# Is there a relationship between Substance Use Disorders and Violent Offending? A case study of Rimutaka and Wellington Male Prisoners

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Amanda Jones

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## ABSTRACT

New Zealand imprisonment per capita rates are second only to the USA with continued growth expected in the next decade. Previous research and extensive personal work experience within the prison system suggests that there is a connection between Substance Use Disorders (SUDs) and crime. The main object of this study was to investigate and ascertain if there is a relationship between occurrences of SUDs and violent offending. This is a complex question, as it is unlikely that SUDs are the only determinants of violent offending. Demographics, ethnicity, education and other environmental and psychological factors will also be contributing factors. The current study tests SUDs and 'other factors' to see if a relationship exists.

Two hundred prisoners from Rimutaka and Wellington Prisons were randomly selected from a possible sample size of 850. The 102 respondents who chose to take part in the study were administered the Substance Use Disorders Diagnostic Schedule (SUDDS-IV). Seventy of these 102 prisoners were in prison for having committed a violent offence. A demographic questionnaire followed the psychometric test.

Surprisingly, SUDs (both substance abuse and substance dependence), were not found to be statistically more significant in prisoners that had offended violently. Overall, SUDs were found in 99% of the entire population. Eighty-four percent diagnosed with substance dependence and a further 8.8% with substance abuse. Only 6.9% did not have a SUD at all. Fifty-eight percent of the sample investigated identified themselves as Maori, 26.5 European and 13.7% Pacific Islanders. This

study found that those imprisoned for a violent conviction were more likely to be Maori. In addition, it illustrated that the prisoners convicted for violence were more likely to have only two years secondary school education or less. Evidence also shows that Maori studied were less likely to be educated. However, such findings require more validation for use as evidence in prisoner research.

Further research could include a qualitative approach with emphasis on Maori with limited education and a propensity to be violent. This research would be beneficial if directed towards the unique lives of New Zealand prisoners, their families and specifically the children of the established offenders. The main objective would be to provide information about the next generation of violent offenders. The data and intelligence gathered could be then utilised to better manage and treat violent offenders.

## DEDICATION

Dedicated to my parents

Marie and Wayne Jones

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# CHAPTER 1:

# SUBSTANCE USE DISORDERS IN THE PRISON AND THE GENERAL POPULATION.

Before we can consider the relationship of Substance Use Disorders (SUDs) to offending and violence it is necessary to explore the relevant theory and choice of language of this potential population group. SUDs are defined and a brief overview of theoretical explanations for alcohol and drug use are discussed. The prevalence of SUDs in a prison population compared with the general population is explored with specific reference to previous SUDs research in both international prisons and within New Zealand prisons are evaluated to engender context. Lastly current management and treatment options of SUDs in a prison environment are discussed.

## 1.1. Definition of Substance Use Disorders

The criteria for mental disorders, including SUDs has of necessity been refined over the past century. Major classification occurred in the late 1970s with further editions of the major diagnostic tool that New Zealand clinicians use. This study is the first New Zealand study to use a questionnaire that generated DSM-IV diagnoses which distinguishes substance abuse from substance dependence.

SUDs include disorders related to the use of alcohol and other drugs. The two main disorders include substance dependence and substance abuse although there are many other disorders of a more transitory or of a more complex nature.

What follows is the Diagnostic and Statistical Manual of Mental Disorders fourth edition (DSM-IV) criteria of substance dependence and substance abuse taken directly from the American Psychological Association's official classification system for defining mental disorders, 1994. The criteria is included so that we may consider how this has been operationlised in the tool used in the current study.

**Diagnostic and Statistical Manual of Mental Disorders 4th Edition criteria for Substance Dependence**

A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:

1 tolerance, as defined by either of the following:
   a. a need for markedly increased amounts of the substance to achieve intoxication or desired effect
   b. markedly diminished effect with continued use of the same amount of the substance

2 withdrawal, as manifested by either of the following:
   a. the characteristic withdrawal syndrome for the substance
   b the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms

3 the substance is often taken in larger amounts or over a longer period than was intended

4 there is a persistent desire or unsuccessful efforts to cut down or control substance use

5 a great deal of time is spent in activities necessary to obtain the substance (e.g., visiting multiple doctors or driving long distances), use the substance (e.g., chain-smoking), or recover from its effects

6 important social, occupational, or recreational activities are given up or reduced because of substance use

7 the substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (e.g., current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer was made worse by alcohol consumption)

Specify if:

**With Physiological Dependence:** evidence of tolerance or Withdrawal (i.e., either 1 or 2 is present)

**Without Physiological Dependence: no evidence of tolerance or withdrawal** (i.e., neither item 1 nor 2 is present

**Diagnostic and Statistical Manual of Mental Disorders 4th Edition criteria for Substance Abuse**

A. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:

1 recurrent substance use resulting in a failure to fulfil major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use; substance-related absences; suspensions; or expulsions from school; neglect of children or household)

2 recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use)

3 recurrent substance-related legal problems (e.g., arrests for substance-related disorderly conduct)

4 continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication, physical fights)

B. The symptoms have never met the criteria for Substance Dependence for this class of substance.

The research/clinical literature reflect the eventual refinement of terms and these may have been used during this paper such as alcoholism and addiction. For the purposes of the literature comparison these two terms are interpreted as having a similar meaning to substance dependence and problem drinking generally being associated with substance abuse.

The essential feature of substance dependence is a cluster of cognitive, behavioural and physiological 'symptoms' indicating that the individual 'continues use' of the substance despite 'significant' substance related problems (American Psychiatric

Association, 1994). Tolerance, withdrawal and compulsive drug-taking result from the pattern of self-administration.

In substance abuse the essential feature is a maladaptive pattern of substance use manifested by recurrent and adverse consequences related to the repeated use of substances. However substance abuse specifically excludes the dependence features - tolerance, withdrawal or a pattern of compulsive use, and 'instead includes only the harmful consequences of repeated use' (American Psychiatric Association, 1994). Even though not considered as serious as substance dependence, substance abuse is often overlooked by treatment providers and underestimated by the user. This is important because substance abuse can not be ignored. In the present study the two disorders are investigated as it is the researcher's belief that substance abuse is going to be more prevalent in the prisoners that have offended violently, which could stimulate debate regarding treatment of violent offenders.

The distinctions between substance abuse and substance dependence are included so that differentiation is established. The comparisons have been taken from Hoffman and Harrison (2001) who made some assumptions to develop a diagnostic checklist for assessing SUDs in order for the criteria to have operational reliability.

A current DSM-IV substance dependence diagnosis requires positive responses, indicating a pattern of behaviour for the past year, in at least three dependence categories. For substance dependence, Hoffman and Harrison (2001) have interpreted the criteria in the following linked categories to the SUD's criteria:

**CATEGORY 1:** Tolerance of alcohol or drugs or Drinks in one day more than 20 standard drinks.

**CATEGORY 2:** Withdrawal or use of a substance to alleviate withdrawal.

**CATEGORY 3:** Unintentional use or longer use than intended.

**CATEGORY 4:** Compulsion to use, person failed to follow own rules for use or wanted to stop.

**CATEGORY 5:** Frequent drinking (5+ days/wk) and 5+ standard drinks per occasion, binge of 2 or more days on alcohol or drugs, consuming alcohol or drugs most of the day or life revolves around alcohol or drugs.

**CATEGORY 6:** Effects of use interfere with activities, person sacrifice activities to use or experiences financial impediments to activities due to prioritising alcohol and drug use, missed school or work or reduced work effort/opportunity.

**CATEGORY 7:** Blackouts, medical consequences of use, failure to eat properly, emotional problems due to use or memory/concentration problems.

A current DSM-IV substance abuse diagnosis for a particular substance requires positive responses indicating a pattern of behaviours for at least one abuse category. For any given substance, a diagnosis of current dependence takes precedence over an abuse diagnosis (Hoffmann & Harrison, 2001). Hoffman has made the following interpretations so that the criteria for substance abuse can be operational:

**CATEGORY 1:** Neglect of responsibilities because of alcohol or drug use, financial problems due to alcohol or drug use, work/school performance problems or loss of job/school suspension due to alcohol or drug use.

**CATEGORY 2:** Inject drug, injury while using, risky/unprotected sex; excessive use during pregnancy, motor vehicle accident when using or driving under the influence.

**CATEGORY 3:** Arrested for driving under the influence, arrested or stopped by the Police because of behaviour related to alcohol or drug use such as disorderly behaviour. Or found yourself in trouble with the law because of possession or sale of alcohol or drugs.

**CATEGORY 4:** Other people object to use of alcohol or drugs, alcohol or drug use has damaged a relationship, conflicts at work as a result of alcohol or drug use or hit anyone while using alcohol or drugs.

To summarise, a diagnosis of SUDs signifies that the individual has developed a maladaptive pattern of use that results in clinically significant physical, psychological or social impairment (American Psychiatric Association, 1994). The diagnostic questionnaire (SUDDS-IV) used in this study identifies SUDs and differentiates between the two specific SUDs of substance abuse and substance dependence. It makes it possible to consider if substance abuse or substance dependence is more prevalent in the prisoners that offend violently compared with the non-violent prisoners. By using a diagnostic questionnaire the current project identifies the range of SUDs in a sample of male prisoners at Rimutaka and Wellington prisons.

## 1.2. Theoretical Explanations for Substance Use Disorders

The theoretical explanations for SUDs are varied and cannot be generalised to certain populations. It is also clear that one theory does not fit all individuals (Sims,

2005). Jung (2001) explains that alcohol and drug use is connected to pleasure-seeking behaviour, when the opportunity for the feelings associated with alcohol and drug use seems worth the risks of encountering negative consequences. According to Sims (2005), the major theories include the biological theory, psychological theory, developmental theory and problem behaviour theory.

Biological theories suggest that biological characteristics may predispose individuals to problems with SUDs. For example, certain temperamental characteristics account for a higher risk of abusing alcohol, especially in males who begin using alcohol at an early age (Sims, 2005). The psychological theory infers that we acquire knowledge about the effects of alcohol/drug use before we actually use it and have certain expectations. An example of the psychological theory is the social learning theory. That is, we learn drug use just as we learn any other type of behaviour, through observing use by others.

Developmental theory argues from the standpoint that what we learn about substance use as we develop provides the foundation for the more proximate precursors of alcohol and drug use in adolescence and into adulthood (Jung, 2001). An example is a chaotic home life with consistent parental arguing, developing into physical confrontations in front of a child, resulting in negative outcomes.

Problem behaviour theory (Sims, 2005) covers the area of thought around self-handicapping and self-awareness theories. Self-handicapping suggests that an over-indulgence in drugs and alcohol often occurs prior to certain situations in which one believes that they are likely to fail. Lack of adequate social skills and learned

expectations set individuals up for failure (Sims, 2005). The theory of self-awareness proposes that drug and alcohol use can bring about a reduction in being aware of what you are doing giving the User the justification for engaging in inappropriate or offensive behaviour.

In the view of Thombs (2006) perspectives on addiction can be categorised into three beliefs. They refer to addiction as Immoral Conduct, addiction as Disease and addiction as Maladaptive Behaviour. The theory of immoral conduct is when a person decides to use substances in such a way that they create pain for others and themselves. They are not considered out of control and should be punished for their actions.

A contrasting theory suggests that addiction is a disease and therefore the person is a victim of an illness and has lost charge of the situation. In other words, it is beyond the control of the individual and they are deserving of treatment. A belief similar to the developmental theory discussed earlier suggests that addiction is not sinful or out of control behaviour, but instead learned. For example, problem behaviour that is clearly under the control of environmental, family, social and cognitive contingencies (Thombs, 2006).

Clearly, SUDs are multifaceted in nature and there is no one single cause. Reasons for abusing drugs or alcohol vary from one individual to another and a host of social, cultural, and psychological factors which most certainly vary from one person to another (Sims, 2005). Other factors are going to play a role in the use of alcohol and drugs and the possible destructive consequences that surround it.

## 1.3. Prevalence of Substance Use Disorders in Prison Populations

Those incarcerated in the criminal justice system, including the youth justice system, seem to experience disproportionately high levels of alcohol and drug related abuse and dependence compared with most others in the community (Ministry of Health, 2001). This level ranges from 89% (Simpson, Brinded, Laidlaw, Fairley, & Malcolm, 1999) in the prison population compared to 3.5% (Oakley Browne, Wells, & Scott, 2006) in the community meeting the criteria for a Substance Use Disorder.

The problems that prisoners have with alcohol and drugs are a recognised theme. Large numbers of drug users are incarcerated in prisons in most countries throughout the world (Strang et al., 2006). There have been studies conducted in prisons around the world investigating SUDs but few have compared prisoners with a community sample. Such a study has recently been conducted in Australia to examine whether excess psychiatric morbidity exists in prisoners compared to the general community using the same diagnostic interview with both populations studied.

Butler, Andrews, Allnut, Sakashita, Smith and Basson (2006) concluded that the findings presented a bleak picture of the mental health of Australian prisoners with the overall prevalence of any psychiatric illness being as much as 80% for prisoners and 31% for the community. The most pronounced contrast was in SUDs - 66% of the prisoners were diagnosed with a SUD compared with 18% in the community sample (Butler et al., 2006). Although the results suggest that psychiatric illness was proportionately higher in the prison population it needs to be considered possibly

why. An explanation could include a lack of options in the community, the reluctance of psychiatric services accepting individuals from the court and co-morbid SUDs.

There is a limited number of epidemiological studies pertaining to SUDs in New Zealand prisoners but like their international counterparts most of the research conducted in New Zealand prisons suggests rates of SUDs higher than found in the general population. The following section critically reviews previous research conducted in prisons internationally and within New Zealand.

## 1.4. International Research in Prisons Investigating Substance Use Disorders

Data presently available on SUDs in prison populations internationally suggest large proportions of prisoners have diagnosable SUDs prior to coming to prison. An example of this was shown in the USA when Kouri, Pope, Powell, Oliva and Campbell (1997) assessed the prevalence of various forms of substances and attempted to judge whether substance use played a role in the index crime which led to the present incarceration. Upon arrival at a Massachusetts Correctional Institution prisoners were consecutively invited to take part in the research. One hundred and thirty three male prisoners agreed to take part in a 15-30 minute interview regarding their history of 'substance use'. The interviewer was blind to the prisoner's criminal record and administered the alcohol and substance abuse portions of the Structured Clinical Interview for DSM-III-R. The researchers also assessed whether there was

a connection between the nature of substance dependence and the 'type of crime committed', whether violent or non-violent.

A staggering 95% obtained a diagnosis of substance dependence on one or more substances prior to incarceration. Of course in this particular study they did not diagnose substance abuse so this may have well contributed to the high incidence of substance dependence. Kouri et al (1997) concluded that the extremely high prevalence of substance dependence in this prison population raises the question of the nature of a relationship between substance dependence and criminal activities.

In that study, the two most commonly used substances used at the time of the index offence were alcohol and cocaine. The present study investigates substances of choice prior to the commission of the crime to establish if certain substances are being consumed more than others prior to offending in New Zealand. We would not expect cocaine to feature highly, however the recent introduction and fascination with pure methamphetamine, often referred to as P in New Zealand, has been portrayed, at least in the media, as playing a significant role in the period prior to the commission of violent crime. The present study tests to see if this connection exists in the studied population.

Kouri et al. (1997) found that there was no significant correlation between the type of substance dependence diagnosis and the type of crime committed. In other words, those prisoners that were incarcerated for a violent offence were not more likely to have a SUD. The present study investigates this relationship in a New Zealand prison population.

Despite high incidences of substance dependence it was noted in the Kouri et al. (1997), study that only half of the inmates invited to participate agreed to the interview, which leaves the open question about those prisoners who chose not to participate as they may have intended to conceal substance use behaviour, which is likely to be more common in a correctional setting. It might be speculated that those who declined to participate were reluctant to discuss alcohol and drug use (Kouri et al., 1997) or be labelled a substance user. For example, if you are an identified drug user in prison there may be certain consequences such as non-contact visits and exclusion from activities such as family days and temporary releases. In other words, prisoners may be likely to refuse to participate and talk about their substance use to researchers in case information is leaked to prison staff and authorities. The present study was aware of this and sought to minimise this limitation as discussed in the method section.

The researchers also stated that to their knowledge their study was the first investigation to use a structured clinical interview to assess the diagnosis of substance dependence, which may have affected the high incidence rates (95 %). Previously all investigations had used either self-report questionnaires or unstructured interviews, indicating that there may have previously been inconsistency in what was being measured.

A 2001 study in Canada by the Correctional Services examined the types of drugs used by offenders on the day they committed the crime to attempt to define the links between alcohol, other drugs and criminal behaviour (Brouchu et al.,2001). According to that study, consumption of psychoactive substances has two major

effects: intoxication and addiction. The intoxication model combines alcohol and drug use and intoxication with a decrease in cognitive functioning and a lack of self control which may lead to a lack of self control over aggressive impulses, violence and lack of inhibitions. The current study investigates if substance abuse alone has a higher occurrence in prisoners that have offended violently. The addiction model refers to the huge financial cost associated with being addicted to certain drugs. For example, a person addicted to alcohol and other drugs may need to engage in lucrative criminal activities in order to pay for it. In short, they may be in prison because crime enabled them to pay for their drugs, on which they were dependent, rather than non-addicted use where crime may occur due to intoxication.

Upon incarceration, 502 offenders in the Canadian study filled out a Computerised Lifestyle Assessment Instrument (CLAI) questionnaire examining offender's every day life before incarceration, including alcohol and drug consumption. Surprisingly, the results showing that 50% reported that they did not consume alcohol or use drugs on the day of they committed the crime. However, of the half that did, 21% reported alcohol consumption on the day of the crime, 16% reported other drug use and 13% used a combination of both. It was noted by the researchers that the two crimes that were mostly committed by people who had not consumed alcohol nor used drugs on the day of the crime were fraud and drug-related offences. This may be likely because of the need to appear calm and presentable, while avoiding suspicion (Brouchu et al., 2001). For example, alcohol and drugs may not be consumed on purpose prior to the offence to maintain composure. Violent crime was the most common type of offence (assault 38%, murder 31% and sexual assault 30%) committed by offenders who consumed alcohol on the day of the crime

suggesting that there may be a connection between alcohol and violent crime which is investigated in a New Zealand prison population in the present study.

In 2003, in the USA a project was conducted using the UNCOPE: A brief substance dependence screen for use with arrestees (Hoffmann, Hunt, Rhodes, & Riley, 2003). The primary objective of a screen for dependence is to identify whether a given individual is at high risk for meeting diagnostic criteria for dependence. Small numbers of the previous prison screens provided a mechanism of screening for both alcohol and drug dependence. The aim of the study was to develop a screen consisting of a relatively small number of items with sufficient accuracy to identify individuals at risk for substance dependence. The authors had identified a number of limitations in previous methods used with prison populations. Longer instruments and written questionnaires may have had limitations for populations where reading ability may be limited or where time for administration and scoring is short, which may be expected within a correctional facility. Efficient and accurate screening for alcohol and other drug dependence is critical if addictions are to be addressed in correctional populations (Campbell, Hoffmann, Hoffman, & Gillaspy, 2005). In other words, if prisons do not use reliable screening and diagnostic tools they may never capture the true significance of the problem.

