.9 Poly-drug use to offset symptoms associated with use

Three clients (three references) briefly discussed poly-drug use to offset the crash associated with the use of another substance. For client one it was the use of alcohol to offset the come-down from cannabis whereas for client nine the use of benzodiazapines controlled the symptoms resulting from speed use. Client two reported that she used cannabis to offset the depressed mood and thoughts associated with the crash phase from amphetamines. The utility of SM would appear to extend beyond that of reducing psychological distress from underlying issues to also include problems resulting from prior AOD use.

#### 4.3.2.10 Would drink when no other drug available

Client two, whose primary substances had been amphetamines and cannabis, observed that she would use alcohol when she could not access her primary drugs. Alcohol, used in low doses, was reported to make her happy and to induce sleep. It appeared that this individual, while swapping the substance, had managed to maintain the same functional properties inherent in her routine AOD use.

#### 4.3.2.11 AOD used to improve functioning in a range of situations

Six clients (11 references) across the first three phases of the interview described the use of AODs to improve their functioning in a range of situations. The use of amphetamines, both dexamphetamine and illicit speed, was noted for its tendency to energise people who were otherwise feeling depressed. (C9, 2<sup>nd</sup> phase) "The other

reason I will take it is I want to get organised. Cause I am so lethargic every fucking day. Like I can not study I can not do this, if I am not organised". A variation on this was the observation by client 10 that she would complete enjoyable activities while on speed that otherwise would not be undertaken when using. (C10, 1<sup>st</sup> phase) "And I am happy, I draw, I play guitar, I feel good".

Two clients discussed the idea that AOD use facilitated increased social contact through access to like-minded peers. Client four's drinking in a group decreased his feelings of isolation and increased his sense of fitting in and being accepted. (C4, 3<sup>rd</sup> phase) "But while I am drinking, usually I am drinking with a group, and it feels like I am being accepted. And it feels like I am finally fitting it. And it makes me feel like I am not alone. I do have something worth living for". This client acknowledged that these social connections did not extend beyond a drinking relationship. When not drinking, he described a low mood being present that was the catalyst for increased conflict with those around him. The notion of being more sociable while drinking small amounts of alcohol was also raised by client six.

Client five discussed the process by which cannabis use allowed him to put aside intrusive elements of past abuse and refocus on daily tasks. He described the day beginning with getting intoxicated followed by planning his day around what he needed to complete. (C5, 1<sup>st</sup> phase) "But when I have smoked pot I have sat down and thought what do I want to do today, got the house cleaning to do, gotta do some gardening, yeah will have the shower first". Without smoking cannabis, he described being dominated by intrusive thoughts that greatly impacted on his ability to function. (C5, 1<sup>st</sup> phase) "Its like thoughts go through my mind every second. Thoughts I do not want to go through my mind. Then I take my social smoke, and I think what can I do today?"

## 4.3.2.12 Reduction or stopping AOD use is often associated with difficulties

Three clients (11 references) contributed to the view that reducing or ceasing AOD use results in adverse experiences. These clients described adjusting to being without their substance, which was often regarded as a core coping strategy, as being a difficult transition. This transition required them to learn alternative strategies to cope with old problems.

Client five reported sleeping problems combined with difficulties coming back to reality in the six months after decreasing his cannabis use (C5, 5<sup>th</sup> phase) "Trying to get a grip on everything and not lose my head. It is pretty well coming back to reality." For this client, coming back to reality and all its problems also meant trying to control the resultant increase in suicidality. (C5, 5<sup>th</sup> phase) "It's like it took me a while to get it under control". The client noted that although this transition to lighter use was difficult, overall it was beneficial. He reported continuing to smoke cannabis to help him cope with past traumas and the resultant suicidality. Client one reported difficulties associated with being straight on ceasing her AOD use. (C1, 1<sup>st</sup> phase) "Feeling, just being sober, just being straight is a totally unnatural way for you to be when you have been off your face for years. So it is very hard to deal with".

#### 4.3.2.13 Integrating AOD use as decreasing the risk of suicide

The theme that AODs are used to manage suicidal states by either directly reducing suicidal feelings or indirectly by regulating those experiences that contribute to the desire to die was reported by all of the clients. Initiation into this style of coping often resulted from the role modelling of family members and became increasingly utilised by clients in periods of increased suicidality. There was a general view by clients that their substance use was driven by a need to reduce uncomfortable emotional experiences, often in the absence of other known strategies. This was more important than seeking the euphoric effects of intoxication. Clients reported that while intoxicated there was an absence of the usual triggers of a suicidal episode, such as such as posttraumatic stress disorder symptoms. Some clients reported a continued consciousness of these concerns while intoxicated, although they did not elicit the same level of discomfort.

As the effects of intoxication reduce the impact of problems this often results in clients not caring about the accumulated negative consequences of use. It was also not unusual to use substances to cope with the problems associated with prior AOD use. This was often described as a vicious cycle. The accumulation of problems associated with use combined with increasing levels of neuroadaptation were the primary reasons given to explain AOD use as not being an effective long term strategy to offset suicidality.

Reducing or ceasing their AOD use was often associated with difficulties in controlling suicidality as this often represented the loss of a primary coping strategy. In periods of not using AOD, cravings to reuse were experienced when faced with similar situations to that of past occasions when substances had been used to cope.

The benefits of resolving underlying issues were identified in this section. In this process, some clients used their AOD in such a way as to offset the emotional difficulties associated with counselling. For another client, the numbing effects of their AOD use reduced their capacity to fully work through painful experiences.

## 4.3.3 AOD use unrelated to risk

#### 4.3.3.1 Introduction to AOD use unrelated to risk

Nine clients in the second to fourth stages of the interview discussed the idea that the presenting issues of substance use and suicidal behaviours may either be independent conditions or not significantly related. Of the 36 references in this area, the majority (27) were made in the third phase of the interview.

Table 11.

Second-Order Themes Pertaining to Alcohol or other drug use unrelated to suicide risk

Theme	Number of references [and clients] in each
	phase
AOD use not associated significantly with	2 <sup>nd</sup> phase 6 [3]; 3 <sup>rd</sup> phase 26 [8]; 4 <sup>th</sup> phase
suicidality	1 [1]; total 33 [9]
AOD was an independent condition to suicidality	3 <sup>rd</sup> phase 1 [1]; 4 <sup>th</sup> phase 2 [2]; total 3 [2]

## 4.3.3.2 AOD use not significantly associated with suicidality

Nine clients (33 references) referred to the idea that AOD use may not be significantly associated with suicidality. A common theme generated across clients referred to alcohol use as not impacting significantly on risk. (C6, 3<sup>rd</sup> phase) "I really do not think

it affects it all that much". Clients reported either not having been suicidal while drinking or alternatively if they had, it being a one off occurrence. (C6, 3<sup>rd</sup> phase) "I do not know, I just find it the same, like being drunk as opposed to being straight. There is no real difference". Some of these clients had identified other concurrent substance use as having an impact on risk, often negative, though this did not extend to their alcohol use, which was often minimal.

Another client's response appeared to acknowledge both positive and detrimental impacts of their alcohol use, and thus was not sure as to the final overall influence on risk. (C7, 3<sup>rd</sup> phase) "With the alcohol, it did not make me feel good, it might have had a part to play in it. I am not sure".

As discussed in the section on AOD use increasing risk, some clients reported changing their approach to drinking to reduce related problems. This resulting in clients reporting a reduced impact of alcohol related problems on their lives and therefore a minimal impact on suicide risk.

Five clients made reference to the fact that either one or all illicit substances they were using did not impact on their suicidality. Two of these clients made the reference to their amphetamine use. (C2, 3<sup>rd</sup> phase) "The speed was not really a thing, neither here nor there". While another client referred specifically to the period in which they are in the "up" stage of use. (C9, 3<sup>rd</sup> phase) "Null and void, not thinking about it". This client had previously made the statement that suicidal thoughts were restricted to the crash phase of the use cycle.

Client eight made the reference that cannabis use overall did not significantly impact on his suicidal thoughts. Client five described being aware of suicidal thoughts in the comedown from cannabis but found it easy to distract himself from them. (C5, 3<sup>rd</sup> phase) "It's like thoughts go through your mind but I shrug it off. Cause like I have had a good day and nothing is going to spoil it, especially my thoughts. So it is like I would turn on the play station, radio and listen to music, and just let the night wind down and fall asleep".

#### 4.3.3.3 AOD use as an independent condition to suicidality

Many of the clients gave examples of where they had either been suicidal or had attempted suicide while not under the influence of AOD. Two clients drew attention to the fact that they had been suicidal long before they initiated their substance use. For these clients there was a clear progression from becoming suicidal, then beginning to use AOD to cope with related feelings and then in the long term have their AOD use negatively affect their suicide risk. (C1, 4<sup>th</sup> phase) "I was suicidal since I was 14. I did not start taking drugs till I was 18. I did not become a speed addict until I was 20". (C2, 4<sup>th</sup> phase) "But because I have been trying to commit suicide from such a young age when I did not even know of these substances".

#### 4.3.3.4 Integrating AOD use as unrelated to suicide risk

It was widely reported that in many situations AOD use did not significantly impact on suicidality. It was noted that suicidality often occurred as an independent condition to AOD use while two clients described beginning to use AOD in an attempt to offset pre-existing suicidal feelings. These two clients noted that in the long term, the problems associated with their AOD use did negatively contribute to suicide risk. In some cases, particularly with alcohol, clients reported modifying use patterns to reduce subsequent stresses, which acted to concurrently reduce the negative impact on suicidality.

## 4.3.4 Factors influencing suicide risk

#### 4.3.4.1 Introduction to factors influencing suicide risk

Nine clients (32 references) across phases one to four of the interview described the impact of AOD use on suicide risk as being dependent on a range of mediating and moderating variables. This section accounts for the apparent contradiction in responses between and within individuals for the seemingly opposing impacts substance use had on their suicide risk. Contextual variables such as mood, environment, stresses, and tolerance (neuroadaptation) play a critical role in determining the impact of AOD use on suicide risk. Each of these variables interacts with properties of the substance, resulting in a unique set of effects on each occasion of substance use.

Table 12.

Second-Order Themes Pertaining to Factors Effecting the Impact of AOD Use on Risk

Themes	Number of references [and clients] in
	each phase
Importance of Mood in Influencing Risk	1 <sup>st</sup> phase 2 [1]; 2 <sup>nd</sup> phase 2 [1]; 3 <sup>rd</sup> phase 2
When Intoxicated	[2]; total 6 [3]
Importance of Stresses in Influencing Risk	1 <sup>st</sup> phase 1 [1]; 2 <sup>nd</sup> phase 3 [2]; 3 <sup>rd</sup> phase 6
in Intoxication	[1]; 4 <sup>th</sup> phase 2 [1]; total 7 [4]
Importance of Environment in Influencing	1 <sup>st</sup> phase 1 [1]; 2 <sup>nd</sup> phase 1 [1]; 3 <sup>rd</sup> phase 7
AOD's Impact on Risk	[2]; total 8 [3]
Importance of Tolerance in Influencing the	2 <sup>nd</sup> phase 6 [2]; 4 <sup>th</sup> phase 2 [1]; total 8 [2]
Effect of Intoxication	
Initial Self Medication Stopped on	4 <sup>th</sup> phase 1 [1]; total 1 [1]
Becoming an Addict	
Prior Experiences Influencing Capacity to	4 <sup>th</sup> phase 1 [1]; total 1 [1]
Self-Medicate	

#### 4.3.4.2 Importance of mood in influencing risk when intoxicated

Three clients in the second and third phases of the interview discussed the impact of their mood prior to alcohol use on subsequent suicide risk. Other types of substances were not discussed in this specific area. A general trend across the three clients was that if they were in a positive mood leading up to drinking they would not become suicidal on becoming intoxicated. (C3, 2<sup>nd</sup> phase) "If I am fairly happy and have no worries what so-ever and if I feel like a quiet beer or quiet bourbon. I will have one, two or three". Client 4 (3<sup>rd</sup> phase) extended this view to state that there would be no increase in risk in the hangover period.

The presence of a depressed or suicidal state prior to intoxication was viewed by three clients as having a significant negative impact on resultant risk both when intoxicated and sobering up. (C5, 1<sup>st</sup> phase) "I try not to drink when I am in that kind of mood cause I know that if I get drunk and I am in that mood there is no stopping me". For

another client it was not a simple case of alcohol leading to increased risk as the level of prior negative mood influenced the amount of alcohol required to trigger a suicidal act. (C3, 2<sup>nd</sup> phase) "There will be a certain amount that will tip me over to those states but sometimes not, depends on how I will be feeling at the time. And how stressed or depressed I would be at the time". This client described when in a low mood only a few standard drinks could result in a suicide attempt whereas in the absence of a low mood, this would not be the case.

Client four described a rebound effect in his suicidality so that if he was suicidal before drinking, this risk state would disappear while intoxicated. However on sobering up a return to and an escalation of that risk would be evident. (C4, 3<sup>rd</sup> phase) "A couple days after I finish drinking I will feel worse than when I started". Client five recognised his increased suicide risk when drinking while in a depressed state so he most often chose not to drink. On those occasions where he did consume alcohol, he ensured that he drank to a level so that he was physically unable to carry out a suicidal act. (C5, 1<sup>st</sup> phase) "In the past I would sit down and I would make sure before I literally started thinking about suicidal thoughts I would make sure the bottle had gone before the night had finished".

### 4.3.4.3 Importance of stresses in influencing risk in intoxication

Four clients discussed how stressors that occur while intoxicated impact on their suicide risk. All but client 10, who discussed amphetamines, referred to their experience with alcohol. Three of the clients identified that in the past when stresses occurred when intoxicated their suicide risk increased. (C10, 4<sup>th</sup> phase) "Inoticed the scars on my arms for some reason. I do not why that was different. I was already upset before I had it, but I got more upset and more dangerous because I was more willing to do radical things without thinking about it". In this case, which was described as unusual, suicidality increased on speed to a higher level than had occurred when she had been straight. Of potential importance is the observation that she was in a negative mood before intoxication as this corresponds to others' observations of intoxication heightening pre-existing moods.

Client four described becoming highly suicidal when faced with relationship difficulties while drinking while client six described an increased likelihood of carrying out a suicidal act even if only slightly intoxicated. (C6, 2<sup>nd</sup> phase) "If something really annoys me or something really bad happens, then I probably would do that again". This client extended this idea to state that to remain suicidal on sobering up a very significant problem would need to occur.

Client five (1<sup>st</sup> phase) simultaneously discussed the dual issues of mood pre-intoxication and the occurrence of stresses while intoxicated. "If I have had a good day and I start drinking and problems come in I shrug it off. The problems were not there before I started drinking". In this case it would seem that the presence of a positive mental state was sufficient to override the potential negative mood swing.

### 4.3.4.4 Importance of environment in influencing AODs impact on risk

Three clients in the second and third phases of the interview discussed the importance of their immediate environment in determining their suicide risk both when intoxicated and in the comedown phase. For most participants, a positive environment was thought of as a place where there were no potential sources of stress and one is surrounded by friends. Client three in the second phase stated that such an environment would ensure his risk did not increase. "But if am going out with friends and if it is a social outing like that I will go out with them and have a few beers, get tipsy and then come home and I will be alright and feel fine. Wake up in the morning fine, feel happy. Normal". The positive impact of the environment was even more significant for client eight, (3<sup>rd</sup> phase) who indicated that his level of suicidality pre-using would decrease on using in a social context. "Or whether I was with a lot of people. I would not even be thinking about it, I would be having a good time and that".

Both clients five and eight described similar experiences when coming down from amphetamines [(C8, 3<sup>rd</sup> phase) "I do not like being by myself cause I just tend to run on thoughts, I can think of one thing that leads to another thing which leads to another thing, before you know it you are somewhere"] and drinking by themselves [(C5, 3<sup>rd</sup> phase) "It's like just going through your thoughts and the only thing that went through my thoughts at the time, was everything that was happening. And it really was not

pleasant"]. This last statement described the client who, when not occupied, would focus on distressing things resulting in an increased risk. This observation supports the notion that distraction from underlying issues is an important coping strategy.

Client one (first phase) described that while alcohol use consistently acted to lift mood, the type of experience on cannabis was a complex interplay of mood, environment and the characteristics of the drug. (C1, 1<sup>st</sup> phase) "It depends on the quality of it, some just depresses you some of them makes you feel good. So it depends on the quality to how much I smoked to what kind of day it was to who I was hanging around with. It just all depended on who was home".

## 4.3.4.5 Importance of tolerance in influencing the effect of intoxication

Two clients observed that due to an increase in tolerance to substances, the situation developed to a point where their drug use would not result in the same intensity of experience. For client two this meant that trying to regain the euphoric initial experience on amphetamines was unsuccessful. (C2, 2<sup>nd</sup> phase) "The rest of it was just like I could not feel it, I could not feel the rush from it. I would clench my jaw more, I would get cranky. It was just shit. It was not enjoyable. What was the point?". For this person, the SM effects gained through the initial use of amphetamines was lost with increased tolerance. Consequently, what seemed to be left was an actual deterioration in mood.

## 4.3.4.6 Initial self-medication stopped on becoming an addict

Client one reported that the initial SM effects gained through her substance use was lost on becoming an addict. (C1, 4<sup>th</sup> phase) "I actually started the drug use to combat the suicidal thoughts in the beginning and then I became an addict, it was all lovely and good for a while. But you know it does not stay that way." The implications of becoming an addict with its resultant problems were seen to take away from the capacity of the substance to provide an ongoing SM effect.

### 4.3.4.7 Prior experiences influencing capacity to self-medicate

The importance of different factors on the capacity for somebody to self-medicate through their substance use was briefly discussed in general terms by clients' one and five. While client five made reference to somebody's prior experiences being an important determinant for their capacity to self-medicate no further clarification was given.

## 4.3.4.8 Integrating factors influencing suicide risk

The variation in the impact of AOD use on suicide risk is evident by the fact that seemingly contradictory views were recorded between and within clients. The data presented in this section suggests a complex interplay between substance use, suicide risk, and a wide range of mediating and moderating factors. It is these factors, grouped together under mood, environmental influences, stresses, and tolerance and a complex interplay between those factors, which were described as critical in influencing the subjective experience of intoxication and the subsequent comedown phase of AOD use.

The influence of mood on resultant suicide risk when using AOD was variable. Generally pre-existing mood, either positive or negative, would be exaggerated. The ability of intoxication to achieve a SM state were mediated by pre-existing mood (e.g., did not occur in some mood states or at certain intensity of mood) or moderated by mood (e.g., the worse that pre-existing mood is the less effective SM is). It appeared that the amount of alcohol consumed, though variable between clients played an important role in determining risk. The capacity for stresses occurring while already intoxicated to increase risk was noted for some clients. This seemed more evident if mood prior to use contained suicidal thoughts, whereas if these thoughts were absent, stresses generally would not increase risk. A positive environment ensured that suicidality would not be evident in either the intoxication or come down phase. For another client being intoxicated in a positive environment meant a drop in pre-existing suicide levels. Both social contexts seemed to be characterised as enabling a distraction from underlying issues. Increasing tolerance to a substance led to reduced pharmacological effects and limited the drug's capacity to provide a SM function.

It would appear that an interaction between mood, environment, stresses, substance, and tolerance are instrumental in influencing the impact of AOD use on suicide risk and the related capacity for SM. The complex nature of individual differences and how these differences interact with variations in the context surrounding substance use make it a difficult task to confidently apply population level trends to an individual. Therefore population trends would serve best as generalised benchmarks that can then inform an individualised assessment process.

#### 4.3.5 Intervention strategies proposed by clients

# 4.3.5.1 Introduction to intervention strategies proposed by clients

Clients, on the basis of their experiences, were asked to suggest approaches to clinical intervention for suicidal AOD users. The majority of references (38 by seven clients) were elicited in the fifth phase of the interview while overall 46 references were made by nine clients. Themes reflected that an intervention should contain those principles regarded as best practice while allowing the process to be client driven. The functional aspects of the AOD use should be recognised while working towards developing alternative strategies for meeting one's psychological needs. This should occur before a reduction in AOD use is considered.

Table 13.

Second-Order Themes Pertaining to Intervention strategies proposed by clients

Themes	Number of references [and clients] in each phase
The approach by the counsellor should incorporate normal strategies with an emphasis on client focused philosophy	5 <sup>th</sup> phase 20 [6]; total 20 [6]
Generally the intervention should include addressing the AOD use	1 <sup>st</sup> phase 3 [2]; 2 <sup>nd</sup> phase 1 [1]; 5 <sup>th</sup> phase 15 [6]; total 19 [7]
Intervention should work towards developing other coping strategies to offset AOD use	2 <sup>nd</sup> phase 3 [2]; 3 <sup>rd</sup> phase 1 [1]; 5 <sup>th</sup> phase 3 [3]; total 7 [5]

# 4.3.5.2 The approach by the counsellor should incorporate normal strategies with an emphasis on client focused philosophy

Many of the skills and attitudes that are generally noted as core aspects to any intervention were reinforced as being important by six clients (20 references). The concepts of being available, listening, liaison with other involved professionals, and individualised approaches that seek to explore the clients problems were all noted as important. An acknowledgment on the therapist's behalf that he or she is not able to fix the situation was also noted as important when working with this client group.