The sample in the Hoffman (2003) study comprised 244 male and 66 female prisoners. The study found that 44 percent of the sample had a clear indication of Alcohol Dependence. It is the view of Hoffman et al. (2003) that dependence is even more likely to warrant formal treatment services and require specific management considerations in correctional institutions than substance abuse. Dependence may

be of greater concern upon release from incarceration due to the complexities of dependence, and the increased possibility of relapsing back into alcohol and drug use and associated criminal activities. Of interest, the researchers note that the distinction between substance dependence and substance abuse has implications for treatment and evaluation of programmes. This is why the present study uses a method that will diagnose both substance dependence and substance abuse.

## 1.5. Research in New Zealand Prisons Investigating Substance Use Disorders

To date, there have been three studies in New Zealand prisons that have investigated SUDs in a prison population in the last 20 years. Conducted in 1988 by McLean, 129 male and 102 female prisoners were administered the Michigan Alcoholism Screening Test (MAST). The MAST is a 25-item checklist which was developed in 1971 as a standard, inexpensive means of detecting Alcoholism. The items individually enquire about the extent to which alcohol has affected some aspect of the respondent's life. The main aim of the study was to obtain an estimate of the incidence of alcoholism in male and female prisoners that is based on a broad definition of 'alcoholism'. A critique of the MAST tool is that it detects late stage dependence. Screens of today reflect better understanding of SUDs earlier in the continuum.

The authors and assistants conducted the interviews over an eight month period. The researchers finding 58.9% of the male and 52% of the female prisoners

classified as alcoholics (McLean, 1988). It was however discussed by the author that the MAST may over detect alcoholism as the instrument may not be relevant to a New Zealand population as it was developed with Americans. For example, the tool used was not validated to a New Zealand population so results must be interpreted carefully. This study did not use a diagnostic assessment which emphasises the careful interpretation of the findings.

A study of a similar nature using a different methodology was conducted in the same year in 1988, by Bushnell and Bakker but was published later in 1997. The study was the first in New Zealand to use a Diagnostic Interview Schedule that assessed SUDs according to American Psychiatric Association DSM-III criteria and set out to determine the prevalence of SUDs. The researcher used the alcohol and drug sections of the Diagnostic Interview Schedule (DIS). One hundred and six male prisoners from Christchurch men's prison were selected for inclusion in the study with six declining to participate. The prisoners were sequential new arrivals at the institution over a three month period. Of the 100 interviewed, 81% were found to have an alcohol disorder, 30% having a drug disorder and 25% met criteria for both disorders.

The author's concluded that it seems likely that for a substantial proportion of prisoners, alcohol and drug use has either a direct or indirect bearing on the offending that led to their incarceration and is more widespread than in just those imprisoned for crimes involving alcohol and drugs. In summary, treatment endeavours and prevention strategies, designed to minimise the harm from alcohol and other drug use and associated risk behaviour, could be productively focused on

a substantial proportion of the prison population (Bushnell & Bakker, 1997). The current study seeks to see if these rates have been maintained or changed and by implication if strategies that have been introduced have impacted positively on prevalence rates in New Zealand prisons.

The most recent study to provide information on SUDs was part of a large study conducted in New Zealand in 1997-1999 and is a commonly quoted epidemiology study (Simpson, Brinded, Laidlaw, Fairley and Malcolm (1999) Commissioned by the Department of Corrections, Ministry of Justice and Ministry of Health, their research investigated the prevalence of psychiatric disorders among New Zealand prisoners but did not focus on SUDs. They found that the size and nature of the incidence of mental disorders amongst inmates had remained unquantified.

The study set out to interview all female, all remand male and fifteen percent of the sentenced male prisoners. By comparison to the two previous New Zealand studies this one used a greater sample size. A total sample size of 1248, from a total population of approximately 5500, chose to take part. One hundred and sixty two females, 441 remand male and 645 sentenced men were interviewed using the Comprehensive International Diagnostic Interview-Auto (CIDI-A). The CIDI-A examined anxiety disorders, depression, mania, psychosis, eating disorders, alcohol, drugs, obsessive-compulsive disorder and post-traumatic stress disorder.

The overall results of this study can be summarised as demonstrating that a significant number of prisoners suffered from a range of psychiatric disorders. Approximately 30% suffered a major depressive disorder: about 121 were suffering

from either schizophrenia or related disorder and 54 prisoners may have been suffering a manic episode of a bipolar disorder. Of interest, 89% of the prisoners suffered a SUD, primarily alcohol and cannabis abuse and dependence. Nevertheless, while this study identified a large scale psychiatric morbidity in a prison population it did not illustrate if there was a relationship between SUD and nature of offending.

### 1.6. Options for Treating Substance Use Disorders in prison.

Given the rates of SUD, the Department of Corrections has recognised that the correctional system may have the opportunity for intervening with prisoners that have SUDs due to the controlled environment they are in. One key issue is the extent to which SUD can be treated effectively in correctional settings. In other words, can rehabilitation and punishment exist together? Love (2002) argues that punishment and incarceration 'alone' have no favourable effect on a prisoner's SUDs but there is no empirical reason to believe that prisoners should be less responsive to evidence-based treatment methods.

Professionals working with prisoners do their utmost to ensure that the programmes they offer are effective, and designing these programmes with reference to current scientific knowledge is obviously one requirement for best practice (McMurran, 1995). Given the high percentage of such disorders among prisoners there would seem to be a responsibility (to society, as well as to the prisoner) to provide effective treatment (Love, 2002).

Internationally, two types of Substance Use Disorder treatment that have been developed within prison settings are therapeutic community programmes and cognitive behavioural programmes (Prendergast & Wexler, 2004). These two types of interventions are currently reflected in New Zealand as therapeutic community programmes at Arohata Women's, Waikeria and Christchurch Men's prisons. Cognitive behavioural programmes are alternatively available to prisoners in the majority of institutions. In addition to the two types of formal intervention there could be voluntary self-help groups such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) that prisoners could have access to. AA and NA meetings have existed in New Zealand prison for a long time but are few and far between.

The principal rationale behind therapeutic community based treatment is that many prisoners have a long history of alcohol and drug use, which may require high-intensity treatment that attempts to restructure attitudes and thinking (Prendergast, Campos, Farabee, Evans, & Martinez, 2004). The therapeutic goal of the therapeutic community is a global change in lifestyle, involving abstinence from substances, elimination of antisocial activities, and development of employment skills and pro-social attitudes and values (Prendergast & Wexler, 2004). Therapeutic communities are designed to be followed by community aftercare to strengthen the gains that the individual made during participation in the prison programme.

Alternative programmes that are often less expensive and not as time consuming, fall within the 'cognitive behavioural' treatment approach. This approach to treating prisoners begins with the premise (grounded in decades of behavioural and cognitive

research) that criminals commit crimes because they think differently than non-criminals. The goal of such cognitive behavioural programmes is to change thought processes and behavioural patterns that promote criminal behaviour (Prendergast & Wexler, 2004).

Internationally, criminal justice system drug treatment programmes have only been accredited if they target people who meet the substance dependence criteria with a goal of abstinence only. When considering the goal of treatment the assumption that all prisoners should be directed toward the same abstinence goal in intervention programmes may be unlikely to get the best results. Where a reduction in alcohol consumption is concerned, a choice can be made between moderation and abstinence (McMurran, 1995). Reduced-risk drinking, also known as moderate drinking, refers to the ability of an individual who has previously shown out of control drinking to return to a more controlled pattern of alcohol consumption commonly associated with substance abuse or low-moderate substance dependence. Reduced-risk drinking is one example of a public health approach known as harm reduction (Ambrogne, 2002). Harm reduction allows the individual to moderate their alcohol and drug use rather than having to abstain. A key reason the present study set about to identify substance abuse from substance dependence was to discover if there is a population group in prison that may benefit from the strategy of harm reduction in addition to abstinence options.

It is the opinion of McMurran (1995), that only by designing alcohol intervention programmes for prisoners based on today's evidence of what works, and by evaluating these efforts, will we make a contribution to future analysis which stand a

chance of showing that we are not wasting the prisoner's time and the tax payers money. Much remains to be learned about what works, with whom, and under what conditions to enhance the effectiveness of treatment for prisoners. To fulfil the promise of reducing recidivism, promoting public safety and health, and saving criminal justice costs, criminal justice agencies and programmes are encouraged to undertake ongoing monitoring and evaluation designed to ensure that the objectives for the programme are being met and the quality of the programme is maintained and, it is hoped, improved (Prendergast & Wexler, 2004).

## 1.7. Current Management and Treatment of Substance Use Disorders in New Zealand Prisons

Given the large proportion of offenders with alcohol and other drug problems, it does make sense to provide treatment during incarceration (Love, 2002). Entry into prison may provide the only contact some individuals have with alcohol and drug interventions as this population may or may not voluntary present to an alcohol and drug agency in the community. Prison may provide the only opportunity for this population to engage with treatment services (Fazel, Bains, & Doll, 2006). However, prison is a controlled and unnatural environment and a key consideration is the extent to which SUDs can be treated effectively in correctional settings.

The New Zealand Department of Corrections has developed from the Psychology of Criminal Conduct (PCC) and field tested a needs assessment procedure known as the CNI (Criminogenic Needs Inventory). The objective of the PCC is to understand

variations in the delinquent and criminal behaviour of individuals (Andrews & Bonta, 1998). The CNI determines the presence and the severity of six universal risk factors recognising SUDs as a key criminogenic need and responsivity barrier. The risk factors include: beliefs and emotions supporting offending, criminal associates, lifestyle problems, propensity for violence, family relationship problems and alcohol and drug use.

Those involved in developing the CNI in New Zealand, Coebergh, Bakker, Anstiss, Maynard and Percy (1998), acknowledged the previous New Zealand SUDs related studies and stated that drug or alcohol use is a factor in almost all criminal offences, with many offenders having a degree of dependency. Consequently effective treatment of substance dependence for offenders currently in the corrections system has the potential to bring about significant reductions in re-offending and re-imprisonment (Department of Corrections, 2001a). In particular, information on the prevalence of substance abuse and dependence in prisoners is important, as there is scope for targeting and initiating treatment while in custody and encouraging contact with community services on release (Fazel et al., 2006). By diagnosing for SUDs appropriate treatment planning may take place in jail and upon release back into the community.

In 2004, the Department of Corrections published a 'Strategy to reduce drug and alcohol use by offenders, 2005-2008' which is the Department's third such publication and effort to address the issues. By law, the Department of Corrections is required to issue a drug and alcohol strategy at three year intervals. The main goal of the strategy is to reduce re-offending by reducing substance use in prison

and post-release (Department of Corrections, 2004). Untreated Substance Abuse and Dependence in general have large economic, health and social costs, both to the individual and the wider community (Ministry of Health, 2001), as is now beginning to be reflected in health, social services and criminal justice expenditure.

The Penal Institutions Act 1954 requires that the strategy to reduce alcohol and drug use by prisoners includes the provisions relating to the assessment of individual prisoners; measures to reduce demand and supply for drugs; treatment services and harm minimisation services and staff training. Since Integrated Offender Management in 2001 was implemented the Department of Corrections has introduced validated screening tools and treatment for prisoners who have SUDs. Prisoners are screened using assessment tools such as The Drug Abuse Screening Test (DAST) and the Alcohol Use Disorders Identification test (AUDIT) (Department of Corrections, 2004).

The Department has operated specialist Drug Treatment Units (DTU) for the last decade and currently operates three units in the Central North Island and South Island for men and Wellington for women to which prisoners may be transferred from prison to prison to participate in the programme. The prisoners are scheduled to attend in approximately the last 12 months of their sentence. The 24-30 week programme, delivered by CARE NZ, a contracted provider, involves 200 hours or more face-to-face cognitive-behavioural therapy that is delivered in a unit that endeavours to build and maintain a therapeutic community. In a recent review it was stated that the DTU provide a programme which would stand scrutiny if evaluated according to best practice principles (Department of Corrections, 2006). Alternately

prisoners attend medium intensity criminogenic programmes that run for approximately 150 hours and are also scheduled in approximately the last twelve months of their sentence to maximise relevance to release. The prisoner attends the criminogenic programme for four hours a day, five days a week for a period of approximately three months covering alcohol and drug use and all other CNI criminogenic needs.

Recently in 2005, the New Zealand Drug Foundation (NZDF) hosted a national workshop consisting of communication between the Department of Corrections, the Ministry of Health, Non-Government Organisations and Department of Health Board representatives. The main aims of the workshop were to outline how SUDs were currently being addressed in New Zealand prison settings, and for people coming out of prison; identify key elements of best practice, including whether or how to treat SUDs in prisons may contribute to reducing recidivism and to increase attention among agencies involved with prisoners.

It was identified by the NZDF workshop that for some people, prison is their introduction to drugs; for others, it is an opportunity to change their lives and deal with their problems. Key themes were identified during the workshop:

- More can be done to ensure prevention and treatment of prisoners with alcohol and drug problems: treatment services are not consistent around the country, and prisoners often have waiting lists for treatment.
- The point where a person leaves prison is a critical time if they are to maintain the benefits of treatment. At present there are gaps in aftercare service provision and support.

- New Zealand has a high rate of imprisonment compared to comparable countries. The effects of imprisonment have impacts on the families of prisoners and contribute to inter-generational criminal activity.

A number of key objectives were identified from this workshop for future development. These included a desire to provide prisoners with an even more comprehensive assessment of their SUDs, setting up more alcohol and drug treatment units within prisons, referrals to community programmes and enabling AA and NA programmes in more prisons. For example, when the present study began there were no AA or NA meetings at Rimutaka Prison. As a result of the present study, there are now regular meetings in two of the units at Rimutaka Prison with the intention of extending this further into other units and other prisons in New Zealand.

It was concluded by the workshop that given the small number of previous research in New Zealand, its not clear whether prisoners with SUDs are committing serious crimes or minor ones, nor the extent to which their SUDs may be contributing to their offending. This points to the need for New Zealand specific research (New Zealand Drug Foundation, 2005). The current study will build on earlier studies by investigating SUDs in the non-violent prisoners compared with the prisoners with a propensity for violence and stimulate academic debate that may result in further, more specific research into the lives of the substance using prisoner that has a propensity to be violent.

## 1.8. Summary

The literature indicates that internationally and within New Zealand, there is a high occurrence of SUDs in prison populations, and yet studies in New Zealand have not investigated SUDs, type of offence and the influence of other factors. This may be useful to targeting of a limited treatment resource and help eliminate individuals from returning to a life of constant alcohol and other drug use and offending.

## CHAPTER 2:

## VIOLENT OFFENDING

### 2.1 Introduction

The intricate connection between SUDs and violence is discussed, by looking at possible trajectories of violence. This chapter aims to establish why further research is required in New Zealand, looking at violent offending and its relationship with SUDs so that best practice and intervention are carried out.

It is the view of Gilligan (2000),

> *"Many of the violent criminals who fill our maximum security prisons desperately want to feel that they are big, tough, independent, self-assertive, self-reliant men, so as not to feel needy, helpless, frightened, inadequate, unskilled, incompetent, and often illiterate. It is essential we understand violence and violent criminals until we see through what are, in truth, a defensive disguise; and until we understand violence, we cannot prevent it" (p32).*

James Gilligan's theories are based on his experiences as a psychiatrist, director of mental health for the Massachusetts prison system and director for the study of violence at Harvard University Medical School.

## 2.2 Definition

Violent offences involve either a direct act of violence against a person or the threat of such an act. For example, these offences include murder, manslaughter, attempted murder, kidnapping, abduction, aggravated burglary, aggravated robbery, robbery, injuring or wounding, aggravated assault, male assaults female, threaten to kill, grievous bodily harm, group assemblies and sexual violent offending such as rape, unlawful sexual connection, attempted sexual violation, or indecent assault (Spier, 1995).

In New Zealand between 1991 and 2001 incarceration for violent offending grew by 55 percent (Department of Corrections, 2001a). The growth may be due to purely increased violent acts or a policy shift from electoral referendum that involved attention on violent crime. The 2001 census of prison inmates showed that sixty-two percent of male sentenced prisoners were in prison for violent offences (Department of Corrections, 2003b). In summary, violent offending has increased since 1991 and with large proportions of offenders, up to two thirds being incarcerated for committing a violent offence.

## 2.3 Relationship between Substance Use Disorders and Violence

The possible connection between SUDs and violent crime is complex, difficult to explain and moderated by a host of factors in the individual and the environment. Substance use, particularly alcohol, has been associated with violent behaviour for many decades but research has rarely documented causal linkages due to the multiple variables that are involved in assessing etiology (Paglia & Room, 1998). According to Gilligan (2001), the only drug that has been shown to stimulate violent behaviour, through its psychopharmacological effects on brain and behaviour, is one that is legal - alcohol. Such findings are important; however such results must be interpreted carefully due to lack of empirical evidence and other contributing factors. There is no simple, one-to-one relationship between alcohol use and violent behaviour.

Longitudinal research has shown that young people who drink heavily are three times more likely to commit violent offences than those who do not misuse alcohol, even after controlling for social factors that may contribute to both alcohol misuse and violence (Fergusson, Lynskey, & Horwood, 1996). Gilligan (2000), states that the psychopharmacology of alcohol use and violence suggests that the relationship between the two is a complicated interaction among biological, psychological, social and cultural factors. On one hand it is undeniable that alcohol plays a part in many violent crimes but you cannot say that alcohol causes people to be violent as many other variables need to be considered.

A study examined the linkage between alcohol use and crime in a New Zealand birth cohort of 1265 children born in the Christchurch urban region during a 4 month period in mid 1977. From age fifteen to twenty-one years assessments were made of their involvement in violent and property crime and the extent of any alcohol abuse or dependence symptoms. The researchers stating that alcohol abuse was associated with clear and significant increases in rates of both violent and property crime (Fergusson & Horwood, 2000). In conclusion, they suggest the presence of a possible causal association between alcohol Abuse and juvenile offending.

Developmental factors that have been identified as contributors to violence include an aversive environment, harsh discipline, family aggression, lack of parental supervision, and exposure to violence and substance 'abuse' (Chermark & Giancola, 1997). Young people who are at risk of becoming serious adult offenders are increasingly recognizable within various life stages as newborns, as school entrants, as young offenders, and as early adult offenders, as they proceed along what is now a well-understood developmental path (Department of Corrections, 2001a). For some, the predisposition to aggressiveness may start in childhood in troubled circumstances. Children who witness violence in their families or neighbourhoods are also at increased risk of becoming violent themselves (Gilligan, 2001). Nevertheless, a proportion of children who are seriously disadvantaged in social and economic terms grow to become non-violent, happy and productive adults (Department of Corrections, 2001a).

The same Christchurch Health and Development longitudinal study examined a cohort of 1265 children at birth, four months, one year, annual intervals to age sixteen years, and at ages 18, 21, and 25 years. At age 18, participants were questioned concerning their experience of inter-parental violence during their childhood. If in a relationship at aged 25, they were asked about the occurrence of inter-partner violence. Lastly at ages 18, 21 and 25 the same sample was questioned about their offending behaviours and contact with the criminal justice system.

It was found contrary to the researcher's expectation, that the association between reported exposure to domestic violence in childhood and later violent behaviours was only weak. There was however a relationship between inter-parental violence and self reported violent crime. For those reporting high exposure to inter-parental violence they also reported higher rates of violent crime (Fergusson, Boden, & Horwood, 2006). Findings are important from both studies conducted but results have to be interpreted with caution as these findings include retrospective self reporting that may be subjected to a level of error.

## 2.4 Interventions for Violent Offending

The (Department of Corrections, 2003b) believes that addressing the causes of violent offending would create fewer victims and produce significant savings in the costs of imprisonment and other justice sector costs. However, working with violent offenders whether at the assessment or treatment stage is going to be challenging

as they may not fully understand their 'criminogenic needs' (beliefs and values that support offending), which may also be a responsivity barrier to intervention. Violent offenders often are resistant to fully admitting their offending, to taking responsibility for it, and to committing themselves to behavioural change (Polaschek & Reynolds, 2004). With every sociopathic or narcissistic violent criminal there is, or there may be (if one is persistent and patient enough), a part of the personality that is capable of feeling empathy and concern, guilt and remorse, toward the people they victimize, though they will try to conceal or run away from that side of themselves (Gilligan, 2001).

Polaschek & Reynolds (2004) suggest that violent offenders with an extensive and varied history of violence are 'likely to require' a more intensive, group treatment programme that contains a variety of treatment methods, and targets affect regulation and violence-related cognitive processes and products, that teaches a range of cognitive and social skills and strategies, and tackles other common correlates such as alcohol and drug abuse. In New Zealand there is one specialised violence prevention unit. The Violence Prevention Unit (VPU) provides an intensive, group therapy programme that runs for nine months. Many of the prisoners that attend have committed murder and often the VPU is a requirement before release. Prisoners do wait to attend the programme due to the small numbers (10 participants) that can attend at one time. Out of the 10 participants that begin roughly seven finish. There are three groups a year so approximately 21 prisoners would attend the VPU annually.

Even the most intractably violent people can learn to live with others in ways that are constructive rather than destructive (Gilligan, 2001). Known risk factors in chronically violent individuals yield such problems as substance abuse (Serin & Preston, 2001). Prisoners that have a propensity to be violent may also require intervention to address their alcohol and drug criminogenic needs. The VPU has recently acknowledged that substance use as one of the dynamic factors relating to offending risk and is considered in the assessment phase.

Gilligan (2001) states that as our prisons (referring to the USA) have become more and more crowded and costly, the waiting lists in our substance-use treatment centres have become longer and longer-despite the fact that treatment is effective in preventing both substance use and violence associated with substance use. It is the belief of Gilligan (2001) that rather than punishment, one proven approach to reducing violence is education, especially advanced or tertiary education.

Gilligan and colleagues (2001) conducted a programme over a 25 year period that enabled prisoners to acquire a free college degree, in a Massachusetts Prison in the United States of America. More than 200 prisoners, most of whom were serving time for the most serious violence, including murder, rape and armed robbery had received a college degree and then left prison. Not one had been returned for a new crime. Gilligan, 2001, stated that at first he thought there was a mistake, but two other states Indiana and California, found exactly the same result. The current study investigates if there is a relationship between those prisoners that have offended violently and education.

The Department of Corrections (2001a) in New Zealand states that there is another direction that policy could take to reduce the incidence of serious crime. This suggests that instead of the rehabilitation of 'established adult offenders' they prevent the 'next generation of serious offenders'. However, prevention options are long term, and results would not be achieved for several years (Department of Corrections, 2001a). To put it differently, changes may not be seen for a generation or more.

Prevention options considered by the Department of Corrections in New Zealand include:

**OPTION 1: REDUCING THE NUMBER OF HIGHEST RISK BIRTHS**

This prevention strategy consists of targeting young women of all cultural groups with no education, a history of substance abuse, and criminal offending and providing them with the support and guidance required. In the same way, young men in the child protection and justice system, who have relationships with several young women, should also receive appropriate advice and training on the task of parenthood.

**OPTION 2: SUPPORT FOR HIGH-RISK NEW MOTHERS AND THEIR FAMILIES**

Using acceptable risk assessments, births from which mother and baby are likely to experience difficulties are identified. Early intervention programmes, designed to limit the effect of risk factors on the baby, and improve the families circumstances by providing individualised support for both the newborn and mother such as the strengthening families programme.

### OPTION 3: DEAL WITH CONDUCT DISORDER AT SCHOOL ENTRY

One option for limiting progress toward criminal offending is to identify and treat high need, conduct disordered children at school entry in disadvantaged neighbourhood (Department of Corrections, 2001a). To put it differently, work is required with the parents and teachers of selected children to change the way in which significant people respond to the child's behaviour.

### OPTION 4: IDENTIFICATION AND MANAGEMENT OF HIGH-RISK EARLY YOUTH OFFENDERS

High need, behaviourally disordered children who are at risk of progressing to serious adult offending become more identifiable between the ages of ten and 15 years, as they begin their offending career (Department of Corrections, 2001a). In regard to prevention, a key task of the youth justice system is to identify as early as possible, those individuals, to ensure they receive services that may improve their chances to live in society and remain out of jail.

## 2.5 Summary

The literature suggests that violence is indeed complex in nature due to the multifarious factors that might make people violent. What is clear though is that substance use is often a factor in violent crime. A large proportion of violent the offenders have been drinking before the violence occurred (Room & Rossow, 2001). Violent offender may benefit from interventions that target other criminogenic needs such as SUDs. It therefore stimulates debate about the benefits of incorporating alcohol and drug components when intervening with violent offenders.

# CHAPTER 3:

# NEW ZEALAND MAORI

## 3.1 Introduction

With half of the prison population consisting of Maori the next section emphasises why it is so important that research in New Zealand prisons considers Maori people and culture. Maori and alcohol and the Department of Corrections strategic plan to work with Maori are briefly discussed. Lastly, issues that need to be considered when working with Maori cliental are outlined.

## 3.2 Statistics

Maori are over-represented in New Zealand prisons. Maori make up fourteen percent of the general population and fifty one percent of the prison population (Statistics New Zealand, 2004). Maori are more likely to be prosecuted, more likely to be convicted, and more likely to be sentenced (Department of Corrections, 2001b). It could be argued also that Maori are more likely to be targeted. The rising trend is expected to continue as a result of the high proportions of Maori in the 15-24 year old range, which is the group that statistics indicate is most likely to offend (Department of Corrections, 2003b). By 2013, Public Prisons Service musters are forecast to grow by 1,693 for Maori, 322 for Pacific People and 426 for other groups.

### 3.3 Maori

Maori did not escape the worldwide pattern of alcohol usage that has plagued indigenous peoples in a wake of Western colonisation (Durie, 2001). The results of a national survey conducted in Auckland in 1995 showed that fewer Maori than non-Maori were drinkers, but when individual Maori did drink they consumed on average up to 200 percent more than non-Maori, thus drastically increasing the risk of alcohol related problems (Dacey, 1997).

Alcohol and drug misuse are major threats to Maori health and well-being and have brought risks that, according to Durie (2001), are comparable to the infectious diseases that ravaged Maori society a hundred years ago. Alcohol morbidity and mortality for Maori is at a higher rate than for non-Maori (Te Puni Kokiri and Kaunihere Whakatupato Waipiro O Aotearoa, 1995).

Alcohol was not part of Maori culture prior to the arrival of Europeans and its arrival was greeted with ambivalence. The first European settlers arriving in pursuit of seals, whales, trading and gold were hard drinking men by reputation (Bushnell, Carter, & Howden-Chapman, 1994). Now there are significant differences between the health of Maori and non-Maori. (Aschengrau & Seage, 2003) discuss these kinds of ethnic differences in disease rates as possibly stemming from differences in socioeconomic status, health practices, psychosocial stress and resources, environmental exposures, discrimination, or access to health care.

Maori are the indigenous people of New Zealand that lived in small whare (houses). Warfare, often for utu (revenge or payment), was a frequent feature of early life for Maori. Maori sought honour and fame in the assault with the patu. Boys were expected to grow up to be warriors (Binney, Bassett, & Olssen, 1993). Life in early Maori society may have been more dangerous for children that it is today, with the true possibility of an enemy attack. Some of the games taught to Maori children were aimed at improving their agility and swiftness of the eye, which would be useful to a warrior in battle. According to Bassett, Sinclair & Stenson (1985), the boys were also taught to practice the war dances and the use of weapons such as the patu and the taiaha (a kind of club or spear).

### 3.4 Strategic Plan

*Kotahi ano te kaupapa; ko te orange o te iwi.*

There is only one purpose (to our work); it is the wellness and wellbeing of the people (Department of Corrections, 2003b). The Department of Corrections recognised the need to work with Maori in prison and developed the Treaty of Waitangi Strategic Plan 2001-2003 and the Maori Strategic Plan 2003-2008, to help meet the needs of Maori in prison. The plans focus on developing positive and constructive relationships between the Department of Corrections and Maori communities. This includes being effective for Maori (provide programmes and services that are meaningful and relevant to Maori), building partnership with Maori (working with Maori individual, communities and organizations) and being responsive

to Maori (developing and delivering services that are effective and appropriate for the particular needs of Maori) (Department of Corrections, 2003a).

A solution to the situation is to assist Maori to develop their social, cultural and economic resources and to use tikanga Maori and whakapapa as positive forces for the rehabilitation for Maori offenders (Department of Corrections, 2001a). The rehabilitative programmes in prison with a Maori focus designed to help Maori offenders to address their offending within a culturally effective context include five Maori focus units, tikanga maori, mahi tahi, te reo, kaiwhakamana and Maori whanau liaison workers. Indigenous communities continue to fight a high attrition in the battle against alcohol and other drug use. However, incorporating customary cultural components helps curb the loss of human potential among these communities (Warbrick, 2000).

### 3.5 Working with Maori

Westermeyer (1995), stated that the astute clinician might reasonably believe that "addiction and alcoholism" are complicated enough without adding an even more complex consideration, such as culture. Engaging Maori with substance use problems is similar to engaging any other culture, that is, with empathy, respect, and professionalism. There are subtle differences when working with Maori as there are many Iwi differences that contribute to Maori being heterogeneous. While many Maori retain links with their marae, whanau, hapu and Iwi, there are a significant number of Maori who have little, if any connection with traditional practices and

processes (Todd, Sellman, & Robertson, 1999). This has implications for the delivery of treatment and the most effective approach for clinicians to take.

An example of this is by not making an assumption about people who look Maori by greeting them automatically with 'Kia ora'. In some cases it may be more appropriate not to greet Maori in this way as the client may be embarrassed by a lack of knowledge of Te Reo, or by the clinicians' poor pronunciation (Robertson, Huriwai, Potiki, Friend, & Durie, 2002). A desirable level of trust may need to be established before a Maori client is willing to disclose information regarding their Maori identity, this may not necessarily occur during the first interview (Hirini, 1997). Equally important, being aware of potential areas of cultural sensitivity is also significant and allowing the client time and space before attempting to elicit information. Rushing things can be seen as a precipitous intrusion and disrespectful of personal and interpersonal boundaries (Robertson et al., 2002).

On the whole, these guidelines to working with Maori are not definitive rules, but rather guidelines to assist further development and integration. In simpler terms, diversity is the rule when working with Maori in New Zealand today as they are not all alike. On the other hand, culture is a critical factor in the criminogenic needs of Maori.

With the rates of imprisonment being so high for Maori the Department of Corrections has a goal to reduce recidivism by Maori and policy was established to assist with this goal. The Criminogenic Needs Inventory developed a Maori Cultural-Related Need component (MaCRN), which explores specific cultural related needs

(e.g. whakawhanaunga) and their functional relationship with criminogenic needs such as alcohol and drug use. Consistent with this theory, Canadian correctional settings found evidence of the positive effects of Aboriginal cultural and spirituality in the treatment of alcohol and drug use problems. Similarly, (Huriwai, Sellman, Sullivan, & Potiki, 2000) reported the importance of cultural factors in the treatment of Maori with alcohol and drug use problems.

Overall, Maori are over-represented in the prison population with approximately fifty percent of the entire prison population being Maori. The researcher spoke with clinical staff at both Waikeria Men's and Arohata Women's Prison in regard to ethnicity distribution. It was stated that while ethnicity figures were not collated, it was in their opinion and experience that Maori would make up approximately fifty to eighty percent of the participants.

How responsive such programmes will be to Maori who make up most of the prison population may not be clear. Unless there are components or processes that take into account unique ethno-cultural factors, Maori will not engage in the programme, will have lower retention rates, and ultimately will continue to be at risk of further offending (Department of Corrections, 2003a).

### 3.6 Summary

As Maori are disproportionately over represented in the criminal justice system, with numbers projected to increase requires the Department to continue focusing on

addressing the needs of Maori prisoners effectively. The Department will need to address issues associated with re-offending through the implementation of strategies designed to improve outcomes for Maori people, and to break the cycle of offending through initiative and address some of the key causes of offending, including violence and the impact of alcohol and drugs, and interventions to reduce intergenerational offending (Department of Corrections, 2003b).

# CHAPTER 4:

# THE PRESENT STUDY

## 4.1 Research Origins

Despite research being conducted at regular intervals internationally in prisons research in New Zealand is more sparse and underdeveloped. There has been a gap in the New Zealand literature of nearly a decade since the last piece of research in its field was produced. The current study also seeks to extend on the previous New Zealand prison prevalence studies by investigating,

**If there is a relationship between occurrences of Substance Use Disorders and Violent Offending?**

The research also inquired about other factors that may have a connection with violent offending such as, age, ethnicity, education, past alcohol and drug treatment, level of intoxication and substances used prior to the offence.

The widespread use of alcohol and drugs in New Zealand prisoners has important public health implications for the entire population. These arise from both the risk of dependence from such use, and the increased risk of adverse health and other consequences from substance abuse (O'Hagan, Robinson, & Whiteside, 1993). Therefore it may be important that appropriate help in prison is available to address such problems.

From a public health perspective, the provision of appropriate and effective help for those wishing to abstain from, or control, their substance use is a central component of the harm reduction/harm minimization philosophy integral to the National Drug Policy (Ministry of Health, 1998). Offenders could be offered help to moderate their drinking and, more specifically, to reduce the incidence of drunkenness (McMurran, 2006). In fact, targeting only prisoners who are dependent and recommending abstinence may either exclude or alienate many. The treatment goal may need to encourage offenders to reduce their levels of intoxication. Of course abstinence would work to rule out intoxication, but if the offender is unwilling to agree to a goal of abstinence or is unable to stick to a goal of abstinence, then "the point is academic rather than practical" (McMurran, 2006). In summary, the prisoners may be better off to learn how to be less extreme with drinking and using other drugs, rather than solely learning sobriety.

The origins of the present study come from a need for an updated investigation at the current status of prisoners SUDs and its possible relationship with violent offending. In the future research can add to this quantitative exploration, which has always been conducted in a New Zealand prison population and move towards collecting qualitative data about the unique lives of prisoners. Incorporating qualitative methodologies may build a better picture of the prison population by further exploring into the life of a prisoner to capture individual experiences.

## 4.2 Rationale for Study Design

The researcher is interested in the possible relationship between SUDs and violent offending. Current practice within New Zealand Department of Corrections is to address violence prevention and SUDs as two independent criminogenic needs and not two combined needs. By investigating the occurrence of SUD in the prisoners that committed a violent offence it may build from evidence that violent prisoners require knowledge about both violence and substance use.

## 4.3 Definition of Key Concepts

At this point it is important to clarify the key concepts and variables in this study.

- **Prisoner:**

  A person who is currently incarcerated in a prison either awaiting trail or serving a sentence which they have been convicted for.

- **Remand prisoner:**

  A person who has been remanded into custody to await trail.

- **Sentenced prisoner:**

  A person who has been convicted of a charge and is serving a jail sentence. The length of imprisonment may range from fourteen days to an indefinite sentence depending on the seriousness and repetitive nature of the offence.

- **Muster:**

  The muster is the amount of prisoners in total in a prison.

- **Violence:**

  Is a general term to describe actions that cause or intent to cause injury to people, animals, or non-living objects. For the purpose of this study violence is defined by Spier (1999) in Chapter 2.

- **Substance Use Disorders:**

  SUDs relate to the two disorders of substance abuse and substance dependence as defined by the DSM-IV in which substance use results in significant adverse consequences.

- **Substance Abuse:**

  The essential features include a maladaptive pattern of substance use exhibited by recurrent and significant adverse consequences related to the continued use of a substance or substances. As a result there may be continual failure to fulfil major life obligations, use in situations that may be dangerous, legal problems and social and interpersonal problems occurring in the same twelve month period.

- **Substance Dependence:**

  The essential features include a cluster of cognitive, behavioural, and physiological symptoms showing that the individual continues to use despite significant substance related problems. The user develops a pattern of repeated use which may result in tolerance, withdrawal and continued self administration. Dependence is defined by a cluster of three or more of the symptoms listed in DSM-IV occurring at any time in the same twelve month period.

- **SUDDS-IV:**

  Substance Use Disorders Diagnostic Schedule, $4^{th}$ edition. This is an interview questionnaire which results in a diagnosis according to the DSM-IV.

- **DSM-IV:**

  The DSM-IV is an acronym for the Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition. The DSM-IV is one of the two main classifications systems of mental disorders that have been developed for use in clinical, educational and research settings internationally to be employed by individuals with clinical training and experience in diagnosis.

### 4.4 Potential Benefits of this Research

Potentially the prisoners and the Department of Corrections will benefit from this study. The Department of Corrections will have the most recent data from an epidemiological study conducted in the Wellington region on male prisoners by investigating the possible relationship between SUDs and violent offending and incorporating other factors for consideration.

From an individual level, the prisoners in the study will each receive feedback on the information that was collected via the SUDDS-IV. All prisoners will be informed personally if they meet the DSM-IV criteria for substance abuse or substance dependence shortly after their interview on specific substances that they report using. The prisoners will be given personal feedback if they meet the criteria for a Substance Use Disorder which gives them the knowledge to make informed decisions if they choose to do so. If the prisoners ask for assistance in regard to their substance use after they receive feedback then they can be referred for criminogenic intervention if eligible or alternatively Narcotics Anonymous are available, if requested while serving their current sentence.

There was also a possible benefit to Maori. Maori and local Iwi were incorporated from the start of the project and will be informed of the results so that information is shared among those with a common interest of the wellness and wellbeing of Maori.

### 4.5 Research objectives

The primary research question for this study was: Is there a relationship between occurrences of SUDs and prisoners that offend violently? This question arose from the anecdotal observation made by the writer in her duties as a Prison Officer.

The question is a complex and potentially difficult question to answer. Firstly, it is unlikely that SUDs are the only determinants of violent offending, as demographic, cultural, education and other psychological factors will also play a role. For this reason a range 'other factors' were also tested to see if they in some way explained the occurrences of violent offending among prisoners. These other factors included age, ethnicity, educational background, past treatment history and level of education. Secondly, it needs to be recognised that the statistical analyses undertaken in this thesis only focuses on a given prison population i.e. Rimutaka and Wellington prisons. As such the findings of the analysis should only with appropriate caveats be generalized beyond this context.

The approach used in this study to answer this research question, was to use the Chi-squared test to see if there was a statistically significant relationship between a number of explanatory factors (age, ethnicity, educational background, past treatment history, substances used and level of intoxication) and violent offending.

This is an initial exploratory study in the New Zealand context, firstly because there may well be other factors that explain the occurrence of violent offending that were not measured and tested in this study. Secondly, this type of analysis needs to be replicated amongst other prison populations and indeed amongst the general population for comparison before more definitive conclusions can be arrived at.

The two main objectives for this study were:

To examine the prevalence and epidemiology of SUDs in a New Zealand prison population.

To examine if SUDs are more prevalent in prisoners that are in jail for a violent offence and if other factors are also related to violent offending.

SUDs are more prevalent in prisoners that are in jail for a non-violent offence compared to prisoners that have offended violently. It was hypothesized that substance abuse was more likely to be statistically significant in the violent prisoners, compared to non-violent prisoners. This was the methodological rationale for requiring a diagnostic tool that could differentiate from substance dependence and substance abuse.