The concept of tailoring approaches was mentioned by client 10 who suggested that the intervention should be determined by the client. (C10, 5<sup>th</sup> phase) "Whatever approaches the suicidal person feels they like". This idea was expanded by this client who thought it important that the therapist did not champion any one treatment approach with the client but instead tailored the intervention to the situation. Client five thought taking into account the client's perspective on the situation was important when planning an intervention for their substance use.

The importance of creating a safe environment so that the client did not feel judged was reinforced. This included not judging the client's use of AOD as well as wider clinical issues. (C5, 5<sup>th</sup> phase) "It's the last thing if you are trying to open somebody, is to judge them. Because that is the thing they have been judged pretty well all of their lives. And soon as you judge them they will halt". As evidenced in this quote, many individuals who use illicit substances come from a background of being judged harshly, either by themselves or others. If this re-occurs towards their use of substances it will often result in the breakdown of the therapeutic relationship.

The idea that the intervention should proceed slowly, particularly when addressing underlying issues such as trauma was noted (C5, 5<sup>th</sup> phase). Client nine went on to emphasise the importance of practical forms of interventions such as setting up daily schedules of activities and responsibilities. This client suggested that this is beneficial as it provides a distraction from underlying issues. (C9, 4<sup>th</sup> phase) "Making short term goals/plans. Organising a routine, even if it means getting out a white board and organising a routine for the next week."

## 4.3.5.3 Generally the intervention should include addressing the AOD use

The theme of addressing aspects of AOD use when working with a suicidal substance user was included in the responses of seven clients. Overall 19 references indicated the need to take into account the substance use, beginning with the importance of exploring the reasons for use. Client four suggested that the basis for the intervention should be guided by the reasons for use. The example given was for those that identify substance use as a means to feel better, the therapist then should explore alternative ways to lift mood.

Client six reflected on his reasons for use and suggested the exploration of home life and the relationship with parents was important to understanding the reasons behind somebody's AOD use. (C6, 5<sup>th</sup> phase) "I think a social worker could help by talking about their home life, what their parents are like without being too intrusive. Look at the reasons why they are using it.". The need to understand the issues that may have contributed to the initiation of AOD use may well put this behaviour into a broader context, thus deepening the understanding of the client's situation.

It seems significant that there was no theme of working towards the reduction or cessation of AOD use in the face of suicidality. However, several clients noted the need to exercise care when approaching the client's AOD use. While the reference was made to not judge the behaviour as bad or wrong, it was also noted that the therapist should not encourage AOD use, even if the client was looking to continue using. Client eight noted that for those clients who are using stimulant drugs, particularly amphetamines, they should be told to exercise caution, especially in the crash phase of use. (C8, 4<sup>th</sup> phase) "Just emphasise that the crash is quite substantial".

Client one in the first phase of the interview stated that having her counsellor acknowledge the emotion regulation role of AOD use was helpful. This increased the sense that her attempts to cope were understood. Client eight suggested that for those clients who state the need to continue using AOD to regulate mood, he suggested cannabis as an alternative. (C8, 5<sup>th</sup> phase) "But if you have to do something, rather than pop a pill, have a few cones".

Client nine indicated that discussing AOD use was a trigger to spark cravings to use, which would then most likely result in a relapse back into use. (C9, 4<sup>th</sup> phase) "I had just finished a week and a half ago, a three week bender. It was when my counsellor and I started thinking about the shooting up thing that happened in the past". The implication from this client's experience is therapists be cautious when discussing past AOD use.

# 4.3.5.4 Intervention should work towards developing other coping strategies to offset AOD use

The notion of substance use being a primary coping strategy was reported by all ten clients. Five clients made seven references that discussed the benefits of assisting the client to develop other strategies to cope with their circumstances. (C6, 5<sup>th</sup> phase) "Teach them other ways to feel better other than to use drugs".

While this domain was not discussed in depth, strategies such as talking were identified as good alternatives to deal with concerns (C6, 4<sup>th</sup> phase) "Sometimes I can get the same effect from a person, say from talking and the rest of it". Another client suggested that setting up alternative activities or routines was beneficial as it provides a distraction from underlying issues. (C9, 5<sup>th</sup> phase) "My opinion is distractive therapy. Cause like when I am distracted, like I am here to day, and I have work this afternoon, there is no way I am going to do anything today. Totally distracted".

#### 4.3.5.5 Integrating clinical approaches suggested by clients

Generally the suggestions raised for clinical approaches when working with suicidal AOD users observed the general principles underscoring sound practice. Clients also emphasised the importance of being client directed when developing goals for therapy. These goals should be based on a thorough assessment of the issues underlying both AOD use and suicidality and be worked towards in a slow, measured manner.

Should the function of AOD use be assessed as incorporating emotional regulation aspects, special reference was made to slowly working towards alternative strategies to achieve that function. No reference was made that suggested attempting to reduce or

cease substance use as a means to increase safety. It was noted though by several clients that the therapist should not encourage their AOD use, especially if it includes amphetamines.

#### 4.3.6 Integrating client section

On first examination the results generated from the 10 clients appear to be a maze of contradictions both across and within respondents. These contradictions were made evident by all ten clients reporting that using substances reduces suicide risk, while the same ten clients also reported an increase in suicide risk associated with AOD use. To potentially confuse the situation further, nine clients reported that their substance use can be unrelated to their suicide risk. The key to understanding these differences lies in the second-order theme, 'factors that affect the impact of AOD use on risk'.

To understand how the same client can report a reduction in suicidality when intoxicated and then state shortly after that they became highly suicidal while drunk, one needs to explore the domains of mood, social context, substance characteristics, and the influence of stressors. The clients indicated that the specific nature and strength of impact of AOD use on suicide risk depends on the context in which a drug experience occurs. Predicting how one client will respond to changes in a contextual factor, such as the introduction of a stressor, using population based trends (i.e., the typical response or the average response) will contain significant error. This task becomes even more complicated when several factors interact (e.g., mood and environment) and a detailed individualised assessment is required in order to anticipate an individual's reaction to potential risk factors.

Having stated the inherent difficulty in developing 'rules' for predicting the impact of substance use on risk, certain qualified patterns can be described that commonly occur across clients. Most clients report intoxication being associated with a pleasant experience, which for many is associated with a reduction in pre-existing levels of suicide risk. This positive experience seems to be more likely retained in the face of stresses if the client is in a positive mood pre-use. A positive social context was given high importance by some for its capacity to distract from underlying intrusive concerns

or alternatively by providing supportive social contact and thereby mediating the impact of drug use on suicide risk.

The substance's capacity to provide a pleasant experience in intoxication was reported to be compromised by increasing levels of neuroadaption (tolerance). Neuroadaption is largely determined by the amount and frequency with which the substances are used. Clients reported being distressed by this decreased ability to induce a pleasant druginduced state.

Some clients reported negative experiences (e.g., increased impulsiveness) while intoxicated that sometimes increased risk. Increased impulsiveness was most commonly associated with alcohol. Impulsiveness increased risk as a result of reduced importance placed on otherwise protective factors. As a result of experiencing one of these episodes clients commonly either ceased using that substance or developed harm-reduction strategies (e.g., not use it when in a particular mood or circumstance) to avoid increasing their suicide risk. In circumstances where clients have chosen to stop using that substance, they commonly reported changing to another drug for which increases in risk had not been experienced.

Increases in suicidal ideation and suicide attempts were reported as occurring most often in the crash period following intoxication. The use of psycho-stimulants (amphetamine and methamphetamine) was most commonly reported to be involved in these cases. Clients described the increased risk experienced in the crash as resulting from an exacerbation of pre-existing conditions (e.g., suicidal ideation, depression) that had been temporally covered through intoxication. On returning to the pre-intoxicated state, the sense of those conditions being intolerable is magnified when contrasted with the relatively problem-free state of intoxication. This then seemed to increase the perceived need to find a permanent escape resulting in increased suicidality. Therefore, clients outlined short-term protective properties of stimulant use during intoxication but longer-term risk-enhancing properties depending on the nature of the crash experience and pre-existing problems. It also follows from some participant's reports that the strength of the protective element correlates with the severity of the subsequent risk element, due to the contrast between the two experiences.

The problems resulting from the heavy use of what was most often an illicit substance was experienced as adding to the individual's overall stress level, including becoming isolated from traditional support structures. The awareness of this process often further eroded a compromised sense of self, adding to overall suicide risk.

Nine clients had observed their AOD use, in specific situations, had been largely unrelated to their suicide risk. Generally when clients reported their AOD use as unrelated to their suicide risk, either their level of use was low, a specific type of substance was not seen as problematic, or suicidality was in evidence irrespective of AOD use. Also some clients explained that their AOD use was initiated well after their suicidality was present. In these cases AODs were subsequently used in an attempt to offset this suicidality, with variable results.

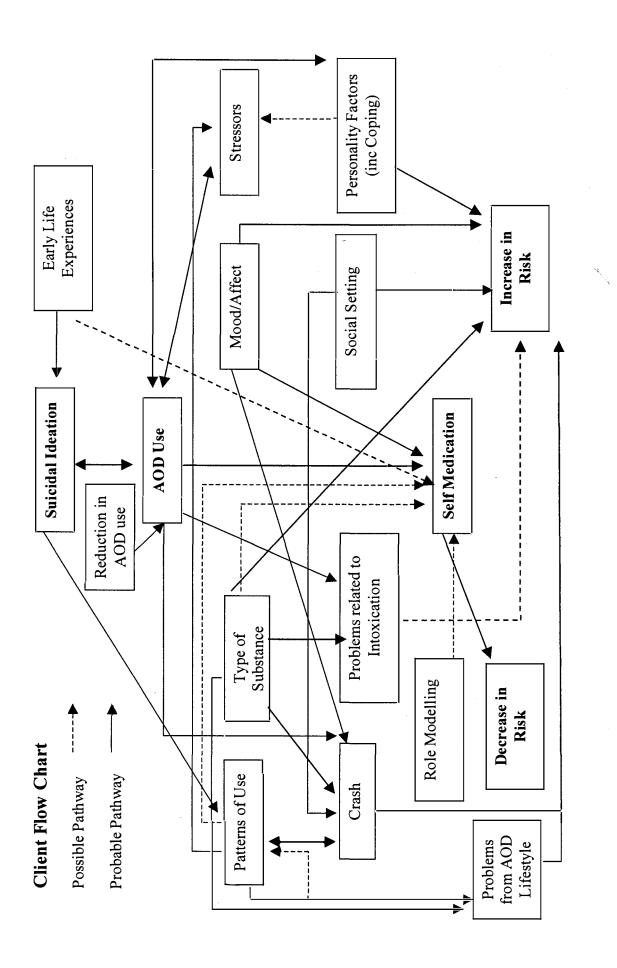
All 10 clients directly reported AOD use as being protective against suicide. For some clients, these statements were linked to specific situations and time frames while others made global statements about AOD use being responsible for them being alive today. The role of AOD use in managing suicidal ideation is predominantly in the intoxication phase of use where the often powerful and sometimes subtle effects on consciousness were used to manipulate experience. The core theme that linked clients was the utility of intoxication to counter uncomfortable emotional experiences that often originated from unresolved underlying issues that were most often traumatic in origin. For these clients, using AOD to cope with painful states occurs in a context of an apparent lack of other strategies to achieve even a temporary respite from these stresses. The relative effectiveness of different types of substance to achieve this SM state didn't vary greatly from client to client, with alcohol, cannabis, and amphetamines commonly described as effective for this purpose.

The type of substance became important when talking about suicide risk in the post-intoxication crash. Most of the clients in this sample were poly-drug users and they often purposefully used the interaction effects of multiple substances to potentate desired intoxication effects. Several clients reported using other substances to achieve the desired effects if their preferred substance became unavailable.

Clients often described their AOD use increasing in times of crisis as their other, often limited, strategies were overwhelmed with the experience at hand. Coping through AOD use in times of crisis was often role modelled by family members from early childhood. The loss of access to, or the conscious decision to reduce or stop, AOD use is often experienced as a major difficulty and is often associated with initial increases in suicidality. Cravings after ceasing use often occur in situations that evoke painful feelings where historically AODs were used to cope.

Clients recommended approaches to clinical intervention that were underscored by recognised clinical concepts, with an emphasis on individualised, client-directed treatment plans. Within this was the need to assess for functional aspects of AOD use, such as emotion regulation processes and for clinicians to acknowledge and respect the role of those functions in limiting suicide risk. No client recommended that clinicians actively intervene to reduce substance use as a standard method to increase safety. Many clients preferred practical approaches to increase safety (e.g., enhancing specific coping skills).

Figure 2 represents the possible pathways that originate from AOD use to then influence subsequent suicide risk as uncovered in the interviews with the clients. The solid lines represent a pathway that was frequently referred to in the interviews as common or important. The dotted lines show either a weak or uncommon pathway between factors. The arrows identify whether an influence is in either a single or dual direction.



# Chapter 5. Implications for Clinical Approach and Future Research

In this chapter I integrate the clinicians' and clients' views into a single theoretical framework. This model illustrates the pathways and processes through which AOD use influences suicidal behaviour. The model is then examined in light of the theories discussed in the literature review. The clinical implications of the model for both assessment and clinical intervention are then discussed with the understanding of the need for future research to further examine these preliminary findings. In the final section of the chapter I outline recommendations for future research.

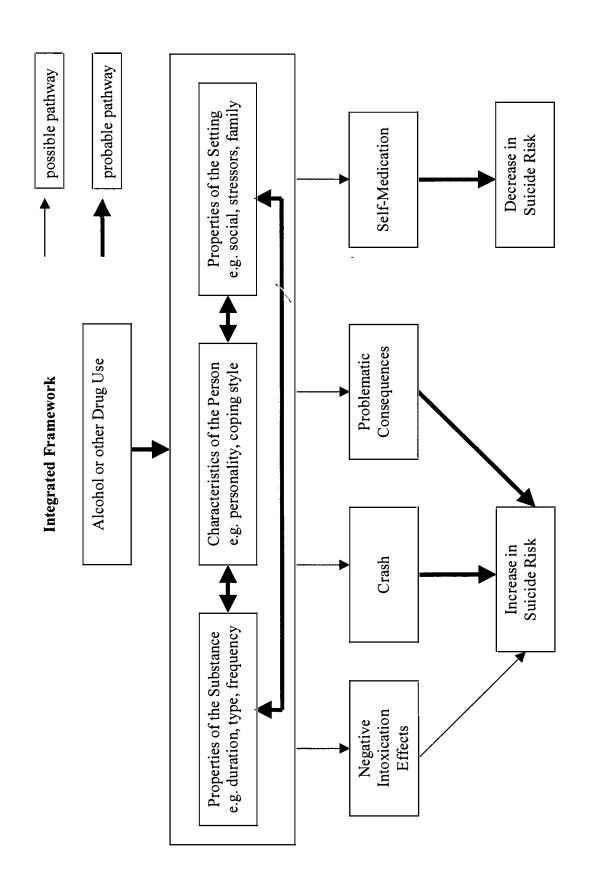
## 5.1 Integrating Clinician and Client Views

The information generated across the clinician and client interviews is generally consistent in key domains. Where there is divergence in opinion, it is most often in the strength or importance of certain pathways that denote interactions between factors (e.g., the importance of SM in ameliorating suicide risk). A single theoretical framework is outlined in the following section using key areas of agreement in the data. Key areas of difference between the two groups are also noted. Reference to the literature and relevant theory are made when interpreting information. Finally the implications of the proposed theoretical construct for current approaches to clinical practice are explored.

#### 5.1.1 Theoretical framework

Both the clinicians and clients noted the complexity involved when trying to understand the impact of substance use on suicide risk, with the latter group stressing the need to take into account mediating variables such as mood and environment in this process. On review, the basic principles of the interaction model (Zinberg, 1984) were observed in the proposed framework. Through this model the importance of reviewing the three key areas of the person, the drug, and the environment (along with the interaction between each) when developing an understanding of a drug experience is evident. The result from combining the client and clinician information to generate an integrated framework also resulted in a similar finding.

Figure 3 was formulated by combining both the clinician and client data. This flow chart represents the main pathways resulting from AOD use that then either increase or decrease suicide risk. Bold lines represent likely pathways while the thin lines represent possible pathways between factors. The three boxes contained within the larger box represent the variables of the drug, the individual and the setting. The interactions between these three variables mediate the likelihood that certain pathways (i.e., crash, problems from intoxication, problematic consequences, and SM) will occur. The interactions between these three variables also interact to moderate the strength of these pathways that then directly influence suicide risk.



## 5.1.2 Properties of the substance

The type of substance being used and its psycho-active properties were considered to be important in influencing its subsequent impact on suicide risk. Assessing AOD uses impact on risk began with the type of substance and its psycho-active properties. The clinicians placed great importance on this area, with the general view that depressant substances (heroin, alcohol and cannabis) are the most effective for SM. The client group did not show the same level of preference for depressant substances, but instead placed a greater emphasis on individual preference for certain drug effects which cut across types of substances. Both groups noted the importance of the type of substance when predicting increased suicide risk. Both groups noted the potential for amphetamines to increase risk, especially in the post-intoxication crash phase. This was thought to be predominantly through the contrast between moods in intoxication and the crash plus through the amplification of mood present prior to use. Clients also noted the potential for alcohol to increase suicide risk both when intoxicated and in the period shortly after use. Alcohol was associated with increases in impulsivity and amplifying negative pre-use moods while intoxicated.

It was agreed that the capacity of a substance to regulate painful emotional states is restricted to the period of intoxication. The potential for a SM process to occur is dependant on the psycho-active properties of the substance and how these interact with other factors (e.g., mood, stresses, and social setting).

The way in which a substance was used was also thought to impact on suicide risk. Factors such as the regularity of use, duration of use and length of intoxication were all noted as important variables when understanding the drug experience. It was generally considered the higher the level and the longer duration of use, the greater the associated problems experienced by the user which then reduced the capacity for SM. High quantities combined with regular use were also associated with increasing levels of neuroadaption that decreased the potential of the substance to change emotional states. Longer periods of intoxication were associated with a longer and a more difficult recovery in the crash phase for the user.

A change in the use of AOD either through it becoming unavailable or a conscious choice on behalf of the user was associated with increases in negative affect. This was seen to often result in increased suicidality as the person struggled to cope with a return to non-medicated, distressing mood states.

#### 5.1.3 Characteristics of the user

The individual who uses AOD in periods of suicidality was viewed by both groups of subjects as more likely to have certain personality traits. They commonly suffered significant early life difficulties, most often in the form of trauma and in relationships with significant others. These experiences were thought to impair the development of conventional coping strategies to regulate painful experiences. These individuals often utilised other non-conventional strategies to regulate moods such as self-mutilation, mostly in the form of cutting. They were also observed to exhibit impulsive personality characteristics that led to unplanned suicide attempts.

It was primarily the client sample who observed the importance of mood in influencing an intoxicated state. Mood was also seen as important in determining the impact of environmental stresses that may occur when intoxicated. Individual differences were noted in the influence of mood prior to and during intoxication, with clients able to articulate their patterns of use that resulted in increases in suicide risk. They then were able to describe strategies they put into place to reduce their suicide risk.

The clinicians interviewed noted the presence of psychiatric conditions, most often depression, anxiety disorders, PTSD and psychosis were common among this client group. These clinicians generally noted that with the exception of psychosis that the psychiatric disorder predated the AOD use. Clinicians viewed subsequent development of AOD as an attempt to offset symptomatology of their particular disorder. Some noted that AOD use had the potential in the longer term to increase the symptoms for which it was being used to cope.

#### 5.1.4 Properties of the environment

The process of initiating substance use in an attempt to SM suicidal states was thought to occur by both client and clinicians through observing others model that as a coping strategy. These role models are most likely to be older family members, generally parents, or peers.

The environment surrounding the user was described by both clients and clinicians as most often chaotic and laden with a range of stress inducing experiences. While aspects of this setting were thought to predate or be unrelated to substance use, there was a general consensus that the lifestyle surrounding AOD use (notable illicit substance use) was responsible for creating a range of stresses. These stresses, dependent on the interaction with other variables such as mood, had the capacity to influence suicidal states. Both clients and clinicians noted that ultimately it was the accumulation of these stresses that were thought to undermine efforts to SM, at times resulting in a corresponding increase in suicide risk.