# CHAPTER 5:

# METHODOLOGY

## 5.1 Study Design

The overall approach of the research to be reported here is epidemiological. Epidemiology is an investigative method used to detect the cause or source of diseases, disorders, syndromes, conditions, or perils that cause pain, injury, illness, disability, or death in human populations or groups (Timmreck, 2002). Epidemiology is often considered the basic science of public health and since the 1920's several definitions of epidemiology have been advanced. According to (Oleske, 1995), a widely accepted version is the study of the distribution and determinants of health related states or events in specified populations, and the application of this type of study is to control health problems.

The theoretical principles of epidemiology as a method involve taking measurements from subjects and making inferences about relevant characteristics of a wider population typifying the subjects. In this case individuals that have been charged with committing a crime which has resulted in a period of imprisonment. Epidemiology is about measuring a behaviour such as health, identifying the causes of ill health and intervening to improve health (Webb, Bain, & Pirozzo, 2005). Good epidemiological research requires both an understanding of statistics, which provides the means for assessing the probabilities associated with apparent relationships between certain variables. Since statistics is the science that is concerned with making inferences about populations parameters using sampled measurements,

statistical methods provide the basic tools for epidemiological research (Oleske, 1995). In summary, the basic objective in epidemiological research is measuring the relevant variables of individuals selected as subjects for a study and using statistical analysis to draw conclusions which apply to an appropriate target population (McNeil, 1996).

The current study is a descriptive epidemiological study using a cross-sectional survey. Descriptive epidemiology can be anything from a description of patterns and trends seen among routine data collected at a population level, or a survey especially designed to collect information from individuals to describe the prevalence of some attribute in that population (Webb et al., 2005). In the present study it is the prevalence of SUDs in a specific prison population.

Cross-sectional surveys determine the extent of a health problem in a population. The idea is to select people in such a way that they are representative of the whole population so that information collected from the study can be generalized directly to the whole population (Webb et al., 2005). The estimates provided by a cross-sectional study are static, representing the amount of the condition at one point in time or period (Brownson & Petitti, 1998). In this case it is about identifying SUDs in a prison population comparing the prisoners that have offended non-violently to the prisoners that are currently in jail for a violent offence. Interviews are conducted to capture this time. The sources of data used in cross-sectional studies is most often some form of survey methodology, such as personal interviews, self-administered questionnaires or record reviews (Oleske, 1995). The data from this study is collected using personal interviews with the prisoners as research participants.

## 5.2 Research Settings

This study was conducted at Rimutaka and Wellington Prisons. Rimutaka Prison is located in Trentham, Upper Hutt and Wellington Prison is in Miramar, Wellington City. Over a six week period the researcher went to both prisons to interview. The interviews were conducted inside the unit where the prisoner was housed. Generally interviews took place in rooms designed specifically for interviewing prisoners and other times in an available private space in the unit due to the layout of the prison and other personnel using designated interview rooms.

## 5.3 Participants

When the present study began in December 2005 there were seven and a half thousand incarcerated prisoners' in New Zealand. This study randomly selected 200 prisoners from Rimutaka and Wellington Prison which had a combined muster then of 900 prisoners. From the 200 randomly selected, one hundred and twenty prisoners chose to take part in the study. One hundred and two (n=102) prisoners were interviewed for the study as eleven were transferred out of the region to another prison and seven were released, before interviews took place. Due to the muster requirements at the time of the study it was not unusual that prisoners were relocated to another institution. No prisoners from these Rimutaka and Wellington Prison were excluded from being randomly selected.

## 5.4 Measures

The variables investigated in the present study were SUDs, ethnicity, education, previous alcohol and drug treatment, level of intoxication and substance used prior to offending. Data on these variables were collected using the Substance Use Disorders Diagnostic Schedule-IV (SUDDS-IV) **(Appendix 1)** and a demographic questionnaire **(Appendix 2).**

The SUDDS-IV is an objective, event-oriented 30 to 45 minute structured interview where diagnostic findings can be determined by the clinician immediately after administration. The SUDDS-IV is a comprehensive structured interview designed to elicit accurate and sufficient information for the diagnosis of psychoactive Substance Use Disorder based on DSM-IV and DSM-IV-TR criteria (Hoffmann & Harrison, 2001). The SUDDS-IV collects information relevant to public health and safety in the course of obtaining data necessary for documenting SUDs. These variables address health care utilization, motor vehicle accidents, dangerous driving behaviour and personal health. For example a person may continue to drive or operate machinery under the influence of alcohol and/or other drugs which may be dangerous to themselves or others. These behaviours and problems may be likely to have safety and financial implications for the public (Hoffmann, 2003).

The researcher decided on the SUDDS-IV as the tool of choice after consultation and agreement with the Department of Corrections Policy Department and Psychological Service. Other tools that were considered were,

- **CAAPE (Comprehensive Addictions and Psychological Evaluation)**

A 145 question structured interview that documents Substance Abuse/Dependence diagnoses and the most prevalent mental health conditions likely to impact on recovery. This tool was not chosen because of the length of the questionnaire which was 145 questions compared to the SUDD-IV, the tool of choice which is a 65 questionnaire interview. The CAAPE was not considered as it was a more comprehensive dual diagnostic assessment which was not required for the present study.

- **CIDI-A (Composite International Diagnostic Interview).**

The CIDI is a comprehensive, standardized instrument for assessment of mental disorders according to the definitions and criteria of ICD-10 (International Statistical Classification of Diseases and related Health Problems: 10$^{th}$ Revision. The European guide for diagnosis of mental disorders) and DSM-IV. The CIDI contains 20 major questions and 59 sub-questions and takes approximately 75 minutes to administer. Like the CAPPE the CIDI-A was not chosen due to the length of the questionnaire (approximately 80 questions) and because the ICD-10 is not widely used in New Zealand, particularly when diagnosing for SUD.

- **SCID (Structured Clinical Instrument for DSM-IV).**

The SCID-I is a large semi-structured interview used to assess the major DSM-IV diagnoses. The instrument is designed to be administered by a clinician or trained mental health professional and takes between one to two hours to complete. This tool was eliminated from consideration due to the length of the interview which could take up to two hours to complete.

- **CLAI (Computerised Lifestyle Assessment Instrument).**

The CLAI is a 570 item standardized assessment tool that has been adapted and implemented by the Correctional Service of Canada to identify offenders with substance abuse problems, to assess the nature and severity of their problems, and to assist in the development of suitable treatment programming. The CLAI is a procedure for recording information relating to the nature and severity of substance abuse among offenders. This tool was not chosen due to the number of items it involves and because it only screens for drug use using the DAST (Drug Abuse Screening Test) and uses the ADS (Alcohol Dependence Scale). In other words this tool does not diagnose for drug abuse and dependence or for alcohol abuse which was a requirement for the present study.

These four tools were not chosen predominately because of the time required to administer some of the tools and because the researcher needed a tool that differentiated between substance dependence and substance abuse. Lengthy assessments, especially those that seem repetitive, can tax both the respondent's willingness and ability to respond completely and accurately (Del Boca & Darkes, 2003). In other words due to the fact the prisoners were the research participants the researcher did not want to use a tool that was lengthy as it may have been taxing on the prisoner and they may lose interest/concentration if required to be interviewed for too long. Another rationale for using the SUDDS-IV over all other methodological considerations was because the SUDDS-IV had been previously validated with a prison population in a state correctional facility in the USA.

One of the main purposes and hypothesis of the current study was to investigate if substance abuse was more prevalent in prisoners that offend violently, compared with substance dependence so a diagnostic tool that differentiated between the two disorders was imperative for this project. The SUDDS-IV was the only tool able to accommodate this requirement.

No instrument or procedure is completely free from various forms of falsification. For example, someone may say that an event or behaviour occurred when it truly did not, or deny that events and behaviours occurred. However, self report methods are considered generally to offer a reliable and valid approach to measuring alcohol. Self report measures have demonstrated levels of reliability and validity; at the same time they offer the means to assess alcohol use in a manner that is relatively inexpensive, non-invasive and acceptable to the respondent (Del Boca & Darkes, 2003)

An advantage of the SUDDS-IV is that it uses very direct and objective questions that respondents do not appreciate the collective significance of their responses and therefore are less likely to falsify (Hoffmann & Harrison, 2001). The SUDDS-IV is a very efficient and content focused assessment tool as its questions cover all seven of the DSM-IV dependence criteria and all four of the abuse criteria. The SUDDS-IV has excellent content validity relative to the DSM-IV-TR diagnostic criteria and unless a respondent deliberately lies in reporting events and behaviours, false-positive results should not be found (Hoffmann & Harrison, 2001).

Test-retest reliability is the correlation between two or more administrations of the instrument, or test. In other words, it is the extent to which the same conclusions are reached by administration of the instrument, or test, at two different times. The SUDDS-IV format is designed to maximize test-retest reliability as it is structured to require a common core set of questions to guarantee that at least those core questions are asked in the order indicated (Hoffmann & Harrison, 2001).

## 5.5 Demographics

The demographic questionnaire was developed to meet the data collection requirements of this study. Demographic variables investigated were ethnicity, education, past alcohol and drug treatment, substances used in the 24 hour and 12 month period before offending and level of intoxication prior to the commission of the crime.

- **Ethnicity:** 7 categories were utilized-

  **A**=NZ European, **B**=NZ Maori, **C**=Cook Island Maori, **D**=Pacific Islander, **E**=Asian, **F**=European, **G**=other.

- **Education:** Level of completion is divided into 9 categories-

  **A**=Left school without any formal qualification, **B**=School certificate, **C**=Sixth form certificate, **D**=University entrance, **E**=Diploma, **F**=Certificate, **G**=University degree, **H**=Master's degree, **I**=PhD

- **Substances used in the 24 hour and the 12 month period prior to offending:** Seven major substance groups were utilized-

  **A**=alcohol, **B**=cannabis, **C**=methamphetamine and amphetamine, **D**=LSD, **E**=opiates, **F**=prescription pills, **G**=other.

- **Level of intoxication prior to offending:** Self reported compared with typical using patterns.

  **A**=low, **B**=moderate, **C**=high.

- **Past alcohol and drug treatment:** If a person had received treatment this was categorised into 5 different types of treatment.

  **A**=Residential programme in the community, **B**=Day patient programme in the community, **C**=100 hour substance abuse criminogenic programme in jail, **D**=Specialist treatment programme in jail such as the Addiction Treatment Unit, **E**=another alcohol and drug programme in jail.

### 5.6 Procedures of the study

A person, independent from the study, was assigned as the controller of the database so that prisoners were not selected by the researcher. The controller of the data base randomly selected via the Department of Corrections Integrated Offender Management (IOM) computer system, 200 prisoners from Rimutaka and

Wellington prison **(Appendix 10)**. A two step procedure was then initiated. The 200 randomly selected prisoners then received an invitation to participate via the required ethical procedure called the Reply Slip - **(Appendix 3)** in the mail from the researcher. The form outlined that they had been randomly selected to take part in the proposed research and were given the opportunity to either agree or decline to find out more about the study.

If the prisoner did not want to find out more about the study or choose not to reply, they were not approached again. If the prisoners agreed to find out more they meet with the researcher to have the study and its requirements (Information Sheet - **(Appendix 4)** explained to them.

One hundred and twenty prisoners filled out the form and returned it to the designated box in their unit to find out more about the study. The researcher explained the information sheet to all prisoners that were willing to participate and they were then given the opportunity to sign the Consent Form - **(Appendix 5)** to take part in the study or to take it away to decide and return it to the researcher within one week.

Once informed consent was gained the researcher then interviewed the prisoners using the SUDDS-IV psychometric test to identify SUDs. The demographic questionnaire followed the SUDD-IV interview.

## 5.7 Data Analysis

The data analysis was conducted using MINITAB. Minitab is a computer programme designed to perform basic statistical functions. It combines the user-friendliness of Microsoft Excel with the ability to perform complex statistical analysis of the Statistical Analysis System (SAS) and Statistical Package for the Social Sciences (SPSS). Descriptive analyses are presented for all major variables in the results section of this paper.

## 5.8 Ethical and Legal Issues

In most countries, researchers seek approval from their institution and other authorities that their proposed study is ethically sound. Ethical approval is rapidly becoming a requirement before grant funding will be awarded, access to patient or population groups permitted or results published (Silman & Macfarlane, 2002).

The present study potentially impacted on the researcher, the prisoners' wellbeing, Department of Corrections, academics and the Ministry of Health (MOH). The study was designed in accordance with ethical guidelines of four major stake holders which included Massey University, Central Regional Ethics Committee from the MOH, Department of Corrections and the Kaumatua Kaunihere o Upoko o te ika a Maui.

The research proposal was reviewed and approved by three separate ethics committees, Massey University Human Ethics Committee **(Appendix 6)**, the Central Regional Ethics Committee **(Appendix 7)**, and Department of Corrections **(Appendix 8)**. While a number of ethical issues are normally considered in research with human subjects, the present study involved some particular issues demanding special consideration due to the nature of the research participants and the researcher's position.

As the researcher was an employee of the Department of Corrections (Senior Corrections Officer/Sentence Planner), the ethical dilemma considered by all the committees was the potential for the prisoners to feel coerced or obliged to take part in the study. In other words, the prisoners may perceive that to not assist would disadvantage/punish or may simply want to gratify the researcher when it could be potentially deleterious to their own wellbeing. Due to the nature of the environment (incarcerated prisoners being researched by a Prison Officer working in the same prison), all three ethics committees wanted reassurance that prisoners were going to take part in the study because they chose to and not because they felt forced to do so. To reduce any possible coercion or perceived gratification the researcher did not approach the prisoners in the first instance. Instead, they received the Reply Slip in the mail and were assured that participation or non-participation would not affect them adversely in anyway.

In all cases, informed consent was gained with an explanation that all information used in the study was completely confidential and anonymous. In most scenarios, a suitable covering letter addresses the issues of confidentiality. This emphasises that

the research is interested in looking at groups rather than single individuals and that it will not be possible to identify individuals from the way that the results are presented (Silman & Macfarlane, 2002).

### 5.9 Informed consent

Informed consent is defined as a process by which a subject voluntarily confirms his or her willingness to participate in a particular piece of research, after being informed of all aspects of the research that are relevant to the subject's decision to participate. Informed consent is documented by means of a written, signed and dated informed consent form. This was operationalised first in this study in the information sheet which in a language and format appropriate for the prisoners summarised the studies aims and procedures, provided researcher and supervisors contact details. Prisoners were informed that participation was entirely voluntary, informed of their right to withdraw at any time without affecting them adversely and that they would be given a summary of individual results when concluded. Ample time was allowed for prisoners to decide whether or not to participate and in all cases data collection did not begin before prisoners had given their informed consent in writing.

### 5.10 Confidentiality and Anonymity

Additional issues of confidentiality and anonymity arise because all New Zealand prisoners' personal information is protected under the Privacy Act 1993 and the Official Information Act 1982. Silman & Macfarlane (2002) state that the study population should be confident that data provided by them will be kept confidential.

There are clear legal and ethical responsibilities on researchers for maintaining confidentiality and anonymity.

Given the legalities, the sensitive nature of this project and the target group, anonymity of the prisoners was considered critical. At no time were the prisoners documented by their name or personal details. Independent numbering systems were developed by the independent controller of the database. This client number could not be cross referenced back to the prisoners names, keeping them anonymous at all times. The master sheet was the only tangible connection between code numbers and client names and this was kept secure in a locked cabinet in the researcher's office at all times.

Prisoners were informed in the reply slip that they remain anonymous at all times. The information sheet explained in further detail that all information collected in the study remained confidential between the researcher and those involved in the study. They were told that when data is presented to others, it would be presented as collective data which could not identify any individual prisoner.

### 5.11 Cultural Sensitivity and Minimizing Harm to Prisoners

The Health Research Council of New Zealand (1998) has determined that consultation is a vital step in the development of a research project that involves Tangata Whenua as participants or is on a topic of particular relevance to Maori health. During the developmental stages of this project the researcher, a Kaumatua of the prison and the Wellington Regional Advisor for Maori Service Development

from the Department of Corrections, consulted with the Local Iwi Kaumatua Kaunihere o Upoko o te ika a Maui at Koranui Marae, Stokes Valley. The consultation process can lead to the development of research partnerships, focusing of research topics, identification of the most useful research design methods, the resolution of contentious issues and the maximization of the various potential benefits of the intended research project (Health Research Council of New Zealand, 1998). Any concerns were identified and it was widely accepted as a useful research project for Maori.

After discussion and consideration, local Iwi were satisfied that prisoners were not going to be harmed from the study. A letter was sent to the researcher **(Appendix 9)** stating that the Kaumatua Kaunihera o Upoko o te ika a Maui gave the researcher their support. In return, the researcher ensured the Kaumatua council that once the results had been collected they will be presented to the Kaunihere. In addition The Department of Correction's cultural framework FreMO (for research involving Maori) was applied to the present study and approved. The FReMO standards included potential benefits to Maori including reducing Maori offending, Maori input into research design and research methods and procedures selected were culturally responsive. As many of the prisoners identify as Maori, the researcher informed all research participants that a support person, such as a Kaumatua or prison chaplain was available, if requested during the research process and interview. No requests of this nature were made by the prisoners to the researcher during the study.

# CHAPTER 6:

# RESULTS

## 6.1 Introduction

The presentation of results is organised into descriptive and Chi-square analysis that largely correspond with the main objectives of the present study. Results detail descriptive data such as the ages of the sample **(Table 1)**, ethnicity of the sample **(Table 2)**, previous educational level of the sample **(Table 3)**, previous alcohol & drug intervention of the sample **(Table 4)**, and previous mental health diagnosis of the sample **(Table 5)**.

The results then address the first objective of the present study and describe the prevalence of SUDs in a New Zealand prison population **(Table 6)**. What follows is a description of the break down of SUDs for specific type of substances **(Table 7).** The descriptive data then breaks down the multiple diagnoses for substance dependence **(Table 8)**, to show how many prisoners meet the criteria for substance dependence in more than one substance. The descriptive data lastly gives detail of the substances used in the 12 month period prior to the offence **(Table 9)**, the 24 hour period prior to the offence **(Table 10)**, and the level of intoxication in the 24 hour period prior to the offence **(Table 11)**.

The results then address the second objective of the present study to examine if SUDs are more prevalent in violent offending and if other factors are related to violent offending. Prisoners that offended non-violently were juxtaposed to the

prisoners that had offended violently **(Table 12)**. Chi Square analysis was conducted to test if there was a statistical relationship between non-violent and violent offending and age **(Table 13)**, ethnicity **(Table 14)**, education **(Table 15)**, past alcohol and drug treatment **(Table 16)**, previous mental health diagnosis **(Table 17)**, SUDs **(Table 18)**, level of intoxication **(Table 19)**, and ethnicity verses education **(Table 20)**.

## 6.2 Sociodemographic characteristics of the sample

The sociodemographic characteristics of the sample are presented in **(Table 1)**. A total of 102 male prisoners were interviewed with an age range from 18 to 67 years. It was found that approximately half of the participants (44.2%) were aged between 18-29 years and another half (43.1%) were aged between 30-41 years. This left a small percent of prisoners (8.8%) in the age range from 42-53 years and an even smaller percentage (3.9%) in the 54-67 age range. Their mean age of the prisoners studied was 32 years.

By comparison and with similar results to the present study, the consensus of prison inmates (1999) showed that more than half of the sentenced prisoners were less than thirty years old.