The client sample generally stressed the importance of social context in influencing the impact of AOD on risk, both when intoxicated and in the crash phase of use. A socially orientated space free from potential sources of stress was seen to occupy the person and distract him or her from underlying psychological problems. This was thought to greatly reduce the likelihood of AOD use resulting in suicidal states. Some clients noted the capacity of AOD use to provide access to a social group of fellow users that then reduced subsequent feelings of isolation. In this sense, AOD use can influence the setting and the setting can then influence the impact that the AOD use will have on suicide risk, often reducing risk. This is a more complex pathway than the social setting simply moderating the association between AOD use and suicide risk.

#### 5.1.5 Pathways influencing suicide risk

Figure 3 shows four pathways depicting various influences that drug use can exert on suicide risk. These are both mediated and moderated by the combined interaction of the substance, the individual and the setting. The contributions of each of these mediating and moderating variables, and their interactions, to each of these four pathways are discussed in sections 5.1.1 to 5.1.3. Within the model depicted in Figure 3 any, all, or none of these pathways could be opened on any occasion of drug use.

Pathway 1, negative intoxication effects, is shown as possibly, rather than probably, leading to an increase in suicide risk, whereas the other three pathways are all shown to have a high likelihood of impacting on suicide risk. This reflects the ambivalent views on the strength of association between intoxication effects and suicide risk by both clinicians and clients.

#### 5.2 Theoretical frameworks fit with existing theory

#### 5.2.1 Suicide theory

The core aspects of the cry of pain (Williams & Pollack, 2000) and the concept of psychache (Shneidman, 1993) involve the experience of intolerable psychological states driving suicidal behaviour. The drive to remove oneself from an intolerable emotional experience motivates the behaviour of suicidal people. SM is a process for reducing psychological pain and therefore matches the process that Shneidman (1993) promotes to reduce suicide risk. Shneidman discusses in length, various strategies to reduce the discomfort (or psychache) that he sees as driving all suicidal acts. While he focuses on concrete responses that instil hope for positive change while decreasing the frustration from thwarted needs, the underlying principle is the same. A reduction in psychological pain equals a suicidal act averted. A temporary egression from the motivator (psychache) is theorised to be enough to keep the person alive. It is this temporary escape from psychological discomfort provided by drug use that both the clinicians and the clients have identified as being sufficient to reduce suicidal intent.

Social learning theory (Orford, 2001) holds that substance use is a decision based on the pros and cons of use. This notion explains the continued use of AOD in spite of a range of accumulated problems. Several clients noted that they perceived their choice to be either use substances to cope with their emotional pain or commit suicide. This position supports the continuing to use substances in spite of the predictable negative consequences that accrue. It would seem that the clinicians generally focussed on the array of problems associated with AOD use and in doing so partly lost sight of the primary capacity for substances to reduce psychological pain.

#### 5.2.2 Self-medication theory (SMT)

Khantzian (1985;1997) proposed that individuals who are unable to regulate affect through conventional processes are attracted towards AOD use to manage negative emotional experiences. Khantzian (1985) theorised that an individual would be drawn to the use of a particular substance due to its unique psychotropic effects, which have the potential to beneficially interact with personality characteristics and specific clinical symptomatology.

The results from this study support SMT. Within the study it was noted that those who SM have not developed conventional strategies to reduce negative affect. Intoxication was associated with a reduction of pre-existing uncomfortable emotional states. As also noted within SMT, in times of increased crisis, there is a parallel increase in substance use as the individual struggles to cope with his or her emerging feelings.

The clinicians generally indicated that depressants were the only category of drug that had utility in the role of SM whereas the clients lent towards individual preferences across categories of substances, including amphetamines. Khantzian (1997) noted that the choice of a particular substance depended on three factors: personality characteristics, inner states of psychological suffering, and the main action of the drug. Within this model, Khantzian (1997) recognised the interaction of both internal and external factors in determining the drug experience. While this is similar to the approached proposed within this research, Khantzian did not explore the role of environment in influencing the drug experience. This research found that the environment surrounding the intoxicated person is seen to significantly influence the experience of a SM state.

#### 5.2.3 <u>Interaction model</u>

The interaction model (Zinberg, 1984) proposed that the subjective experience of intoxication will be determined by the interaction of variables across and within the domains of the drug (e.g., type, how much, how often) the individual (e.g., prior experiences, personality, gender) and their environment (e.g., social context, stresses, social attitudes). This model emphasises the importance of a range of different factors

and how they then combine to influence the drug experience. This interaction explains why AOD use in one context may be problem free, while in another it may result in significant problems for the individual. This model places importance on role modelling of others in the initiation of AOD use that then acts to develop certain anticipated outcomes that then act to drive AOD use.

The model by Zinberg (1984) was used to organise the data from this study into a conceptual framework. Both groups of subjects emphasised the importance of factors surrounding AOD use in determining the drug experience and its subsequent impact on suicide risk. Changes in these factors, or mediating variables were used to explain differences in the influence of AOD use on suicide risk within and across individuals. Results showing the importance of role modelling in developing the expectation that AOD use would result in a reduction in psychological pain is consistent with Zinberg's theory. While Zinberg broadly discussed the drug use experience, this paper focuses specifically on the impact of the interactions within and between the drug, the individual and environment on subsequent suicide risk.

#### 5.3 Clinical implications

Using the themes generated by the clinicians and clients a proposed model of clinical intervention has been developed to guide work with this client group. This approach should not be taken as a model of best practice, but rather an emerging set of observations that a clinician can use when working with this client group. Future research and discussion should assess the veracity of this model.

#### 5.3.1 Assessment process

The assessment process is best characterised as being underpinned by the skills and strategies already accepted as best practice when working in clinical settings (Best Practice in Alcohol and Other Drug Interventions Working Group, 2000). These include skills such as listening, being empathetic and consulting with other professionals. As outlined in the client interviews, it is especially important to avoid language that implies the client or his/her behaviour is being morally judged by the clinician. The results from the clinicians interviews supported the view that

interventions with this client type might need to be more intensive and longer in duration than with other client groups (Rossow & Lauritzen, 2001).

The client's point of view about the relationship between his or her AOD use and suicide risk needs to be given high importance in the assessment process as indicated in both the clinician and client interviews. Should the clinician transpose a pre-existing belief onto the situation that is in opposition to the client's view, he or she risks damaging the therapeutic relationship. It is also likely that if preconceived views are held by the clinician during the assessment process, information not consistent with these views will be either missed or minimised.

It is important to conduct a comprehensive assessment process that looks at both current and historical factors that may be influencing AOD use, suicidality or both. From this gathering of information, the clinician and client in partnership need to develop an understanding of the functional aspects of the AOD (Khantzian (1997). It is important to note that the functions are most likely to be dynamic in nature and change with circumstance. Therefore this assessment process needs to be an ongoing process throughout the course of any intervention.

#### 5.3.2 Clinical Intervention

It is critical to understand the function underlying AOD use before an intervention seeks to instigate changes in this use (Khantzian (1997). The potential risk here is that a clinician might unwittingly take away a core coping strategy, in the form of AOD use, without an understanding of how this will impact on suicide risk (Motto 1999). In the case where AOD use has been used as a strategy to survive, the clinician should acknowledge its importance to the client. This should add to the strength of the therapeutic relationship (clinician and client interviews).

Once the functional aspects (e.g., regulating the experience of depressed states) of the AOD use have been identified, alternative skills to achieve these functions need to be learnt. Intervention strategies need to take into account that this client group might be delayed in acquiring the basic coping strategies expected of their age (clinician interviews). The process of acquiring skills to monitor and regulate internal states

generally requires considerable investment of time from both the clinician and the client. Clients might therefore have some difficulty in relinquishing an existing effective strategy (SM with AODs) when the replacement strategies will take time and effort to be effective.

While the process of developing alternative coping strategies is being undertaken, unless exceptional circumstances dictate, the clinician should not seek to reduce substance use unless the client and/or the assessment data are indicating this course of action (clinician and client interviews). It is probable that the client's AOD use is associated with a range of difficulties that should be minimised where possible using harm reduction strategies that are developed in consultation with the client.

Once the client has developed alternative coping strategies that match his or her psychological needs, the type and frequency of substance use is likely to naturally change to reflect the reduced dependence on it to achieve more comfortable states. In those cases where AOD use remains problematic, a client-driven, clinician-assisted intervention to reduce use should be considered.

In settings such as therapeutic communities and detention facilities it is not possible within current legislation and policy to build alternative coping strategies while keeping AOD use in place as a primary coping option. In these settings, considerable effort should be made to explore the historical functionality of AOD use and put in place coping strategies that attempt to meet these needs. It is most likely that these strategies should be focused on providing symptom relief, such as relaxation and visualisation strategies (Motto 1999).

#### 5.4 Recommendations for future research

Research of self-medication through non-prescribed substance use is in its early stages. Whilst this thesis has raised a range of interesting propositions, further research needs to occur to examine and refine these ideas. A desirable endpoint for such research would be the development of a psychometric tool that assesses the impact of an individual's substance use on their subsequent suicide risk. Ideally this tool should be able to assess

the presence and subsequent impact of both self-medication and risk increasing processes associated with an individuals substance use.

In order to develop this assessment tool, initial research needs to progress along a number of lines. The use of larger sample sizes would enable the preliminary findings of this paper to be tested and refined. Of particular importance would be to test the accuracy and strength of the proposed pathways outlined in the combined client and practitioner model. Larger sample sizes would also enable variations across client groups to be established and tested.

Research should also be conducted exploring the pathways that result in the establishment of self-medication practices within an individual. The results of this paper would suggest that the experience of trauma, early attachment problems to primary care givers and those witnessing significant role models using substances increase the likelihood of later self-medication practices.

#### 5.5 Reflection on methodology

A number of potential methodological limitations of the research need to be noted when interpreting the results of this study. Initially, the use of a clinical sample for clients makes it difficult for these results to be generalised to non-clinical populations. The fact that the entire sample had previously made at least one suicide attempt indicates that they have experienced high levels of suicidal ideation. As all of the clients met the criteria for substance use dependence or abuse makes it difficult to generalise to those in the non-clinical population. Non-clinical populations would potentially use substances in a more controlled manner or without significant problematic consequences (it should be noted that not all dependant users seek clinical intervention and therefore also may be present in non-clinical populations).

The sample used in this research is restricted to a small age range, 19-25 year olds, and as such needs to be generalised to other age ranges with significant caution. It is possible that different ages would exhibit different life circumstances that will influence their experience of substance use.

The use of qualitative research methodology often attracts criticism of being unscientific and open to the researcher's biases. While several authors have noted the appropriateness of researchers incorporating aspects of their own selves in the interview and analysis process (Strauss & Corbin, 1990; Burgess-Limerick & Burgess-Limerick, 1998; Pidgeon & Henwood, 1997), the current research was designed to reduce researcher-bias. The use of a funnel approach to research questions, using grounded theory principles and routinely checking interpretations with the research supervisor, all sought to minimise the potential impact of the researcher's own assumptions and views.

Critics of the SM theory have raised the idea that clients seek to rationalise their use of substances as a way to justify its use. The research did not seek to test clients versions of their experience through approaching secondary sources such as significant others or hospital records. It was considered important within this research that the clients' reality be honoured as the best source for what are dynamic and complex experiences.

#### 5.6 Conclusion

Undertaking clinical interventions with client's who exhibit both suicidal tendencies and AOD use has always proven to be a difficult task. This task has not been greatly aided by intervention guidelines that have been based on unexplored correlations that suggest AOD users have an elevated suicide risk. The consistent emphasis on working toward a cessation of drug-use as a first step in reducing suicide risk fails to take into account individual differences in the relationship between drug use and suicidal behaviour. Published clinical guidelines also fail to offer adequate guidance in the assessment process to establish the type of relationship that exists between an individual's AOD use and suicidality. The research reported in this thesis highlights that such a relationship, while containing some commonalities across individuals, is dependant on a constellation of interacting factors. This impact is dynamic in nature and as such requires ongoing assessment.

The client type used in this research is reflective of a long-term clinical population who exhibit ongoing difficulties in regulating their mood states. For these people it would appear that AOD use along with other non-conventional strategies such as self-harming behaviours have been developed to offset deficits affect-regulation competencies. The

cessation of, or significant reduction in, AOD use often results in an elevation in suicide risk because a critical coping strategy (AOD use) has been removed. In these cases an individualised assessment might reach the conclusion that the retention, at least in the short term, of AOD use will be protective. This pathway from AOD use to a decrease in suicide risk was identified by both the clinicians and the clients in the current study, and it provides an alternative perspective to that which underlies most published clinical guidelines.

The extension of the current findings to non-clinical populations is not recommended without further research. Non-clinical individuals might be less likely to exhibit the same reliance on AOD use as a primary coping strategy and more likely to have alternative coping strategies and access to supportive networks. It is possible that for these individuals AOD use would not be an important protective factor but that the risks of AOD use (e.g., disinhibition, problematic social consequences) would still operate. Another possibility is that the conditions of AOD use and suicidality co-exist as largely independent conditions and AOD use need not be the focus of efforts to decrease the risk of suicide.

The theoretical framework developed through this research is only at a propositional stage of development. Future research is needed to test the pathways that are contained in the model. Both the existence and the strength of those pathways need to be tested.

Theory development in this important area is in its early stages and until a clearer understanding is gained through careful research, clinicians need to place an emphasis on client-driven assessment processes to inform their clinical practice.

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### Appendix A

#### Clinician Quotes

Chnician Quotes			
Alcohol or other drugs	s increases risk of suicide		
Individual differences influence the impact of AOD on risk	Any drug use it largely depends on how the clier is feeling at that moment they use, who with an where they use. So it is all unpredictable (T6, 3' phase)  And I still think that the drug, set and settin model is the best on to adopt. So you have lots of drug effects, you have got lots of individual moo effects and lots of setting effects (T10, 3 <sup>rd</sup> phase)		
Speed use (especially in the crash) can increase the risk of an attempt	I think the come down phase is really distressing and that is when I think the risk is in the come down phase. (T9, 3 <sup>rd</sup> phase)		
AOD use increases risk	I just think that all those risks far outweigh any alleged relaxing, emotional or cognitive benefits that might come from it (T3, 1 <sup>st</sup> phase) My clinical experience is based on the fact suicidality is actually increased (T11, 3 <sup>rd</sup> phase)		
AOD use may trigger a mental illness (ie psychosis) which is then a risk factor for suicide	especially when there are things like a drug induced psychosis people tend to have thoughts on harm themselves or getting rid of someone (T2, 2 <sup>nd</sup> phase)		
Dis-inhibited/impulsiveness resulting from intoxication may increase risk	At the same time I think that the risks because of impulsivity or dis-inhibition can make their suicide risk increase (T11, 3 <sup>rd</sup> phase)		
Alcohol use increases risk	Alcohol depending on the pattern of use bingeing pattern of use is quite dangerous (T1, 3 <sup>rd</sup> phase)		
Problems resulting from AOD lifestyle may increase suicide risk	but usually I think that certain patterns of substance use can bring with them certain of problems that also contribute to suicide risk T3, 3 <sup>rd</sup> phase)		
A person attempting while intoxicated would have tried at some point even if straight	its not as if that AOD makes then do what they would not have done anyway (T10, 1st phase)		
Externalisation of control (ie possibility of overdosing found in heroin use is attractive to some	Crank up a good hit you might die and for some people it's a lottery they are prepared to take. Either I will be dead in the morning or I won't. And I think there is a nice externalisation of control which is beautiful if you are feeling in a real mess. (T10, 3 <sup>rd</sup> phase)		

Substance Use as Coping

Alcohol (inc other depressants is generally considered effective to self medicate

Heroin can help. Heroin can actually lock you up in a cocoon and take you away from your emotional pain so heroin can do that (T10, 3<sup>rd</sup> phase)

People with PTSD will use alcohol particularly to swamp out the nasty intrusive thoughts (T10, 3<sup>rd</sup> phase)

A range of people seek to self medicate to alleviate various sufferings

I think in the short term drug use becomes the universal panacea (T9, 3<sup>rd</sup> phase)
It gives them something to look forward to. It gives them hope of feeling better (T8, 3<sup>rd</sup> phase)

AOD may be used to self medicate symptoms of a mental illness

Well I think that people do titrate their substance against their DSMIV symptomatology (T10, 3<sup>rd</sup> phase)

I think that if you are getting voices in your head cannabis actually helps (T10, 3<sup>rd</sup> phase)

AOD is used to self medicate mood/affect

Clients will say it takes them away from reality and I guess that is probably it. Reality is that it is bloody painful for what ever reason. And the drug use puts bit of a blanket around that (T6, 3<sup>rd</sup> phase) I suspect there is a huge amount of quite appropriate and effective drug use out there which is about mood moderation and management (T10, 3<sup>rd</sup> phase)

Should AOD use become the singular coping style, problems are likely

So I think once we have got to the extreme if there coping method is the same thing over and over irrespective of what you are dealing with then at some level it is the coping method that will become problematic (T3, 3<sup>rd</sup> phase)

Pot may be used as an effective means to self medicate

Probably my experience with clients most of them will describe smoking pot as the one that provides some distancing from the pain (T6, 3<sup>rd</sup> phase)

AOD use allow a distancing from the underlying issues

where their AOD use becomes harmful so that they are driven I suppose to pursue their substance use behaviours rather than the underlying issues (T11, 3<sup>rd</sup> phase)

All kinds of sources influence self medication expectations, which may or may not be met All sorts of social aspects I think that impact on a young person and they would come to believe that drug use will provide, this is what it will do, pure X will do this kind of thing, because I have read about it, it did last time, my friends said. So there is an expectation that it will. And it might not, it might, it might not. (T6, 3<sup>rd</sup> phase)

AOD through reducing negative affect can decrease suicidality, though this influence can be short term A short distance probably from the pain. So some detachment from it, a numbing kind of (T6, 3<sup>rd</sup> phase)

It does actually regulate some of the internal distress. It helps dampen down some affective disturbances. It just offers the YP some time out (T9, 3<sup>rd</sup> phase)

Risk may increase on ceasing use

It is really interesting hearing people who have recently tried to stop using, how much worse they

feel at first, you know the distress that then comes to the surface, it has been there all along but it has been quite effectively covered up really intense career that heroin addiction has about it (T4, 3rd phase) With some of the options I often find it is about the AOD use may be one of several type of turmoil they feel will depend on what they strategies attempted to self medicate use (T7, 3<sup>rd</sup> phase) I am not sure there is much difference between self harming and drug use in this regard as an emotional regulator. (T10, 3<sup>rd</sup> phase) so it should not be surprising with all the different An increasing range of AOD has number of kinds of drugs we have available that provided more opportunity to self people have more chances to successful self medicate manage. (T8, 3<sup>rd</sup> phase) I think it has initially an explosive phase that is quite The use of speed can have positive pleasant (T9, 3<sup>rd</sup> phase) consequences

Alcohol or other drug use not decreasing risk

AOD use does not provide a viable self medication option and as a result does not consistently act to decrease risk

If you are very distressed you have to use a lot of substances to stop your distress. And it makes you more distressed the next day. You just feel like shit (T10, 3<sup>rd</sup> phase)

they will not be maintaining a equal stone the whole time, they are going to be experiencing some withdrawals at some time they are going to feel pretty bad some of the time (T4 3<sup>rd</sup> phase) The chaos involved with smack for most heroin users decreased the nice part of being able to self medicate (T1, 3<sup>rd</sup> phase)

Stimulants/Hallucinogenics do not dampen negative affect or provide a viable self medication option

They do not seem to describe using speed to put a blanket on the pain (T6, 3<sup>rd</sup> phase) verses high uses of things like acid I don't think that would feel much benefit. (T1, 3<sup>rd</sup> phase)

#### Some AOD use is unrelated to risk

Some AOD use is not related to increased risk

And of course for the occasional user, of course they may have some suicidal ideation it may not be all that harmful (T8, 3<sup>rd</sup> phase) and some people can just have two independent conditions (T10, 2<sup>nd</sup> phase)

Self medication is a minor issue in the bigger picture of the individuals situation

Again I would agree with it at a level but in the bigger picture it is only a minor thing that actually goes on for people at a whole (T7, 3<sup>rd</sup> phase)

Chronically suicidal people have generally had long history of psychosocial stresses leading up to their AOD use and suicidality There has been a long lead up to pathways to suicidality, and alcohol drug use, be that may abuse, neglect be it over controlling parents, be it poverty, be it school bullying, a multitude of factors (T5, 2<sup>nd</sup> phase)

#### Assessment Considerations

Suicidal people have personality traits that increase their risk that is not related to their substance use It is not just about their substance use they have got poor decision making, poor ability to think through and they are impulsive and that's not much to do with their substance use so (T1, 3<sup>rd</sup> phase)

The client and the therapist may hold opposing views on the impact of AOD and risk

I think about people who are, for example long term heroin users may not be able to envisage their lives without using heroin, and this is the only way they are hanging there whole life together and in some ways that is true but I don't think it reduces there risk of suicide (T4, 3<sup>rd</sup> phase)