Table 1: Ages of the sample of Rimutaka and Wellington prisoners, 2006 (n=102)

| Age in years | Total | % of total |
|---|---|---|
| 18-29 years | 45 | 73.5% |
| 30-41 years | 44 | 26.5% |
| 42-53 years | 9 | 8.8% |
| 54-67 years | 4 | 3.9% |
| Total | 102 | 100.0% |

Sixty prisoners (58.8%) identified as Maori making this the largest ethnic group in the study. 27 (26.5%) identified as New Zealand European, 14 prisoners (13.7%) as Pacific Islander with one prisoner who identified as other and specified that he was from the Middle East **(Table 2)**.

The ethnicity figures in this study were similar to the wider prison population suggesting that the sample was representative of the entire male prison population in regard to ethnic background. A snapshot of the prison population in 1999 showed 50% identifying as Maori, 35% as European and 8% Pacific Islanders (Rich, 1999). The most recent Department of Corrections statistics captured from September 2006 show Maori as 49.4%, European as 35.6%, Pacific People as 10.5% and 3.2% Asian. It could be suggested that when comparing the figures, that the present study had a satisfactory representation of Maori, European and Pacific Islander prisoners. Comparatively, ethnicity figures from the New Zealand 2006 census were European 67.6 %, Maori 14.6 % and Pacific People 6.9 %.

Table 2: Ethnicity of the sample of Rimutaka and Wellington prisoners, 2006 (n=102)

| Ethnicity | Total | % of total |
|---|---|---|
| New Zealand Maori | 60 | 58.8% |
| New Zealand European | 27 | 26.5% |
| Pacific Islander | 14 | 13.7% |
| Other | 1 | 1.0% |
| Total | 102 | 100.0% |

Of the 102 prisoners, 86 (84.3%) reported that they left school before entering the fifth form and therefore attained no qualifications. 16 prisoners (15.7%) reporting that they had achieved either a school certificate, NCEA qualification or higher including, sixth form certificate, university entrance, certificate, diploma or degree **(Table 3)**. Such was the rarity of qualifications that 15.7% reported having a qualification from school certificate to degree, making a breakdown of the level of qualification too difficult.

Table 3: Previous education of the sample of Rimutaka and Wellington prisoners, 2006 (n=102)

| Previous education | Total | % of total |
|---|---|---|
| No qualifications | 86 | 84.3% |
| Qualifications | 16 | 15.7% |
| Total | 102 | 100.0% |

Previous involvement in alcohol and drug interventions were explored as presented in **(Table 4)**. The sample was relatively divided between those who had specific treatment in the community, those who had had some form of treatment in the prison and those who had neither. Out of 102 prisoners, 40 of them (39.2%) stated that they had previously been involved in an alcohol and drug intervention in the community which may include intensive residential and outpatient, 25 (24.5%) had some form of intervention during the current or a previous prison sentence leaving 37 (36.3%) that reported no previous intervention.

Table 4: Previous Alcohol and Drug intervention of the sample of Rimutaka and Wellington prisoners, 2006 (n=102)

| Previous A & D intervention | Total | % of total |
|---|---|---|
| In the community | 40 | 39.2% |
| In prison | 25 | 24.5% |
| No previous intervention | 37 | 36.3% |
| Total | 102 | 100.0% |

Previous diagnosis of a mental health disorder is presented in **(Table 5)**. A previous mental health diagnosis was identified in 25 (24.5%) of the sample. 77 prisoners (75.5%) reporting that they had no previous mental health diagnosis. The 1999 national study of psychiatric morbidity in New Zealand prisons showed that about one third of the total sample of 1248 prisoners suffered from a mental health condition (Simpson et al., 1999). The current study figures reporting that 24.5% had a previous mental health diagnosis. The lower numbers suggesting that prisoners

may not perceive or have under-reported previous diagnosis as they were informed that the interview was to obtain information about prior alcohol and drug use.

Table 5: Previous mental health diagnosis of the sample of Rimutaka and Wellington prisoners, 2006 (n=102)

| Previous mental health diagnosis | Total | % of total |
|---|---|---|
| Previous Diagnosis | 25 | 24.5% |
| No previous diagnosis | 77 | 75.5% |
| Total | 102 | 100.0% |

### 6.3 Substance Use Disorders in the sample

This section of the thesis addresses the first objective of this research 'to examine the prevalence and epidemiology of SUDs in a New Zealand prison population'.

Of the 102 prisoners, 86 (84.3%) meet the criteria for a diagnosis of substance dependence and 9 (8.8%) meet the criteria for a diagnosis of substance abuse. Only 7 (6.9%) prisoners in the sample did not meet the criteria for a SUD. These figures are similar to the results produced in 1999. The Simpson et al. (1999) national study of psychiatric morbidity in New Zealand prisons found 83.4% of the prisoners had a SUD. Results from the present study have shown that SUDs remain proportionately high in New Zealand prisoners. This may be a concern for the Department of Corrections as it provides an indication many prisoners have a SUDs which could suggest that the problems may not or can not be satisfactory addressed.

### 6.3.1 Substance Abuse and Substance Dependence

Results show the prevalence of substance dependence certainly exceeds substance abuse and this is illustrated in Table 6 & Table 7. 59.4% of the prisoners met the criteria for cannabis dependence. 58.8% met alcohol dependence. Prisoners that met methamphetamine dependence criteria were 28.3% and 7.6% met the criteria for amphetamine dependence. Methamphetamine and amphetamine have been differentiated in this study due to an increase of pure methamphetamine into the New Zealand market and perceived concern. Methamphetamine and amphetamine is a synthetic stimulant drug which induces a strong feeling of euphoria. Pure methamphetamine is a colourless crystalline solid and is also sold as less pure crystalline powder.

Some of the prisoners, 11.8%, were diagnosed with sedative dependence e.g. tranquillizers, sleeping pills, valium, librium and xanax and 10.4% meet the criteria for hallucinogenic dependence e.g. LDS, mescaline, peyote, psychedelics and psilocybin. At the lower end of the percentages, 5.2% meet the cocaine dependence criteria and 4.2% opiate dependence. None of the prisoners meet the criteria for inhalant e.g. paint, glue, aerosols and butane or PCP dependence.

As mentioned, fewer amounts of prisoners were diagnosed with substance abuse. Cannabis abuse was diagnosed in 20.8% of the sample and 15.7% of the prisoners met alcohol abuse. Amphetamine abuse was met by only 3.3%of the prisoners with none of them meeting methamphetamine abuse. Six percent of the sample met the criteria for hallucinogenic abuse and 4.7% met the criteria for sedative abuse. Opiate abuse was diagnosed in 4.2% of the prisoners and 2.1% met the criteria for

cocaine abuse. Like substance dependence, no one was diagnosed with inhalant or PCP abuse, while they may have still been consuming.

Table 6: Substance Use Disorders of the sample of Rimutaka and Wellington prisoners, 2006 (n=102)

| Substance Use Disorders | Total | % of total |
|---|---|---|
| Substance Dependence | 86 | 84.3% |
| Substance Abuse | 9 | 8.8% |
| None | 7 | 6.9% |
| Total | 102 | 100.0% |

Table 7: Substance Use Disorders for specific type of substances in a sample of Rimutaka and Wellington prisoners, 2006 (n=102)

| Substance Use Disorder for specific type of substance | Dependence | Abuse |
|---|---|---|
| Cannabis | 59.4% | 20.8% |
| Alcohol | 58.8% | 15.7% |
| Methamphetamine | 28.3% | 0.0% |
| Amphetamine | 7.6% | 3.3% |
| Cocaine | 5.2% | 2.1% |
| Opiates | 4.2% | 4.2% |
| Hallucinogenic | 10.4% | 6.3% |
| Sedatives | 11.8% | 4.7% |
| Inhalants | 0.0% | 0.0% |
| PCP | 0.0% | 0.0% |

As a point of comparison Oakley Browne et al 2006, figures from the 2006 New Zealand mental health survey suggest that SUD's are much lower in the general population. Looking at the 12 month period prevalence for individual disorders their study found that 3.5% of the sample met the criteria for any SUD's. Of interest, the prevalence of substance abuse and dependence for alcohol and for drugs were all highest (6%) for Maori (Oakley Browne et al., 2006).

However, these figures may be low as people living in institutions and homeless people were not included in the sampling frame. Also individuals that use large amounts of alcohol and drugs may be less likely to agree to be survey respondents. In evaluating their results it is considered that many individuals that are dependant on substances may end up in jail due to issues that may lead them to offend so are not considered in general population data.

### 6.3.2 Multiple diagnoses for substance dependence

The study sought to discover how many of the prisoners meet the criteria for Substance Dependence for multiply substances **(Table 8)**. That is, how many prisoners were dependant on more than one substance. It was found that half of the prisoners meet the dependence criteria for two to three substances and a further 9.8% were dependent on four or more substances. The most common pattern was multiple substance dependence, particularly of 2 or 3 substances including alcohol and cannabis. From that it can be summarised that while a small group are true poly-substance dependence (9.8%), vast numbers of prisoners (50%) are dependent

on two to three substances. This increasing the possible level of support required for those identified as poly drug users.

Table 8: Multiple diagnoses for Substance Dependence of the sample of Rimutaka and Wellington prisoners, 2006 (n=102)

| Number of Substances Dependence | Total | % of total |
|---|---|---|
| 1 Substance Dependence | 28 | 27.4% |
| 2-3 Substances Dependence | 51 | 50% |
| 4 or more Substances Dependence | 10 | 9.8% |

### 6.3.3 Substances used in the 12 month period prior to the offence

Cannabis use in the 12 month period prior to the offence was the highest followed by alcohol. 84.2% of prisoners were using cannabis, with alcohol use reported by 80.4% of all prisoners. Methamphetamine was reported by 27.3% and amphetamine by 16.3% as presented in **(Table 9)**.

High rates of alcohol use prior to the offending is consistent with the 2001 Canadian research, conducted by Brouchu et al. (2001) that showed that the most commonly used substance prior to offending was alcohol. Such high levels of cannabis and alcohol use prior to incarceration could suggest a connection between alcohol, cannabis and crime. This is also in keeping with the study by Fergusson et al., (1996) that suggests that young people who drink heavily are more likely to commit violent offences. However it must be considered that substance use does not automatically constitute substance abuse or SUDs.

Table 9: Substances used in the 12 month period before offence was committed in a sample of Rimutaka and Wellington prisoners, 2006 (n=102).

| Substances used in the 12 month period before offence | % of total |
|---|---|
| Cannabis | 80.4% |
| Alcohol | 84.2% |
| Methamphetamine | 27.3% |
| Amphetamine | 16.3% |

### 6.3.4 Substances used in the 24 hour period prior to the offence

The four most used substances in the period prior to the offence were cannabis, alcohol, methamphetamine and amphetamines **(Table 10)**. Cannabis use was reported by 63.4% of prisoners and alcohol by 54.4% in the 24 hour period prior to the offence. Of interest possibly due to an increase in availability and media attention was that methamphetamine was reported by 22.2% and amphetamines by 10.9% of the prisoners prior to the commission of the crime. These figures are considerably lower compared to reported alcohol and cannabis use prior to offending.

Table 10: Substances used in the 24 hour period prior to the offence in a sample of Rimutaka and Wellington prisoners, 2006 (n=102)

| Substances used in the 24 hours before offence | % of total |
|---|---|
| Alcohol | 63% |
| Cannabis | 56.4% |
| Methamphetamine | 22.2% |
| Amphetamine | 10.9% |

Prisoners were asked to report their level of intoxication prior to committing the index offence **(Table 11)**. This was self rated compared with previous experience of intoxication i.e. prisoner felt this occasion was low, medium or high level of intoxication for them. Of the 102 prisoners, 51 (50%) perceived their level of intoxication as high. Moderate level of intoxication was reported by 26 (25.5%) and 10 (9.8%) reported their level of intoxication to be low. Fifteen (14.7%) reported no substance use prior to the commission of the crime. Those prisoners who reported their level of intoxication to be high were not found more likely to be imprisoned for a violent offence.

Table 11: Level of intoxication in 24 hour period before offence was committed in a sample of Rimutaka and Wellington prisoners, 2006 (n=102)

| Level of intoxication in 24 hours before offence | Total | % of total |
|---|---|---|
| High | 51 | 50.0% |
| Moderate | 26 | 25.5% |
| Low | 10 | 9.8% |
| No substance use prior to offending | 15 | 14.7% |
| Total | 102 | 100.0% |

## 6.4 DATA ANALYSIS OF THE SAMPLE

This section of the thesis addresses the second objective of the research 'to examine if SUDs are more prevalent in violent offending and if other factors are related to violent offending. The sample in the study was divided into two sub-samples. Prisoners incarcerated for non-violent offences and prisoners that had offended violently to discover if SUDs or other factors differentiated these populations **(Table 12)**.

Table 12: Non-violent prisoners versus prisoners that committed a violent offence

| Variables | Violent | Non Violent | Total |
|---|---|---|---|
| | 70 | 32 | 102 |
| **Age** | | | |
| 18-35 | 54 | 21 | 75 |
| 36-67 | 16 | 11 | 27 |
| **Ethnicity** | | | |
| New Zealand Maori | 45 | 15 | 60 |
| New Zealand European | 13 | 14 | 27 |
| Pacific Islander | 12 | 2 | 14 |
| **Educational Qualifications** | | | |
| School cert/NCEA and above | 5 | 11 | 16 |
| Left school with no qualifications | 65 | 21 | 86 |
| **Previous A & D intervention** | | | |
| In the community | 28 | 12 | 40 |
| In prison | 17 | 8 | 25 |
| No previous intervention | 25 | 12 | 37 |
| **Previous mental health diagnosis** | | | |
| Previous diagnosis | 18 | 7 | 25 |
| No previous diagnosis | 52 | 25 | 77 |
| **Substance Use Disorders** | | | |
| Substance Dependence | 59 | 27 | 86 |
| Substance Abuse | 8 | 1 | 9 |
| No Substance Use Disorders | 3 | 4 | 7 |
| **Levels of reported intoxication prior to offence** | | | |
| High | 38 | 13 | 51 |
| Moderate | 19 | 7 | 26 |
| Low | 5 | 5 | 10 |
| No substance use prior to offending | 8 | 7 | 15 |

The study found that SUDs were not more prevalent in the prisoner's that had offended violently compared to the prisoner's that were incarcerated for a non-violent offence. Many of the prisoners that had offended in a non-violent nature had multiple SUDs. There was also no statistical significance between a previous mental health diagnosis and being currently imprisoned for a violent offence.

One finding of statistical significance was that prisoners that had offended violently were more likely to have had only two or less years of secondary education having left school with no qualifications. Maori in particular were more likely to have left school with no qualifications. This may be due to possible socio-economic status and opportunity. For example, Maori may have come from socioeconomic disadvantage where education was not able to be a priority. In addition Maori were found to be significantly more likely to be in prison for a violent offence than a non-violent offence.

## 6.5 Chi-square analysis

Chi-square ($\chi^2$) analysis was conducted to test if there was a relationship between two identified variables. The Chi-square test was designed to test hypothesis about category data using a technique called the 'goodness of fit'. The test ascertains whether a significant difference exists between an observed number of responses in (one or two) categories and an expected number based upon the null hypothesis. When the data is nominal, the simplest approach is to use two-way contingency table analysis called the Chi-square $\chi^2$ test (Minichiello, Sullivan, Greenwood, &

Axford, 1999). The traditional rule of thumb is that the expected frequency must always be equal to or greater than 5 (Kranzler & Moursand, 1995). In this study the Chi-square statistic was computed to test the relationship between two variables and then described.

### 6.5.1 CHI SQUARE TEST FOR AGE VERSUS NON/VIOLENT OFFENDING

It was found that there was no relationship between age and violent offending **(Table 13)**. Of the 102 prisoners there were 54 violent prisoners that were aged 18-35 years and 16 violent prisoners were aged 36-67 years. In the non-violent prisoners 21 were aged 18-35 years and 11 non-violent prisoners were aged 36-67 years.

Table 13: Chi Square test for age versus prisoners incarcerated for a non-violent offence compared to prisoners that committed a violent offence

| | Total | 18-35 years[1] | 36-67 years[1] |
|---|---|---|---|
| Violent | 70 | 54 | 16 |
| Non-violent | 32 | 21 | 11 |
| All | 102 | 75 | 27 |
| $\chi^2$ = 1.497, DF= 1, P-Value= 0.221 | | | |

[1] The original age data was more aggregated. Data were aggregated to achieve sufficient cell numbers for Chi Square analysis.

### 6.5.2 CHI SQUARE TEST FOR ETHNICITY VERSUS NON/VIOLENT OFFENDING

It was found that there was a relationship between identified ethnicity and violent offending **(Table 14)**. Of the 102 prisoners, 45 of the 70 violent prisoners identified as Maori. This left 13 prisoners in the violence category that identified as New Zealand European and 12 as Pacific Islanders. Within the 32 non-violent prisoners there were 15 Maori, 14 European, two Pacific Islanders and one other. The findings suggest that Maori in the sample were more likely to have committed a violent offence. No definite conclusions can be drawn until further research and analysis takes place.

Table 14: Chi Square test for ethnicity versus prisoners incarcerated for a non-violent offence compared to prisoners that committed a violent offence.

| | Total | NZ Euro | NZ Maori | Pacific Islander | Other |
|---|---|---|---|---|---|
| Violent | 70 | 13 | 45 | 12 | |
| Non-violent | 32 | 14 | 15 | 2 | 1 |
| All | 102 | 27 | 60 | 14 | 1 |

$\chi^2$ = 8.368, DF=2, P-Value= 0.015

### 6.5.3 CHI SQUARE TEST FOR EDUCATION VERSUS NON/VIOLENT OFFENDING

It was found that there was a strong statistical relationship between being in jail for a violent offence and having no education **(Table 15)**. Of the 102 prisoners, 65 of the 70 prisoners in the violence category reported that left school with out qualifications. In the 32 non-violent prisoners group, 21 reported leaving school with no education.

The findings that there is a relationship between no qualifications and violent offending is consistent with Gilligan (2001), that level of education is one of the strongest predictors of whether or not a person will be violent. Nevertheless, these findings must be considered carefully as they may lack empirical evidence and Gilligan (2001), acknowledges that nothing is one hundred percent under all circumstances but many surveys have confirmed that higher education has reduced rates of recidivism for more than could be due to chance.

Table 15: Chi Square test for education versus prisoners incarcerated for a non-violent offence compared to prisoners that committed a violent offence.

| | All | No qualifications[2] | Qualification[2] |
|---|---|---|---|
| Violent | 70 | 65 | 5 |
| Non-violent | 32 | 21 | 11 |
| All | 102 | 86 | 16 |
| $\chi^2$ = 12.314, DF= 1, P-Value= 0.001 | | | |

[2] The original qualifications data were more disaggregated distinguishing between different educations. Data was aggregated to achieve sufficient cell numbers for Chi Square analysis.

### 6.5.4 CHI SQUARE TEST FOR PAST TREATMENT VERSUS NON/VIOLENT OFFENDING

Table 16 shows that there was no relationship between previous Alcohol & Drug treatment and violent offending. Of the 102 prisoners, there were 28 in the violence category that had been involved in previous alcohol & drug treatment in the community, 17 in prison and 25 that reported no previous treatment. In the non-violent prisoners, 12 reported previous A & D intervention in the community, eight in prison and 12 that reported no previous treatment.