There is a circular relationship between AOD and mental health

But again it depends on the level of arousal and the quality of the disturbance which drives at the end of the day the degree of chaos of the drug use and the chaos of the drug use drives the mood and the whole thing is entwined. (T10, 3<sup>rd</sup> phase)

AOD may be the cause of death (whether instrumental or accidental)

I think heroin is a very interesting one because some of the heroin OD's were probably suicide attempts or successful suicides (T10, 3<sup>rd</sup> phase)

I do think a lot of the deaths of the guys in there 30's that are recorded as overdose deaths are at least in part intentional the death of accidental very experienced heroin users is not always accidental death it appears. (T4, 3<sup>rd</sup> phase)

Self medication is complicated because users do not use the term self medication

But I think it is a little more complicated when you get down to the individual user cause they do not use the term self medicating (T10, 3<sup>rd</sup> phase)

People use AOD because they feel like the benefits of intoxication outweigh the negatives of use There are always benefits or otherwise they would not do it. I mean you have to accept that people do what they do because on balance they think its better to do it than not to do it or to do something else. (T10, 3<sup>rd</sup> phase)

Intentions in use resulting in over dose may be ambivalent between intoxication and death Quite often their unable to or unwilling to identify whether their attempt was self harm or recreational (T2, 1<sup>st</sup> phase)

There are general difficulties in assessing for self medication in clients

quite often after the effect it is quite hard for mental health to work out the chicken and the egg thing, what come first the mental health thing or the drug thing. (T2, 2<sup>nd</sup> phase)

A careful assessment should explore the impacts of AOD use, including its impact on risk You have got to be a detective on this and I think you need to be careful not to be too rule bound and be very careful to listen to the individual and what the individual experiences of this. (T10, 2<sup>nd</sup> phase) I would try to get them to articulate the impact of their drug use on their psychological state and then I would get them to look at their suicidal thoughts in relation to their drug use. What is the connection. (T10, 2<sup>nd</sup> phase)

#### Intervention Considerations

Factors around AOD use make interventions difficult, though intensive approaches may be more effective

What would be more appropriate is more intensive therapeutic or residential programs, stuff like that (T3, 2<sup>nd</sup> phase)

Agencies should provide a range of services to suicidal young people

AOD programs should have psychiatrists on board offer an in-patient service were you can detox in your local community, mental health nurses attached to drug agencies on the treatment side (T3, 3<sup>rd</sup> phase)

AOD use is functional, the functions of which should be replaced with equivalents within the intervention

Are there any healthier ways of getting the release you get from the drugs because the drugs are likely to backfire and cause you problems. (T6 3<sup>rd</sup> phase) Its about that gradual process of increasing one and reducing the other but in saying how long that takes it is really individualistic depending on what level of development that person is (T5, 3<sup>rd</sup> phase)

Though self medication and medical interventions have similar objectives, appropriate use of prescription medications is more protective than self medication

and avoiding slip into that realm of being hopeless and helpless and that need to medicate through alcohol. So you avoid the potential for self medicating if your medication regime is causing you minimal harm and your realising the benefits (T1, 1<sup>st</sup> phase)

Some suicidal young people may not have acquired age appropriate coping strategies which needs to be redressed via an intervention some of the stuff of these kids at some point operating at the age of three you are going to have quite a bit of work to get them up to a level of being able to use coping strategies you would expect of a 14/15/16 year old. (T5, 3<sup>rd</sup> phase)

It is difficult to get mental health services for AOD users

the difficulty is as you know, getting mental health to really pick up AOD drug misusing people (T2, 2<sup>nd</sup> phase)

Intervention approaches with suicidal AOD users include wider generalised practices

I think the biggest thing in all of this is the therapeutic alliance. And I think what is most crucial is not whether you choose to use the mental health act or not but how is your relationship with your client and how much does your relationship keep them alive. (T10, 3<sup>rd</sup> phase)

Would assess AOD for contribution to suicide risk and if unrelated would not focus on it in intervention If the suicidal state is completely unrelated then I put it aside and work with the other stuff that is going on.  $(T7, 2^{nd} \text{ phase})$ 

In terms of getting treatment for them I would try to say okay what is the priority here and it may well be that the drug use isn't (T6, 2<sup>nd</sup> phase)

### Appendix B

### Client Quotes

Cheff Quotes	
Alcohol a	nd Other Drugs Increasing the Risk
Alcohol and other drug use negatively effected decision	(C1, 1st phase) "It seemed quite logical at the time but I was really drunk".
making which increased risk	(C8, 1 <sup>st</sup> phase) "I was handling it all right as best as I could handle the situation, until I started on the drugs very hard where it confused me and I got tunnel vision into thinking that was the only thing to do".
AOD use was having a negative impact on self	$(C9, 2^{nd} \text{ phase})$ "just guilt and disappointment in myself. You know it makes me feel really disappointed".
AOD use causes a deterioration in mental state at times by the amplification of pre-existing issues	(C8, 5 <sup>th</sup> phase) "mainly anything you are feeling before you take the drug is going to be amplified ten times after taking drugs".
	(C8, 1st phase) "And then start thinking about things that are bigger than that, that become huge, big mountains instead of little mole hills which they were earlier".
	(C9, 3 <sup>rd</sup> phase) "Like I told you before I get volatile, angry, very, very angry about stuff in my past and I will project it onto the now".
Problems associated with use increased life stresses	(C10, 3 <sup>rd</sup> phase) "There was so little left of my life, which was worth living for I just did not care if the next hit was to big. I could not just give a shit. I not play guitar anymore, I did not do anything positive at all. Nothing left".
	(C8, 3 <sup>rd</sup> phase) "you have all these things that you have to do, then you put it off until tomorrow. A couple of weeks later you still have not done them".
Would be at increased risk when intoxicated	(C3, 2 <sup>nd</sup> phase) "you know I would wake up, probably in the morning with a slashed wrist and not even remember doing it. You know just look at my wrist and go what the hell, what happened. Not even remember it".
	(C6, 2 <sup>nd</sup> phase) "Because I do not feel it and I can cut as deep as I want"
Suicidality would increase in the comedown phase	(C2, 2 <sup>nd</sup> phase) "Yeah the come downs you just feel like shit. You just get really emotional. Absolutely balling my eyes out".
	(C8, 1 <sup>st</sup> phase) "so you start coming down and that is when reality comes back at you. You have got all the problems that you thought you had run away from and they are there and hit you ten times harder".
Alcohol use increases suicide risk	(C4, 2 <sup>nd</sup> phase) "Initially I can control my emotions, my anger and all that sort of thing. But after a drink I can't. Just I act the way I feel. Holding nothing back".
	(C3, 3 <sup>rd</sup> phase) "When I am drunk a lot of suicidal tendencies and my feelings and my emotions would come a lot more faster than when I am solver"

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	faster than when I am sober".	
Cannabis use had a negative effect on risk	(C10, 4 <sup>th</sup> phase) "I realised it was not an instance thing like that, have a bong and become suicidal, but the built up effect of it, it was making me worse. More depressed, it is definit not good for you".	ct
Speed use was generally	(C8, 3 <sup>rd</sup> phase) "Cause I think that if I was not taking those drugs at the time I would have attempted suicide".	;
considered to have had a negative impact on suicide	sk (C9, 3 <sup>rd</sup> phase) "I never would have hit a suicidal point unt was about 50. So it has had a negative impact in the sense t it has pulled me close to wanting to kill myself a few times'	that
Alcohol or	ther Drug Use as Protective Against Suicide	
The use of AOD as a protective strategy acts to reduce suicide risk	(C2, 3 <sup>rd</sup> phase) "As long as I was not straight. Straight was, I would freak out. I wanted to self harm, I would want to die".	
	(C5, 2 <sup>nd</sup> phase) "I really can't picture that because I reckon if I d not smoke pot, I would be dead".	did
	(C1, 4 <sup>th</sup> phase) "It just felt like I had no where else to go. It was either death or drugs. God that sounds bad. Yeah that is what it came down too. That's how bad it was".	5
AOD not protective against suicide (in the long term)	(C10, 4 <sup>th</sup> phase) "And even though drugs may help you get through that moment, there are a lot of other ways that do not have come downs, which would be better to do. Yeah I think there is more be than good".	
Period of suicidality associated with heavy	(C4, 3 <sup>rd</sup> phase) "it was the reason that I actually started drinking At that time everything started stuffing up. I just resorted to alco to cope"	

associated with heavy AOD use

(C8, 2<sup>nd</sup> phase) "which is up to the time in that month that was the heaviest I had ever used".

Intoxication is associated with positive mental states

(C6, 4th phase) "It creates a false sense of happiness. You are just so relaxed all the time. You do not care".

AOD used to avoid underlying issues

(C8, 5<sup>th</sup> phase) Because you can have cones and sit back and watch TV for a couple of hours. Not thinking about it, but if you don't you can sit there and think about it again and again."

(C2, 2<sup>nd</sup> phase) "That's all I could think about was thinking about killing myself or wanting to get away, the easiest option to get away was to smoke the pot and to get away in that sense".

AOD were used to cope with painful feelings

(C1, 1st phase) "If I got terrible sad I would just have a couple of cones and it like just dulled everything. I was not terribly happy, I was not terribly sad, I was not anything at all. But very stable to sit like a vegetable. It did not matter, you know".

(P10, 2<sup>nd</sup> phase) "on speed I can sit and paint a circle for hours and hours, all night just nainting the same circle and not think ahout

	hours, all night just painting the same circle and not think about anything other than that circle. And that is such a relief sometimes. Just have nothing in my mind. There is no pain there".
	(C8, 1 <sup>st</sup> phase) "The drugs just block them out so you do not have to think about them. You just do not".
Alcohol use generally had a positive impact on self	(C6, 3 <sup>rd</sup> phase) "I have always got a drink if I am feeling like shit or yeah it is something to fall back on."
•	(C4, 3 <sup>rd</sup> phase) "So if I keep drinking I feel fine".
Poly-drug use used to offset symptoms associated with use	(C2, 3 <sup>rd</sup> phase) Interviewer- In that period of feeling like shit, what happened to the thoughts about hurting yourself {crash phase from speed}"Just bring back even more intense the thoughts that were already there. More like the disgust. {Interviewer "And did that fuel the desire to kill or harm yourself"?} C2 "No. neither. "It was more to use the other drugs, the pot.
AOD used to improve functioning in a range of situations	(C5, 1 <sup>st</sup> phase) "But when I have smoked pot I have sat down and thought what do I want to do today, got the house cleaning to do, gotta do some gardening, yeah will have the shower first".
	(C4, 3 <sup>rd</sup> phase) "But while I am drinking, usually I am drinking with a group, and it feels like I am being accepted. And it feels like I am finally fitting it. And it makes me feel like I am not alone. I do have something worth living for".
Reducing or stopping AOD is often associated	(C5, 5 <sup>th</sup> phase) "Trying to get a grip on everything and not lose my head. It is pretty well coming back to reality."
with difficulties	(C1, 1 <sup>st</sup> phase) "Feeling, just being sober, just being straight is a totally unnatural way for you to be when you have been off your face for years. So it is very hard to deal with".

#### AOD Unrelated to Risk (C6, 4th phase) "I really do not think it effects it all that much". AOD use not associated significantly with (C6, 4th phase) "I would not let it get to the stage where I was suicidality drinking every day. The urge is always there to have a drink. It never gets that out of hand that I will actually sell my stuff or borrow some money to get some alcohol. I could never do that". (C2, 4th phase) But because I have been trying to commit suicide Suicidality was an from such a young age when I did not even know of these independent condition to substances suicidality (C1, $4^{th}$ phase) I was suicidal since I was 14. I did not start taking drugs till I was drinking when I was 18 but I did not become a speed addict until I was 20.

#### Factors effecting the Impact of AOD use on Risk

Importance of environment
in influencing AODs impact
on risk

(C8, 3<sup>rd</sup> phase) "It would depend on whether I was by myself. Or whether I was with a lot of people. I would not even be thinking about it, I would be having a good time and that". (C8, 3<sup>rd</sup> phase) "I do not like being by myself, cause I just tend to run on thoughts, I can think of one thing that leads to another thing which leads to another thing, before you know it you are somewhere."

## Importance of mood in influencing risk when intoxicated

(C5, 1<sup>st</sup> phase) If I got really depressed and drank alcohol, its like I would not think, I would act.

## Importance of tolerance in influencing the effect of intoxication

(C2, 2<sup>nd</sup> phase) The rest of it was just like I could not feel it I could not get any rush from it. I would clench my jaw more, I would get cranky. It was just shit. It was not enjoyable. What was the point.

## prior experiences influencing capacity to self-medicate

(C5, 4th phase) "It depends on what they have experienced".

#### Initial self-medication stopped on becoming an addict

(C1, 4<sup>th</sup> phase) "I actually started the drug use to combat the suicidal thoughts in the beginning and then I became an addict, it was all lovely and good for a while. But you know it does not stay that way."

#### Clinical Approach

# Generally the intervention should include addressing the AOD use

(C6, 5<sup>th</sup> phase) "I think a social worker could help by talking about their home life, what their parents are like without being too intrusive. Look at the reasons why they are using it"

(C6, 5<sup>th</sup> phase) "Either that or look at other things like what their home life is like. What their parents are like. Just their environment, a lot of kids take drugs because of their home life or how their parents treat them and all the rest of it"

The approach by the counsellor should incorporate normal strategies with an emphasis on client focused philosophy

(C5, 5<sup>th</sup> phase) "It's the last thing if you are trying to open somebody is to judge them. Because that is the thing they have been judged pretty well all of their lives. And soon as you judge them they will halt"

(C10, 5<sup>th</sup> phase) "whatever approaches the suicidal person feels they like"

Intervention should work towards developing other coping strategies to offset AOD use (C4, 5<sup>th</sup> phase) "If they are doing it because it makes them feel better, then lead onto something like is there anything else"

(C6, 5<sup>th</sup> phase) "Teach them other ways to feel better other than to use drugs".

(C 10 3<sup>rd</sup> Phase) "Sometimes I can get the same effect from a person say from talking and the rest of it"

#### Appendix C

#### **Consent Forms**

#### YouthLink: Client

#### INFORMED CONSENT

The interview that you are about to participate in is designed to gather information around suicidal thoughts. This questionnaire is a part of a doctorial thesis being completed by David Felton through Edith Cowan University. This study is supported by YouthLink and conforms to guidelines produced by the Edith Cowan University Committee for the Conduct of Ethical Research and Royal Perth Ethics Committee.

Questions will also be asked about previous thoughts of hurting yourself, including related stresses, descriptions of any plans or attempts and possible hospitalisations. Questions will also be asked which require you to discuss your use of substances. The total questionnaire time should be completed within one to two hours.

It is possible that you may experience varying levels of discomfort while discussing some aspects of your experiences. You are able to take a break from the interview process. You are also able to access your regular therapist should you require additional supports to discuss any issues that have surfaced during this process.

Participation in the study is completely voluntary and you a able to withdraw at any time with all information received from you being destroyed.

Any information that you provide will be held confidential by the researcher (and supervisor's). At no point will your personal details be attached to any data in the report.

#### Action if an Adverse Event Arises During the Trial

In the event that you suffer an adverse event during this study that arises from your participation in the study, you will be offered all full and necessary treatment by Royal Perth Hospital. The Ethics committee has approved this study on the basis (amongst others) that the reported risk of such an event is either small or acceptable in the terms of the risk you face as a result of your current illness or the benefit that is possible with the new treatment being tested. No provision has been made in this trial to offer trial subjects who suffer adverse reaction monetary compensation, but the absence of such a provision does not remove your rights to seek compensation under common law.

Any question that you may have regarding this project can be directed to Julie Proctor (Chief Investigator) of YouthLink on 9227 4300. This research has project has been approved by the Ethics Committee at Royal Perth Hospital. Further information may be obtained from the chief investigator or from Clin Prof J A Millar, Chairman of the Ethics Committee, telephone (08) 9224 2244.

I	agree to participate in the above study. I have read and understood
the Study information and h	ave been given a copy of it. I have been given the opportunity to ask
questions about the study.	understand that I may withdraw from the study at any time without
effecting my future services	from YouthLink. I agree that research data gathered for the study
may be published, provided	I am not identifiable.

Participant or Authorised Representative	Date	

Signature of Investigator

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Date

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Date

Date

**Consent Form: Client (Holyoake Institute)** 

#### **INFORMED CONSENT**

The interview that you are about to participate in is designed to gather information around suicidal thoughts. This questionnaire is a part of a doctorial thesis being completed by David Felton through Edith Cowan University. This study is supported by Holyoake Institute and conforms to guidelines produced by the Edith Cowan University Committee for the Conduct of Ethical Research.

Questions will also be asked about previous thoughts of hurting yourself, including related stresses, descriptions of any plans or attempts and possible hospitalisations. Questions will also be asked which require you to discuss your use of substances. The total questionnaire time should be completed within one to two hours. There is the possibility that a second interview may be required.

Any information that you provide will be held confidential by the researcher (and supervisor's). At no point will your personal details be attached to any data in the report.

Participation in the study is completely voluntary and you a able to withdraw at any time with all information received from you being destroyed.

Any question that you may have regarding this project can be directed to Greg Dear

(Principle Supervisor) of the School of Psychology on 9400 5052.

Participant or Authorised Representative

Investigator

` 1	, 2,
I	have read the information and any questions that I have
asked have bee	answered to my satisfaction. I agree to participate in this activity,
O	ay withdraw at any time.  I agree that research data gathered for th lished, provided I am not identifiable.

#### Clinicians

#### **INFORMED CONSENT**

The interview that you are about to participate in is designed to gather information about your work with suicidal clients. This questionnaire is a part of a doctoral thesis being completed by David Felton through Edith Cowan University. This study is supported by Holyoake Institute and conforms to guidelines produced by the Edith Cowan University Committee for the Conduct of Ethical Research.

Questions will also be asked about your training, approach and interpretations of clinical information when working with suicidal clients. The total questionnaire time should be completed within one to two hours. There is the possibility that a second interview may be required.

Any information that you provide will be held confidential by the researcher (and supervisor's). At no point will your personal details be attached to any data in the report.

Participation in the study is completely voluntary and you a able to withdraw at any time with all information received from you being destroyed.

Any question that you may have regarding this project can be directed to Greg Dear

(Principl	e Supervisor) of the School of Psychology on 9400 5	052.
realising	have read the information and any questions that I have twe been answered to my satisfaction. I agree to participate in this activity, a that I may withdraw at any time. I agree that research data gathered for the ay be published, provided I am not identifiable.	
	Participant or Authorised Representative	Date
	Investigator	——————————————————————————————————————

#### Appendix D

#### **Questions for Clients**

Initial collection of demographic information ie age, gender, relationship status, employment status.

#### Phase One

- 1. Around the time when you were thinking about committing suicide what was happening in your life?
- 2. How far did your suicidal thoughts progress, ie (formulating plans to acting on them)
- 3. Was there anything that made the situation harder?
- 4. What helped you to get through that time?
- 5. How did your lifestyle at the time influence your level of risk
- 6. Were there any other things in your life that guarded against you committing suicide during this time.

#### Phase 2

- 7. What was happening with your drug use during that time?
- 8. Looking back, do you see your substance use as having any effects, either positive or negative for you?, if so, what?

#### Phase 3

9. Looking back, do you think your drug use (differentiate when intoxicated versus generally) had an impact on wanting to kill yourself.

#### Phase 4

- 10. Do you think using drugs can help when somebody is feeling suicidal?
- 11. (if the client failed to previously raise the connection between substance use and suicidal ideation, but does at this point) You have not mentioned this link between your drug use and thoughts of hurting yourself before now, why?

#### Phase 5

- 12. Given your experiences, how do you think a therapist should approach the AOD use of somebody who is feeling suicidal?
- 13. Are there any other things on these issues that you would like to say?

#### **Questions for Clinicians**

#### Phase 1

- 1. Can you please describe your training for and experience in working with clients that are suicidal.
- 2. What is your general approach when working with suicidal clients?
- 3. In your opinion what factors can increase the risk of a client hurting themselves.
- 4. In your opinion what factors can decrease the risk of a client hurting themselves?

#### Phase 2

- 5. In your clinical experience, do you think substance use effects peoples level of suicidal ideation?
- 6. All things being equal, if a suicidal client presented with significant substance use issues, what would be your approach to their substance use?
- 7. What sort of things influence this decision?

#### Phase 3

- 8. Do you think that for some individuals, substance use may act to reduce levels of suicidal ideation (and likelihood of attempts)?
- 9. Do the factors that increase the risks, (impulsiveness, decreased social supports and impaired decision making) outweigh any possible benefits to the individual.

- 10. Various clinicians and theories put forward the notion that substance use may take on the role of self-medication to decrease levels of negative affect in the user, (ie reduce psychological pain) what's your opinion on this notion.
- 11. In your opinion, is the above effected by the type substance being used?, if so are there certain substances that are more/less effective?
- 12. Are there any important issues that have not been touched on that you would like to comment on?