Table 16: Chi Square test for past treatment versus prisoners that have committed a non-violent offence compared to prisoners that have committed a violent offence.

| | Total | Community | Prison | No tmt |
|---|---|---|---|---|
| Violent | 70 | 28 | 17 | 25 |
| Non-violent | 32 | 12 | 8 | 12 |
| All | 102 | 40 | 25 | 37 |
| $\chi^2$ = 0.059, DF= 2, P-Value= 0.971 | | | | |

### 6.5.5 CHI SQUARE TEST FOR MENTAL HEALTH VERSUS NON/VIOLENT OFFENDING

It was found that there was no relationship between a previous mental health diagnosis and violent offending **(Table 17)**. Of the 102 prisoners, 18 of the 70 violent

prisoners reported a previous mental health diagnosis, leaving 52 that reported no previous diagnosis. Of the 32 non-violent prisoners, seven reported a previous mental health diagnosis and 25 that had no previous diagnosis.

Table 17: Chi Square test for mental health versus prisoners incarcerated for a non-violent offence compared to prisoners that have committed a violent offence.

| | Total | Previous diagnosis | None |
|---|---|---|---|
| Violent | 70 | 18 | 52 |
| Non-violent | 32 | 7 | 25 |
| All | 102 | 25 | 77 |
| $\chi^2$ = 0.175, DF= 1, P-Value= 0.676 | | | |

### 6.5.6 CHI SQUARE TEST FOR SUBSTANCE USE DISORDERS VERSUS NON/VIOLENT OFFENDING

It was found that there was not a statistically significant relationship between SUDs and prisoners that had offended violently **(Table 18)**. Of the 102 prisoners, 59 of the 70 prisoners in the violence category meet the diagnostic criteria for substance dependence, eight with substance abuse and three that did not meet the criteria for a SUD. Within the non-violent prisoners, 27 of the 32 meet the criteria for substance dependence, one with substance abuse and four did not meet the criteria for a SUD.

These results were different than hypothesized. It was expected that substance abuse would be more prevalent in the prisoners with violent offences compared to

the non-violent prisoners. The current study figures of 93% of the prisoners diagnosed with a Substance Use Disorder are consistent with previous studies. It could be interpreted that rates of SUDs in New Zealand prisoners has remained constant in the past twenty years.

Table 18: Chi Square test for Substance Use Disorders versus prisoners incarcerated for a non-violent offence compared to prisoners that have committed a violent offence.

| | Total | Substance Dependence | Substance Abuse | None |
|---|---|---|---|---|
| Violent | 70 | 59 | 8 | 3 |
| Non-violent | 32 | 27 | 1 | 4 |
| All | 102 | 86 | 9 | 7 |
| $\chi^2$ = 3.875, DF= 2, P-Value= 0.144 | | | | |

### 6.5.7 CHI SQUARE TEST FOR LEVEL OF INTOXICATION VERSUS NON/VIOLENT OFFENDING

It was found that there was no relationship between the self reported levels of intoxication in the 24 hour period prior to the crime **(Table 19)**. Of the 102 prisoners, 38 of the 70 prisoners that committed a violent offence reported a high level of intoxication, 19 moderate and five low. In the 32 non-violent prisoners, 13 of them reported a high level of intoxication, seven moderate and five low.

Table 19: Chi Square test for level of intoxication versus prisoners incarcerated for a non-violent offence compared to prisoners that have offended violently.

| | All | High | Moderate | Low | None |
|---|---|---|---|---|---|
| Violent | 70 | 38 | 19 | 5 | 8 |
| Non-violent | 32 | 13 | 7 | 5 | 7 |
| All | 102 | 51 | 26 | 19 | 15 |

$\chi^2$ = 4.300, DF=3, P-Value= 0.231

### 6.5.8 CHI SQUARE TEST ETHNICITY VERSUS EDUCATION

In the prison population studied it was found that there was a relationship between ethnicity and leaving school with no qualification **(Table 20)**. Of the 102 prisoners, 55 of the 60 that identified as New Zealand Maori reported that they had no qualifications. Of the 15 that reported having qualifications, five identified as New Zealand Maori and ten as New Zealand European. These kinds of ethnic differences may stem from variances in socio-economic status. Ethnic comparisons were considered in the (Oakley Browne et al., 2006) New Zealand mental health survey which was conducted from people living in private households. It was found that the prevalence of disorders was higher for Maori and Pacific people generally. Those authors concluding that Maori and Pacific people possibly have a greater burden due to mental health problems. Much of this burden appears to be due to the youthfulness of Maori and Pacific populations and their relative socioeconomic disadvantage (Oakley Browne et al., 2006).

Table 20: Chi Square test ethnicity versus education

| | Total | No qualifications | Qualification |
|---|---|---|---|
| NZ Euro | 27 | 17 | 10 |
| NZ Maori | 60 | 55 | 5 |
| Pacific | 14 | 14 | 0 |
| Other | 1 | 1 | |
| All | 102 | 86 | 15 |

$\chi^2$ = 13.057, DF= 2, P-Value= 0.001

# CHAPTER 7:

# CONCLUSIONS AND RECOMMENDATIONS

## 7.1 Introduction

This study succeeded in recruiting a sample of 102 participants from among the understudied population of New Zealand prisoners. The prisoners were randomly selected from Rimutaka and Wellington Men's prisons and interviewed using a diagnostic structured clinical interview to diagnose SUDs. To the best of the researcher's knowledge, it is the first case study in New Zealand that has investigated if SUDs are more prevalent in the prisoners that have offended violently compared to prisoners that had committed a non-violent offence.

The researcher set out to establish if a relationship existed between SUDs and violent offending while investigating other factors such as age, ethnicity, education, past alcohol and drug treatment, substances used prior to the offence and reported level of intoxication. The study aimed to be able to differentiate between a diagnosis of substance abuse and substance dependence and comments are made about the advantage of this from a clinical perspective. The present study has also identified what types of substances prisoners are more likely to be dependant upon if any and what substances are being consumed the most in the year and twenty-four hour period prior to their most recent offending.

## 7.2 Sociodemographic Characteristics

The results section demonstrated that the demographic profile of the prisoners in the present study appeared to be consistent with that of the entire male New Zealand prison population in regard to age, ethnicity and offending type. Given these similarities, it could be argued that this project recruited a reasonably representative sample of prisoners suggesting that the results can be generalised to the entire New Zealand prison population.

## 7.3 Hypothesis

The researcher hypothesized that SUDs were going to be more prevalent in the prisoners that were incarcerated for a violent offence compared to the prisoners that had committed a non-violent offence. The results did not support this hypothesis as it was found that prisoners that were incarcerated for a non-violent offence were just as likely to be diagnosed with a Substance Use Disorder including substance dependence, compared with the prisoners that had committed a violent offence. Overall, SUDs were found in ninety three percent of the entire studied population. Neither was it more likely that prisoners who committed a violent offence were more likely to have the lesser disorder of substance abuse.

## 7.4 Study limitations

Despite the difficulties of researching participants in a unique and captive environment such as a prison, this study presented minimal limitations. The limitations of the present study are discussed providing different approaches which may have been more suited. Suggestions are made so that if a similar study is replicated improvements could be considered.

## 7.5 Design and Sample Limitations

It is relevant to note how the present study differentiated between prisoners that had offended violently and those that had committed a non-violent offence. The study design separated the prisoners that were currently serving a sentence for an offence that was either violent or non-violent. For example, if a prisoner was incarcerated for multiple offending which included violent offending and non-violent offending they were placed in the violence sample. This meant that prisoners that were in the violence group may have had offences that were also non-violent. More importantly, prisoners that were in the non-violence sample may have a previous history of violent offending. Also, if a prisoner was in the violence group because they had offended violently it was not determined if they had a previous history of violent offending. The present study selected the prisoners into violent and non-violent by the following method,

**Prisoners in the non-violent category:**

Prisoners that were in jail for a non-violent offence but may have previously offended violently.

**Prisoners in the violence category:**

Prisoners that were in jail for a violent offence but may have also committed non-violent offences and have no previous violent offending.

The present study may have been more exclusive in the selection process which might have achieved a more pure contrast between predominately violent and non-violent offenders. For example, the prisoners could have been selected using the following method.

**Prisoners in the non-violent category:**

Prisoners that are in jail for non-violent offending and do not have any previous violent offences.

**Prisoners in the violence category:**

Prisoners that were in jail for an index offence that was violent and had previously offended predominately in a violent nature.

However, this method of selection may have limited the numbers in the study as it might have been difficult to find non-violent offenders with no previous violent offences and violent offenders that do not have any previous non-violent offences.

By selecting the prisoners this way it may not have added any more than the present study has.

To reduce bias the research participants were randomly selected by the controller of the database which meant that every prisoner serving a sentence at Rimutaka and Wellington prison at the time of selection was considered. The sample did limit data to male prisoners only and did not incorporate any female participants. This could be a suggestion for any further studies to juxtapose male and female prisoners when identifying SUDs in a prison population as a point of comparison.

The study design was quantitative in nature which aggregates information across individuals to arrive at estimates for the population studied. For instance, quantitative research does not capture the unique experience of the individual.
In the future this is a direction that research within prisons could take to qualitatively study the lives of prisoners to capture the experience of alcohol and drug use in violent offenders and in particular why prisoners return to using on exit from prison despite enforced abstinence.

## 7.6 Data Validity

Data bias may be inevitable in research involving substance use including illegal substances, due to the sensitive nature of the topic of study and the location of the participants in prison. Silman & Macfarlane (2002) state that ethical committees frequently express concern about the inclusion in questionnaires of data concerning

sensitive topics like sexual practices and use of addictive substances because of the danger of participants incriminating themselves and of issues of privacy. To help increase the validity of the data in the present study regular guarantees of anonymity and confidentiality were emphasized at all stages during the research to consider this particular limitation of the research.

Even though confidentiality was guaranteed to the prisoners the researcher was not in the position to obtain any other collaborative data from other sources to help verify the validity of a diagnosis of SUDs such as investigating the penal file of the prisoners in the present study. For example, the file may have contained information such as a previous alcohol and drug assessment or a screening tool such as the AUDIT and DAST that is completed during the Integrated Offender Management process. Alternatively the researcher may have clarified certain information with family members if this was approved by the participants. This information may have helped to verify the presence of a Substance Use Disorder and strengthened the validity of the self-reporting by the prisoner.

When considering the current data there were factors that may have positively influenced the validity of the self-reporting. The methodology in the present study was a clinical structured interview that used direct and objective questions. In other words, participants may have been less likely to falsify information as they may not have appreciated the collective significance of their responses and this would have increased the validity of the data.

The researcher is employed in the prison environment as an Officer so there was already a previous rapport with the prison population suggesting that the prisoners in the study may have felt comfortable and confident that the researcher was not trying to cause them any harm or incriminate them by participating in the study. All the participants were assured on numerous occasions and at all stages of the project that information collected was to remain confidential at all times which gave the prisoners confidence that the information they provided could not affect them adversely in any way.

The tool of choice (SUDDS-IV) had previously been validated with a prison population internationally but it had not been used in a New Zealand prison in which fifty percent of the prisoners are Maori. As mentioned by Oakley et al. (2006) in the recent major epidemiological study, diagnostic instruments do not usually incorporate Maori beliefs about health, as the systems of disease classification it follows are the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, reflecting Western or Eurocentric conceptualisations and beliefs about mental disorders. During the development of the present study there was consultation with Maori Kaumatua to raise any methodological concerns. The tool used in this study was not found to cause concern to Maori who were consulted or Maori that participated. To summarise, it could be suggested that given the location of the participants and the sensitive nature of the questionnaire the study took into consideration the limitations and the strengths of the data's validity.

## 7.7 Recommendations

The findings that have evolved have generated questions and directions for further research within New Zealand prisons. Figures show the extent and the severity of SUDs in New Zealand prisoners. The aim of the study was to stimulate interest in the field, look at the current picture and to begin to examine current practice when managing SUDs so that the future direction is evidence based.

Beginning with a review of writings and research in the alcohol and drug field this study firstly defines SUDs and provided theoretical explanations for alcohol and drug use. International and New Zealand research previously conducted in prisons were discussed providing relevant background information and statistics for comparison to the current study. Overall, 93.1% of the prisoners in the present study meet the criteria for a Substance Use Disorder with the vast majority (84.3%) however meeting the more severe criteria for substance dependence. Only 8.8% diagnosed with substance abuse, and only 6.9% that did not have a substance use disorder at all. It was found that SUDs were not more prevalent in the prisoners that had offended violently compared to the prisoners that had committed non-violent offences. Despite this only small numbers of all prisoners can have SUDs treatment and no prisoners in the violence prevention unit can receive SUDs treatment at all.

In summary, SUDs affected large numbers of prisoners (93.1%) that participated in the study, with substance dependence being diagnosed in as many as 86 of the 102 participants. The most prominent drugs of dependence in this population are cannabis and alcohol. With such phenomenally high rates of SUDs in the New

Zealand prison population this area needs continual research so that best practice is considered. Despite the relative small size of substance abuse compared to substance dependence in prisoners it is worth having different intervention strategies available for the substance abuse cases as success may be greater with a less severe disorder.

This study has established that alcohol and cannabis are the two drugs that prisoners are most commonly dependant on and highly likely to be consumed in the twenty four hour period leading up to committing the offence. The evidence suggests that these two substances have shown to often be drugs of choice and dependence within a New Zealand prison population. This emphasising the need to consider both alcohol and cannabis in assessment and focusing education for the best effect due to the extremely large numbers of prisoner that have reporting consuming them.

Of significance is that statistically it was found that the prisoners that had committed a violent offence were more likely to have identified as Maori and more likely to have left school with no qualifications. It was also found that the prisoners that identified as Maori were statistically more likely to have left school before obtaining an education. The focus of rehabilitation should continue to have an emphasis on Maori and their Whanau to break the cycle and educate the potential next violent offender. In addition this also highlights possible habilitation rather that rehabilitation issues. For many of the prisoners limited education and means to cope with anger have not been provided to these men before substances come into their lives and filled the gap.

This notion is fully supported by the Department of Correction's Maori Strategic Plan 2003-2008 that places Maori culture, values, philosophies and practices to the forefront when considering solutions for addressing Maori offending. The Department of Corrections (2003) believe this approach is incorporated in the Department's management of offenders from assessment, to intervention, to ensure that staff engage with Maori offenders in a way that is respectful of Maori culture and Maori world views.

## 7.8 Summary

The challenge for future research is to investigate qualitatively to capture the lives of New Zealand prisoners and their experiences of substance use and offending.

The trend that more Maori are going to be incarcerated is expected to remain placing emphasis on the need to continue working with Maori so that Maori offending is reduced. This focus will include being effective for Maori, building partnerships with Maori and being responsive to Maori. The needs of prisoners go beyond their substance use problems and include mental health, legal, family, medical, education, and employment issues. Another important opportunity is to support the families of the established adult offenders to change substance use in order to prevent the next generation following a similar path and becoming an offending population.

It is important to note that Maori were not an original focus of this study. The focus was SUDs and violent offending. Due to what has been discovered from this study it only reinforces the importance that a Maori viewpoint is considered when dealing and working with a New Zealand offending population. For example, there may be a

need to utilise more Maori educators and researchers in further studies so other theoretical explanations can be explored.

Another possibility raised by this research was that by the time that some individuals are sent to prison their SUDs may well have progressed into the more serious diagnosis of substance dependence and interventions may have been needed prior to reaching this point of severity. Both substance abuse and substance dependence are different disorders that need to be assessed so that they can be intervened with accordingly.

Those individuals who do not consider they have a substance use disorder such as substance dependence may still benefit from learning to reduce their substance use rather than having to face the treatment goal of abstinence. Also, even though this study has shown that relatively small numbers of prisoners have been diagnosed with substance abuse it should still be assessed with a diagnostic tool as these are more likely to respond to respond to non-abstinence rehabilitations.

By intervening with those that meet the criteria for Substance Abuse it may reduce the further incidence of substance dependence and to eliminate further offending associated with substance use. As pointed out by Prendergast & Wexler (2004) the potential for the prisoner to 'fall through the cracks' is great, unless the system involved is culturally appropriate, collaborative in assessment, actively referring prisoners to a range of programmes, sharing information with other supporting organisations, monitoring service access and following up the transition from prison to the community.

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# Appendix I

# SUDDS-IV™

Substance Use Disorders Diagnostic Schedule

Norman G. Hoffmann, Ph.D. and Patricia A. Harrison, Ph.D.

Name _____ Interviewer _____

ID# ___ ___ ___ / ___ ___ / ___ ___ ___ ___ Location Code _____

Birthdate ___ ___ / ___ ___ / ___ ___

Sex (Circle) 1 Male 2 Female Date of Interview ___ ___ / ___ ___ / ___ ___



GENERAL INFORMATION

1. What is your ethnic origin?
   1 Asian
   2 African-American
   3 Hispanic
   4 Native American
   5 Caucasian
   6 Biracial/Multiracial/Other

2. What is your current marital status?
   1 Never married
   2 Married
   3 Separated
   4 Divorced
   5 Widowed

3. What is the highest degree you have earned?
   1 Not a high school graduate
   2 High school diploma/GED
   3 Vocational/technical/business school
   4 Associate Degree (2 year)
   5 Bachelor Degree (4 year)
   6 Master's Degree
   7 M.D., J.D., Doctorate

4. Are you employed?
   1 Yes, full-time (35 hours or more)
   2 Yes, part-time (less than 35 hours)
   3 No, unemployed (seeking work)
   4 Not working by choice

5. What is your primary job when you are working?
   1 Professional/technical
   2 Manager/administrator/business owner/farmer
   3 Sales
   4 Clerical/office worker
   5 Craft/skilled trades
   6 Transportation/equipment operator
   7 Laborer
   8 Domestic worker (housekeeper, daycare, etc.)
   9 Service worker (waiter/waitress)
   10 Military Service
   11 Other (specify) _____

6. What was your total personal income last year?
   1 None to $10,000
   2 $10,001 to $20,000
   3 $20,001 to $30,000
   4 $30,001 to $40,000
   5 $40,001 to $50,000
   6 Over $50,000

7. Are any minor children living with you?
   0 No
   1 Yes

STRESS

8. Have any of the following experiences caused you stress in the past 12 months? That would be since (month) of last year. (Emphasize "past 12 months" every few items.)

| | | No | Yes |
|---|---|---|---|
| a. | Serious financial difficulties? | 0 | 1 |
| b. | A new job or career change? | 0 | 1 |
| c. | A job loss or layoff? | 0 | 1 |
| d. | Unemployment? | 0 | 1 |
| e. | Extended periods of inactivity or boredom? | 0 | 1 |
| f. | Serious job or school problems? | 0 | 1 |
| g. | Serious conflict at home? | 0 | 1 |
| h. | Loss of a valuable friendship? | 0 | 1 |
| i. | Serious illness or injury to yourself? | 0 | 1 |
| j. | Serious illness or injury to a close friend or family member? | 0 | 1 |
| k. | Death of a close friend? | 0 | 1 |
| l. | Death of a close family member? | 0 | 1 |
| m. | Divorce or separation? | 0 | 1 |
| n. | Breakup of a relationship? | 0 | 1 |
| o. | Any other serious stress? | 0 | 1 |

ANXIETY

9. Now I am going to ask you about some feelings.

| Have you ever: | Ever No | Ever Yes | Current No | Current Yes |
|---|---|---|---|---|
| a. Experienced distinct periods of intense fear in the absence of any real danger? | 0 | 1 | 0 | 1 |
| b. Avoided things or places that made you anxious? | 0 | 1 | 0 | 1 |
| c. Tended to worry about things or possible events for no good reason? | 0 | 1 | 0 | 1 |
| d. Felt unusually anxious about things that might happen when others thought there was no reason to worry? | 0 | 1 | 0 | 1 |

DEPRESSION

10. Was there ever at least a two-week period when you:

| | Ever No | Ever Yes | Current No | Current Yes |
|---|---|---|---|---|
| a. Felt depressed, sad, or down in the dumps most of each day? | 0 | 1 | 0 | 1 |
| b. Were unable to enjoy anything? | 0 | 1 | 0 | 1 |

**Note: If neither a nor b is endorsed, go to #12.**

11. During that two-week period, did you:

| | Ever No | Ever Yes | Current No | Current Yes |
|---|---|---|---|---|
| a. Feel worthless or guilty? | 0 | 1 | 0 | 1 |
| b. Feel tired, without any energy? | 0 | 1 | 0 | 1 |
| c. Have trouble concentrating, or your thinking seemed to slow down? | 0 | 1 | 0 | 1 |
| d. Have any sleep problems? | 0 | 1 | 0 | 1 |
| e. Lose your appetite or lose weight without dieting? | 0 | 1 | 0 | 1 |
| f. Have recurrent thoughts about death or suicide? | 0 | 1 | 0 | 1 |
| g. Feel agitated or restless? | 0 | 1 | 0 | 1 |
| h. Feel as though you were moving in slow motion? | 0 | 1 | 0 | 1 |

SMOKING

12. Have you ever smoked tobacco daily?
    - 0 No (Go to #16)
    - 1 Yes

13. How old were you when you first smoked daily? ___

14. How much do you smoke now?
    - 1 Not at all. Quit (Go to #16)
    - 2 Occasionally, less than once a day
    - 3 Pipe/cigars only
    - 4 Up to 1 pack/day
    - 5 More than 1 pack/day

15. Have you ever tried to quit or reduce your smoking?
    - 0 No
    - 1 Yes

16. During the past 12 months, on average how often do you drink alcohol?

1 Never drank alcohol (Go to #22 )
2 Have not had a drink in the past year (Go to #20)
3 Less than once a month
4 At least once a month
5 1 to 2 days a week
6 3 to 4 days a week
7 5 to 6 days a week
8 Every day

17. When you drink, how many drinks do you usually have?

**Note: "Drink" refers to a mixed drink, bottle/can of beer, glass of wine, or the equivalent of about 1/2-ounce of pure alcohol.**

1 1 or 2
2 3 or 4
3 5 or 6
4 7 or more

18. How long has it been since you had a drink?

1 Within the past day
2 2 to 7 days
3 8 to 30 days
4 1 to 6 months
5 7 to 12 months
6 More than a year ago

19. How long has it been since you were last intoxicated?

1 1 to 7 days
2 8 to 30 days
3 2 to 6 months
4 7 to 12 months
5 Over a year ago
6 Never was intoxicated

**ADMINISTRATION OPTIONS**

There are two possible ways to administer the SUDDS-IV:

1. Record only the "yes" or "no" response for questions 20, 21, and 23 to 62 in the initial inquiry. When all questions have been asked, probe for the number of times the event occurred in the past year for each substance used. Record "E" if the event last occurred more than a year ago.
2. Probe for number of occurrences for each substance in a single pass through the interview for all substances involved.

   Note: The age of onset is not required for a diagnosis, but may be useful information in understanding the current status of the client.

20. Did you ever drink a fifth of liquor in one day? (That would be about 20 drinks, or 3 bottles of wine or 3 six-packs of beer.)

| | | Times in Past Year | Age of Onset |
|---|---|---|---|
| 0 | No | | |
| 1 | Yes | 1 2 3+ | __ __ |

21. Have you ever had so much to drink that the next day you could not remember what you had said or done?

| | | Times in Past Year | Age of Onset |
|---|---|---|---|
| 0 | No | | |
| 1 | Yes | 1 2 3+ | __ __ |

**GO TO NEXT PAGE**

22. Now I am going to ask you about your experiences with drugs.
Have you ever used __(drug)__ to get high?
***Check the box before each drug group used.***
**Note: State enough of the alternative names to ensure that the individual understands the category of drugs.**

**For each substance used ask:**
In the past 12 months, how often did you use __(drug)__?
Code frequency of use according to the following:
1 = Every day
2 = 5 to 6 days a week
3 = 3 to 4 days a week
4 = 1 to 2 days a week
5 = At least 12 times a year
6 = Fewer than 12 times a year
7 = Never used

❑ Cannabis (Hashish, Marijuana, Pot, Grass)
1 2 3 4 5 6 7

❑ Cocaine (Coke, Crack)
1 2 3 4 5 6 7

❑ Amphetamines - Stimulants (Speed, Uppers)
1 2 3 4 5 6 7

❑ Sedatives -- Hypnotics -- Tranquilizers (Barbiturates, Sleeping Pills, Seconal, Quaaludes, Tranquilizers, Valium, Librium, Xanax)
1 2 3 4 5 6 7

❑ Heroin - Opioids (Codeine, Demerol, Morphine, Methadone, Darvon, Opium, Dilaudid)
1 2 3 4 5 6 7

❑ Inhalants (Huffing, Paint, Glue, Aerosols, Butane)
1 2 3 4 5 6 7

❑ PCP (Angel Dust)
1 2 3 4 5 6 7

❑ Hallucinogens (LSD, Mescaline, Peyote, Psychedelics, Psilocybin, DMT)
1 2 3 4 5 6 7

❑ Other, Unknown, or Mixed (other prescription medications, steroids, antihistamines)
1 2 3 4 5 6 7

**For each substance used ask:**
How long ago did you last use __(drug)__?
Code recent use according to the following:
1 = Within the past day
2 = 2 to 7 days
3 = 8 to 30 days
4 = 1 to 6 months
5 = 7 to 12 months
6 = More than one year
7 = Never used

Cannabis (Hashish, Marijuana, Pot, Grass)
1 2 3 4 5 6 7

Cocaine (Coke, Crack)
1 2 3 4 5 6 7

Amphetamines - Stimulants (Speed, Uppers)
1 2 3 4 5 6 7

Sedatives -- Hypnotics -- Tranquilizers (Barbiturates, Sleeping Pills, Seconal, Quaaludes, Tranquilizers, Valium, Librium, Xanax)
1 2 3 4 5 6 7

Heroin - Opioids (Codeine, Demerol, Morphine, Methadone, Darvon, Opium, Dilaudid)
1 2 3 4 5 6 7

Inhalants (Huffing, Paint, Glue, Aerosols, Butane)
1 2 3 4 5 6 7

PCP (Angel Dust)
1 2 3 4 5 6 7

Hallucinogens (LSD, Mescaline, Peyote, Psychedelics, Psilocybin, DMT)
1 2 3 4 5 6 7

Other, Unknown, or Mixed (other prescription medications, steroids, antihistamines)
1 2 3 4 5 6 7

**IF NO USE OF A DRUG IS REPORTED, BUT ALCOHOL USE WAS REPORTED, GO TO #24. CONTINUE INTERVIEW ABOUT ALCOHOL USE ONLY.**

**IF NEITHER ALCOHOL NOR DRUG USE HAS BEEN ACKNOWLEDGED, END THE INTERVIEW.**

23. Did you ever inject any drug to get high?

| | | Times in Past Year | Age of Onset |
|---|---|---|---|
| 0 | No | | |
| 1 | Yes | 1 2 3+ | __ __ |

24. Have you ever used alcohol or drugs to relieve emotional discomfort, such as sadness, anger, or boredom?

0 No

| 1 | Yes | Ever | Times in Past Year | Age of Onset |
|---|---|---|---|---|
| | Alcohol | E | 1 2 3+ | __ __ |
| | Cannabis | E | 1 2 3+ | __ __ |
| | Cocaine | E | 1 2 3+ | __ __ |
| | Amphetamines | E | 1 2 3+ | __ __ |
| | Sedative/Tranq. | E | 1 2 3+ | __ __ |
| | Opioid/Heroin | E | 1 2 3+ | __ __ |
| | Inhalant | E | 1 2 3+ | __ __ |
| | PCP | E | 1 2 3+ | __ __ |
| | Hallucinogen | E | 1 2 3+ | __ __ |
| | Other or Mixed | E | 1 2 3+ | __ __ |

25. Have you ever used alcohol or drugs when you didn't intend to?

0 No

| 1 | Yes | Ever | Times in Past Year | Age of Onset |
|---|---|---|---|---|
| | Alcohol | E | 1 2 3+ | __ __ |
| | Cannabis | E | 1 2 3+ | __ __ |
| | Cocaine | E | 1 2 3+ | __ __ |
| | Amphetamines | E | 1 2 3+ | __ __ |
| | Sedative/Tranq. | E | 1 2 3+ | __ __ |
| | Opioid/Heroin | E | 1 2 3+ | __ __ |
| | Inhalant | E | 1 2 3+ | __ __ |
| | PCP | E | 1 2 3+ | __ __ |
| | Hallucinogen | E | 1 2 3+ | __ __ |
| | Other or Mixed | E | 1 2 3+ | __ __ |

26. Have you ever continued to use alcohol or drugs longer than you intended?

0 No

| 1 | Yes | Ever | Times in Past Year | Age of Onset |
|---|---|---|---|---|
| | Alcohol | E | 1 2 3+ | __ __ |
| | Cannabis | E | 1 2 3+ | __ __ |
| | Cocaine | E | 1 2 3+ | __ __ |
| | Amphetamines | E | 1 2 3+ | __ __ |
| | Sedative/Tranq. | E | 1 2 3+ | __ __ |
| | Opioid/Heroin | E | 1 2 3+ | __ __ |
| | Inhalant | E | 1 2 3+ | __ __ |
| | PCP | E | 1 2 3+ | __ __ |
| | Hallucinogen | E | 1 2 3+ | __ __ |
| | Other or Mixed | E | 1 2 3+ | __ __ |

27. Have you ever used alcohol or drugs for at least two days without sobering up or getting straight?

0 No

| 1 | Yes | Ever | Times in Past Year | Age of Onset |
|---|---|---|---|---|
| | Alcohol | E | 1 2 3+ | __ __ |
| | Cannabis | E | 1 2 3+ | __ __ |
| | Cocaine | E | 1 2 3+ | __ __ |
| | Amphetamines | E | 1 2 3+ | __ __ |
| | Sedative/Tranq. | E | 1 2 3+ | __ __ |
| | Opioid/Heroin | E | 1 2 3+ | __ __ |
| | Inhalant | E | 1 2 3+ | __ __ |
| | PCP | E | 1 2 3+ | __ __ |
| | Hallucinogen | E | 1 2 3+ | __ __ |
| | Other or Mixed | E | 1 2 3+ | __ __ |

28. Have you ever spent most of the day using alcohol or drugs, or most of the day getting over the effects of use?

0 No

| 1 Yes | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

29. Have you ever found that it took more alcohol or drugs to get the same effect than it once did?

0 No

| 1 Yes | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

30. Have you ever found yourself preoccupied with wanting to use alcohol or drugs?

0 No

| 1 Yes | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

31. Has the desire to use alcohol or drugs ever been so strong that you could not resist using?

0 No

| 1 Yes | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

32. Have you ever set rules to control your alcohol or drug use that you failed to follow, such as not using alone or on weekdays, or not using before a certain time of day?

0 No

| 1 Yes | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

33. Have you ever wanted to stop using alcohol or drugs but couldn't?

0 No

| 1 Yes | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

34. Have you ever felt your life revolved around your use of alcohol or drugs?

0 No

| 1 Yes | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

35. Have you ever had any withdrawal symptoms when you cut down or stopped using alcohol or drugs?

**Note: Common symptoms include headaches, nausea, vomiting, anxiety, depressed mood, irritability, tremor, sweating, rapid heartbeat, diarrhea, disturbed sleep, or increased dreaming.**

0 No

| 1 Yes | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

36. Have you ever used alcohol or drugs to avoid or reduce hangovers, shakes, or other withdrawal symptoms?

0 No

1 Yes

| | Ever | Times in Past Year | Age of Onset |
|---|---|---|---|
| Alcohol | E | 1 2 3+ | __ __ |
| Cannabis | E | 1 2 3+ | __ __ |
| Cocaine | E | 1 2 3+ | __ __ |
| Amphetamines | E | 1 2 3+ | __ __ |
| Sedative/Tranq. | E | 1 2 3+ | __ __ |
| Opioid/Heroin | E | 1 2 3+ | __ __ |
| Inhalant | E | 1 2 3+ | __ __ |
| PCP | E | 1 2 3+ | __ __ |
| Hallucinogen | E | 1 2 3+ | __ __ |
| Other or Mixed | E | 1 2 3+ | __ __ |

37. Has your family, a friend, or anyone else ever told you they objected to your alcohol or drug use?

0 No

1 Yes

| | Ever | Times in Past Year | Age of Onset |
|---|---|---|---|
| Alcohol | E | 1 2 3+ | __ __ |
| Cannabis | E | 1 2 3+ | __ __ |
| Cocaine | E | 1 2 3+ | __ __ |
| Amphetamines | E | 1 2 3+ | __ __ |
| Sedative/Tranq. | E | 1 2 3+ | __ __ |
| Opioid/Heroin | E | 1 2 3+ | __ __ |
| Inhalant | E | 1 2 3+ | __ __ |
| PCP | E | 1 2 3+ | __ __ |
| Hallucinogen | E | 1 2 3+ | __ __ |
| Other or Mixed | E | 1 2 3+ | __ __ |

38. Has your alcohol or drug use ever damaged a relationship with someone you cared about?

0 No

1 Yes

| | Ever | Times in Past Year | Age of Onset |
|---|---|---|---|
| Alcohol | E | 1 2 3+ | __ __ |
| Cannabis | E | 1 2 3+ | __ __ |
| Cocaine | E | 1 2 3+ | __ __ |
| Amphetamines | E | 1 2 3+ | __ __ |
| Sedative/Tranq. | E | 1 2 3+ | __ __ |
| Opioid/Heroin | E | 1 2 3+ | __ __ |
| Inhalant | E | 1 2 3+ | __ __ |
| PCP | E | 1 2 3+ | __ __ |
| Hallucinogen | E | 1 2 3+ | __ __ |
| Other or Mixed | E | 1 2 3+ | __ __ |

39. Have you ever become violent or hit anyone while using alcohol or drugs?

0 No

1 Yes

| | Ever | Times in Past Year | Age of Onset |
|---|---|---|---|
| Alcohol | E | 1 2 3+ | __ __ |
| Cannabis | E | 1 2 3+ | __ __ |
| Cocaine | E | 1 2 3+ | __ __ |
| Amphetamines | E | 1 2 3+ | __ __ |
| Sedative/Tranq. | E | 1 2 3+ | __ __ |
| Opioid/Heroin | E | 1 2 3+ | __ __ |
| Inhalant | E | 1 2 3+ | __ __ |
| PCP | E | 1 2 3+ | __ __ |
| Hallucinogen | E | 1 2 3+ | __ __ |
| Other or Mixed | E | 1 2 3+ | __ __ |

40. Have you ever reduced or given up any social or recreational activities to use alcohol or drugs?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

41. Have you ever been unable to do something you planned because you were recovering from the effects of using alcohol or drugs?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

42. Have you ever neglected some of your usual responsibilities because of your alcohol or drug use?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

43. Have you ever been unable to pay bills or meet obligations because you spent your money on alcohol or drugs?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

44. Have you ever given up any social or recreational activities because you spent your money on alcohol or drugs?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

45. Have you ever missed work or school because of your alcohol or drug use?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

46. Have you ever reduced or given up your job activities or opportunities because of your alcohol or drug use?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

47. Have you ever had difficulty performing your job or doing your school work because of your alcohol or drug use?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

48. Did you ever have conflicts with supervisors or co-workers as a result of your alcohol or drug use?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | ___ ___ |
| Cannabis | E | 1 | 2 | 3+ | ___ ___ |
| Cocaine | E | 1 | 2 | 3+ | ___ ___ |
| Amphetamines | E | 1 | 2 | 3+ | ___ ___ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | ___ ___ |
| Opioid/Heroin | E | 1 | 2 | 3+ | ___ ___ |
| Inhalant | E | 1 | 2 | 3+ | ___ ___ |
| PCP | E | 1 | 2 | 3+ | ___ ___ |
| Hallucinogen | E | 1 | 2 | 3+ | ___ ___ |
| Other or Mixed | E | 1 | 2 | 3+ | ___ ___ |

49. Have you ever lost a job or been suspended or expelled from school because of your alcohol or drug use?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | ___ ___ |
| Cannabis | E | 1 | 2 | 3+ | ___ ___ |
| Cocaine | E | 1 | 2 | 3+ | ___ ___ |
| Amphetamines | E | 1 | 2 | 3+ | ___ ___ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | ___ ___ |
| Opioid/Heroin | E | 1 | 2 | 3+ | ___ ___ |
| Inhalant | E | 1 | 2 | 3+ | ___ ___ |
| PCP | E | 1 | 2 | 3+ | ___ ___ |
| Hallucinogen | E | 1 | 2 | 3+ | ___ ___ |
| Other or Mixed | E | 1 | 2 | 3+ | ___ ___ |

50. Have you ever had any medical problems that you or anyone else thought were related to your alcohol or drug use?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | ___ ___ |
| Cannabis | E | 1 | 2 | 3+ | ___ ___ |
| Cocaine | E | 1 | 2 | 3+ | ___ ___ |
| Amphetamines | E | 1 | 2 | 3+ | ___ ___ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | ___ ___ |
| Opioid/Heroin | E | 1 | 2 | 3+ | ___ ___ |
| Inhalant | E | 1 | 2 | 3+ | ___ ___ |
| PCP | E | 1 | 2 | 3+ | ___ ___ |
| Hallucinogen | E | 1 | 2 | 3+ | ___ ___ |
| Other or Mixed | E | 1 | 2 | 3+ | ___ ___ |

51. Have you ever continued to use alcohol or drugs when you knew you had a physical illness that might be made worse by alcohol or drug use?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | ___ ___ |
| Cannabis | E | 1 | 2 | 3+ | ___ ___ |
| Cocaine | E | 1 | 2 | 3+ | ___ ___ |
| Amphetamines | E | 1 | 2 | 3+ | ___ ___ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | ___ ___ |
| Opioid/Heroin | E | 1 | 2 | 3+ | ___ ___ |
| Inhalant | E | 1 | 2 | 3+ | ___ ___ |
| PCP | E | 1 | 2 | 3+ | ___ ___ |
| Hallucinogen | E | 1 | 2 | 3+ | ___ ___ |
| Other or Mixed | E | 1 | 2 | 3+ | ___ ___ |

52. While using alcohol or drugs, have you ever had an injury that required medical attention?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

53. Were you ever more likely to engage in risky sexual activity when you were using alcohol or drugs?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

54. **[Females only]** Have you ever used alcohol or drugs more than you believed you should when you knew you were pregnant?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

55. Have you ever gone days without eating properly because of your alcohol or drug use?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

56. Have you ever had emotional problems such as depression, anxiety, or paranoia, that may have been related to your alcohol or drug use?

0 No

| 1 Yes | Ever | Times in Past Year | Age of Onset |
|---|---|---|---|
| Alcohol | E | 1 2 3+ | __ __ |
| Cannabis | E | 1 2 3+ | __ __ |
| Cocaine | E | 1 2 3+ | __ __ |
| Amphetamines | E | 1 2 3+ | __ __ |
| Sedative/Tranq. | E | 1 2 3+ | __ __ |
| Opioid/Heroin | E | 1 2 3+ | __ __ |
| Inhalant | E | 1 2 3+ | __ __ |
| PCP | E | 1 2 3+ | __ __ |
| Hallucinogen | E | 1 2 3+ | __ __ |
| Other or Mixed | E | 1 2 3+ | __ __ |

57. Have you ever had occasional problems with memory or concentration that may have been related to your alcohol or drug use?

0 No

| 1 Yes | Ever | Times in Past Year | Age of Onset |
|---|---|---|---|
| Alcohol | E | 1 2 3+ | __ __ |
| Cannabis | E | 1 2 3+ | __ __ |
| Cocaine | E | 1 2 3+ | __ __ |
| Amphetamines | E | 1 2 3+ | __ __ |
| Sedative/Tranq. | E | 1 2 3+ | __ __ |
| Opioid/Heroin | E | 1 2 3+ | __ __ |
| Inhalant | E | 1 2 3+ | __ __ |
| PCP | E | 1 2 3+ | __ __ |
| Hallucinogen | E | 1 2 3+ | __ __ |
| Other or Mixed | E | 1 2 3+ | __ __ |

58. Have you ever had a motor vehicle accident after you were using alcohol or drugs?

0 No

| 1 Yes | Ever | Times in Past Year | Age of Onset |
|---|---|---|---|
| Alcohol | E | 1 2 3+ | __ __ |
| Cannabis | E | 1 2 3+ | __ __ |
| Cocaine | E | 1 2 3+ | __ __ |
| Amphetamines | E | 1 2 3+ | __ __ |
| Sedative/Tranq. | E | 1 2 3+ | __ __ |
| Opioid/Heroin | E | 1 2 3+ | __ __ |
| Inhalant | E | 1 2 3+ | __ __ |
| PCP | E | 1 2 3+ | __ __ |
| Hallucinogen | E | 1 2 3+ | __ __ |
| Other or Mixed | E | 1 2 3+ | __ __ |

59. Have you ever driven while intoxicated or under the influence of alcohol or drugs?

0 No

| 1 Yes | Ever | Times in Past Year | Age of Onset |
|---|---|---|---|
| Alcohol | E | 1 2 3+ | __ __ |
| Cannabis | E | 1 2 3+ | __ __ |
| Cocaine | E | 1 2 3+ | __ __ |
| Amphetamines | E | 1 2 3+ | __ __ |
| Sedative/Tranq. | E | 1 2 3+ | __ __ |
| Opioid/Heroin | E | 1 2 3+ | __ __ |
| Inhalant | E | 1 2 3+ | __ __ |
| PCP | E | 1 2 3+ | __ __ |
| Hallucinogen | E | 1 2 3+ | __ __ |
| Other or Mixed | E | 1 2 3+ | __ __ |

60. Have you ever been stopped or arrested for driving under the influence?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

61. Have you ever been arrested or stopped by the police because of your behavior related to alcohol or drug use?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

62. Have you ever been in trouble with the law because of possession or sale of alcohol or drugs?

0 No

1 Yes

| | Ever | Times in Past Year | | | Age of Onset |
|---|---|---|---|---|---|
| Alcohol | E | 1 | 2 | 3+ | __ __ |
| Cannabis | E | 1 | 2 | 3+ | __ __ |
| Cocaine | E | 1 | 2 | 3+ | __ __ |
| Amphetamines | E | 1 | 2 | 3+ | __ __ |
| Sedative/Tranq. | E | 1 | 2 | 3+ | __ __ |
| Opioid/Heroin | E | 1 | 2 | 3+ | __ __ |
| Inhalant | E | 1 | 2 | 3+ | __ __ |
| PCP | E | 1 | 2 | 3+ | __ __ |
| Hallucinogen | E | 1 | 2 | 3+ | __ __ |
| Other or Mixed | E | 1 | 2 | 3+ | __ __ |

# Appendix II

**Massey University**
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF HEALTH SCIENCES
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099
F 64 6 350 5668
www.massey.ac.nz

Client No: _____

Age: _____

## Ethnicity

**What ethnicity do you identify as being?** Please circle letter

A NZ European
B NZ Maori
C Cook Island Maori
D Pacific Islander
E Asian
F European
G Other, please specify _____

## Educational level

**What level of education have you acquired**

A Left school without any formal qualifications: Age when left school
B School Certificate achieved: How many subjects
C Six form Certificate achieved
D University Entrance Achieved
E Certificate
F Diploma
G Degree
H Master's Degree
I PhD

## Substances used 24 hour period

**Had you been using alcohol and other drugs in the 24 hour period before you committed the offence?** Please circle letter

| | | | |
|---|---|---|---|
| A | Alcohol | | how much: _____ |
| B | Cannabis | | how much: _____ |
| C | Methamphetamines (speed and P) | | how much: _____ |
| D | LSD | | how much: _____ |
| E | Opiates | | how much: _____ |
| F | Prescription pills | Specify: _____ | how much: _____ |
| G | Others-specify | Specify: _____ | how much: _____ |

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www.massey.ac.nz

☐ **By comparison to your previous drinking habits how would you rate your level of intoxication at the time?** Please circle letter

A Low
B Moderate
C High
D Can not remember

## Substances used 12 month period

**Had you been using alcohol and other drugs in the 12 month period before you committed the offence?** Please circle letter

☐ A Alcohol how much: _____
☐ B Cannabis how much: _____
☐ C Methamphetamines (speed and P) how much: _____
☐ D LSD how much: _____
☐ E Opiates how much: _____
☐ F Prescription pills Specify: _____ how much: _____
☐ G Others-specify Specify: _____ how much: _____

## Past Treatment

☐ **Have you ever taken part in any Alcohol and Drug programmes?**
Please circle letter

**What sort of programme was it?**

☐ A Residential programme-Did you complete ☐
☐ B A day patient programme in the community-Did you complete ☐
☐ C A 100 hour substance abuse criminogenic programme in jail-Did you complete ☐
☐ D A specialist treatment programme in jail such as ATU-Did you complete ☐
☐ E Another A & D programme in jail-Did you complete ☐

## Medical History

☐ Have you ever been diagnosed with a mental health disorder?
(Depression, Bi Polar, ADHD, schizophrenia etc) Specify: _____

☐ Are you currently receiving medication? Specify: _____ how much: _____

# Appendix III

**Massey University**
**COLLEGE OF HUMANITIES AND SOCIAL SCIENCES**

**SCHOOL OF HEALTH SCIENCES**
**Private Bag 11 222**
**Palmerston North**
**New Zealand**
**T** 64 6 356 9099
**F** 64 6 350 5668
**www.massey.ac.nz**

Reply slip

**Title: An Exploratory Study to Identify Substance Use Disorders in a Prison Population using a Diagnostic Assessment Interview.**

**Hello,**

This letter is to invite you to participate in this research.

Please let me know if you are prepared to be approached by Amanda Jones Senior Corrections Officer/ Sentence Planner about being interviewed for a research project. The research is for Amanda's Master's Degree thesis and is not research conducted by the Department of Corrections. You reply by ticking one of the boxes on the next page. Once you have done this, please return the form in the envelope provided and place it in the designated box in your unit.

The research involves spending time with an interviewer. The interviewer will ask you questions using a psychometric test. A psychometric test is a questionnaire that is going to ask questions about your previous alcohol and drug use. No individual results will be placed on your file. No previous information from your file/sentence plan or staff will be used in the research. The interviewer will not discuss anything you say with the prison staff and participation or non-participation will not affect your parole or prison status in any way.

**To summarise,**

- Today you will have read the reply slip and had a chance to think about the research.
- **If you do not** want to participate you will tick no to this form on the next page and you will never be asked about the research again.

Client No:_____

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www.massey.ac.nz

- **If you do** want to participate you will tick yes to this form and return it in the envelope in the box provided. You have one week from today to do so. There is a box for these envelopes in your unit. Please ask to find.
- You will then meet the researcher and she will go over the information sheet. This information sheet tells you what you need to know about the research and the researcher will be able to answer any questions you have.
- You can at that stage sign the consent form or you can go away and think about it.

Please remember that taking part or not taking part in this research will not interfere with your prison status, sentence plan or parole in any way.
You should also know that you will remain anonymous at all times.
Thank-you.

**Cut or tear off here to reply**

---

**<u>If you tick the box below</u>**

[ ]You will meet Amanda Jones (researcher) and go through the research information sheet with you. This information sheet tells you what you need to know about the research and the researcher will be able to answer any questions you may have.
You can at that stage sign the consent form or you can go away and think about it. You will have one week to decide if you consent to participating.

**<u>If you tick the box below,</u>**

[ ] You will not be asked about this research again.

Client No:_____

# Appendix IV

**Massey University**
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF HEALTH SCIENCES
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099
F 64 6 350 5668
www.massey.ac.nz

Subject Information Sheet

**Title: An exploratory study to identify Substance Use Disorders in a prison population using a diagnostic assessment interview.**

**Researcher: Amanda Jones: SCO/Sentence Planner**

**Degree: Master of Arts thesis:** It is not research conducted by the Department Of Corrections.

**Supervisor: Ann Flintoft: Massey University**

### Purpose of the study

You are invited to participate in a study about your previous alcohol and drug use. The purpose is to find out more information about Substance Use Disorders in a prison population. Violent prisoners will be compared to non-violent prisoners to establish any comparisons.

### Selection

You have been randomly selected using the Department Of Corrections Integrated Offender Management System by the 'controller of the database'. 200 prisoners were randomly selected.

### Procedure

There is the possibility of three interviews. First I will check that you understand this information sheet about what the study involves and you will have one week to decide if you are going to participate. This interview is expected to take 30 minutes. If you do consent a second interview will then take place including answering questions to a psychometric test (a questionnaire) to ask you about your previous alcohol and drug use. This interview could take up to an hour and a half. No other data from your file or

sentence plan will be used. A third interview of up to half an hour may be requested from a small number of participants at the end of the research period. If required, you will be given the opportunity to accept or decline to particpate at that stage.

**Participants Rights**

You are under no obligation to accept this invitation. If you decide to particpate you have the right to,

- Decline to answer any particular question;
- Withdraw from the study at any time without having to give a reason. This will not affect you in any way.
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that your name will not be used;
- Be given access to a summary of the projects findings when it is concluded.

**Discomforts and Benefits**

Apart from asking for your time, we do not think you will suffer any discomfort or risk from taking part in the study. If problems are uncovered as a result of these interviews you can get a referral to criminogenic intervention if eligible or another option that are available. If you request this please let the researcher know so that the appropriate referral can be completed.

The interviewer will not discuss anything you say with the prison staff. Neither participation nor non-participation will affect your parole or prison status in any way.

You are under no obligation to participate in this study. You can pull out of it at any time if you wish and this will not affect you in any way. At no time will the information from the study be placed on your prison file or be used for sentence planning or go to the National Parole Board.

**Confidentiality and Privacy**

Personal information is protected under the Privacy Act 1993 and the Official Information Act 1982. All information collected in the study will remain confidential between you and those involved in the study. All data will be presented to others as group data and you will not be identified in any way. I will not be collecting information that will identify you. Individual results will not be stored separately or placed on your file. A summary of results will be made available to you at the conclusion of the research. You will be given your individual results via paper form and these will be explained to you by the researcher.

Now that you have had this research explained to you and had time to consider it.

**Summary of what is involved,**

1. If no, I will not be asked about the research again
2. If yes, I will sign the consent form and then expect to be interviewed by the researcher. This interview involves a psychometric test and asked questions about your previous alcohol and drug use and offending. The interview could take up to an hour and a half. A small number of participants will then be asked up to six further questions lasting up to half an hour.
3. You will then be provided with your individual results and a summary of group results.

If you are currently participating in education/programmes/employment you will not be excluded from any of these to participate in this study.

You will be known to the researcher as a client number, not by name and you can not be identified in any other way. You will not be known by photo or personal record number but only by client number which can not be cross referenced to you.

A support person such as a Kaumatua or Prison Chaplain is available if requested. Participants may withdraw at any time without having to give a reason and that will not affect you in anyway.

Interviews will be confidentail unless safety concerns are raised (in situations where there is reason to think that there is risk of me harming myself or someone else.

*"This project has been reviewed and approved by the Massey University Human Ethics Committee, Palmerston North Application 05/29. If you have any concerns about the ethics of this research, please contact Dr John G O'Neill, Chair, Massey University Campus Human Ethics Committee: PN telephone 06 350 5799 x 8635, email humanethicspn@massey.ac.nz".*

This study has been approved by the Central Regional Ethics Committee.

You are invited to contact the researcher and/or the supervisor if you have any questions about the study. You can do so by requesting to see the researcher Amanda Jones.

# Appendix V

**Massey University**
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF HEALTH SCIENCES
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099
F 64 6 350 5668
www.massey.ac.nz

Client No:_____

Consent form

**Title: An exploratory study to identify Substance Use Disorders in a prison population using a diagnostic assessment interview.**

Principal Investigator

Amanda Jones (BA, PostGradDipReh) Senior Corrections Officer/ Sentence Planner.

| | | |
|---|---|---|
| **English** | I wish to have an interpreter | Yes No |
| **Maori** | E hiahia ana ahu ki tetahi tangata hei korero Maori | Ae Kao ki Ahau |
| **Samoan** | Oute mana'o e iai se fa'amatala upu | Io Leai |
| **Tongan** | Oku fiema'u ha fakatonulea | Io Ikai |
| **Cook Island** | Ka inangaro au I tetai tangata uri reo | Ae Kare |
| **Niuean** | Fia manako au ke fakaaoga e tagata fakahokohoko | E Nakai Vagahau |
| **Other** | | |

I have heard and understood an explanation of the research project I have been invited to take part in. I have been given, and I have read, a written explanation of what is asked of me, and I have had the opportunity to ask questions and to have them answered.

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**New Zealand**
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**F** 64 6 350 5668
**www.massey.ac.nz**

I understand that I am consenting to psychometric testing.

I understand I may withdraw from the project at any time and it will not affect me adversely in any way.

I consent to take part as a participant in this research.

Signed: (Participate)

Date:

Signed: (Researcher)

Date:

# Appendix VI

**Massey University**

OFFICE OF THE ASSISTANT
TO THE VICE-CHANCELLOR
(ETHICS & EQUITY)
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 350 5573
F 64 6 350 5622
humanethics@massey.ac.nz
www.massey.ac.nz

30 May 2005

Ms Amanda Jones
[redacted]

Dear Amanda

Re: **HEC: PN Application – 05/29**
**An exploratory study to identify substance use disorders in a prison population using a diagnostic assessment interview: Comparing violent to non-violent prisoners**

Thank you for your letter dated 27 May 2005.

Your application has now been approved by MUHEC: Palmerston North as meeting the requirements of the Massey University Code of Ethical Conduct for Research, Teaching and Evaluations involving Human participants. You should now forward the application to the appropriate Health and Disability Ethics Committee (HDEC) with a copy of this letter. Please note that Massey University has agreed to accept any changes made by the HDEC. However, please advise this office of all changes and supply a copy of the HDEC approval. These documents will be placed on your file and will be referred to if any enquiries are made to the University about this project.

If the nature, content, location, procedures or personnel of your approved application change, please advise both the Secretary of MUHEC: PN and the Secretary of the approving HDEC.

Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

**A reminder to include the following statement on all public documents:** *"This project has been reviewed and approved by the Massey University Human Ethics Committee, Palmerston North Application 05/29. If you have any concerns about the ethics of this research, please contact Dr John O'Neill, Chair, Massey University Campus Human Ethics Committee: Palmerston North, telephone 06 350 5799 ext 8635, email humanethicspn@massey.ac.nz".*

Yours sincerely

J O'Neill

Dr John G O'Neill, Chair
**Massey University Campus Human Ethics Committee: Palmerston North**

cc Ms Anne Flintoft
School of Health Sciences
PN351

Professor Steve LaGrow
HoS, School of Health Sciences
PN351

# Appendix VII

Health and Disability Ethics Committees

**Multi-Region Ethics Committee**
Ministry of Health
Level 2, 1–3 The Terrace
PO Box 5013
Wellington
Phone (04) 470 0655
(04) 470 0646
Fax (04) 496 2191

**12 August 2005**

Amanda Jones
[redacted]

Dear Amanda

**CEN/05/07/051 - AN EXPLORATORY STUDY TO IDENTIFY SUBSTANCE USE DISORDERS IN A PRISON POPULATION USING A DIAGNOSTIC ASSESSMENT INTERVIEW. COMPARING VIOLENT TO NON-VIOLENT PRISONERS**
**Ms Amanda Jones**

Thank you for your letter of 4 August 2005 responding to the points raised in my letter to you of 18 July 2005.

As all outstanding issues have been satisfactorily addressed, the above project has been given ethical approval by the **Central Regional Ethics Committee.**

**Certification**
The Committee is satisfied that this study is not being conducted principally for the benefit of the manufacturer or distributor of the medicine or item in respect of which the trial is being carried out.

**Accreditation**
The Committee involved in the approval of this study is approved by the Health Research Council and is constituted and operates in accordance with the Operational Standard for Ethics Committees, March 2002.

**Progress Reports**
The study is approved until December 2007. The Committee will review the approved application annually and notify the Primary Investigator if it withdraws approval. It is the Primary Investigator's responsibility to forward a progress report covering all sites prior to ethical review of the project in August 2006. You will be sent a form requesting this information. Please note that failure to complete and return this form may result in the withdrawal of ethical approval. A final report is also required at the conclusion of the study.

**Amendments**
All amendments to the study must be advised to the Committee prior to their implementation, except in the case where immediate implementation is required for reasons of safety. In such cases the Committee must be notified as soon as possible of the change.

The Primary Investigator is responsible for advising any other study sites of approvals and all other correspondence with the Ethics Committee.

It should be noted that Ethics Committee approval does not imply any resource commitment or administrative facilitation by any healthcare provider within whose facility the research is to be carried out. Where applicable, authority for this must be obtained separately from the appropriate manager within the organisation.

Yours sincerely

**Claire Yendoll**
**Central Ethics Committee Administrator**
[redacted]

# Appendix VIII

DEPARTMENT
OF CORRECTIONS

Policy
Development

Mayfair House
44-52 The Terrace
Private Box 1206
Wellington, New Zealand
Tel 64-4-499 5620, Fax 64-4-460 32

05 October 2005

REI 5/1

Ms Amanda Jones
[redacted]

Dear Amanda

**Application to Undertake Research within the Department of Corrections**

I am pleased to advise you that your application to undertake research entitled 'An Exploratory Study to Identify Substance Use Disorders in Prison Population Using a Diagnostic Assessment Interview' is approved. Please return a signed copy of the enclosed Research Agreement in the envelope provided.

Please liaise with Stephen Radburn, Senior Strategic Adviser, Policy Development, Department of Corrections to discuss any logistical or administrative issues. Stephen can be contacted on 04 460 3042 or email stephen.radburn@corrections.govt.nz

I wish you all the best with your research and look forward to hearing of the outcomes.

Yours sincerely

Bronwyn Donaldson
Acting General Manager
Policy Development

Enclosures Research Agreement
Postage Paid Envelope

# Appendix IX

DEPARTMENT
OF CORRECTIONS

Public Prisons
Service

Wellington Region

Rimutaka Prison
Freyberg Road Extension
Private Bag 47-901
Trentham
Tel +64-4-528 1300
Fax +64-4-528 5645

22 November 2004

To Whom It May Concern:

This letter is to confirm that Amanda Jones attended and spoke to the Kaumatua Kaunihera o Upoko o te ika a Maui at Koraunui Marae i te tahi o hurae rua mano ma wha.

Amanda discussed with the kaumatua and in simple terms her research design, the method and the intended outcome. The kaumatua were extremely responsive and have given her their support.

In return Amanda ensured the Kaumatua that once the results have been collected they will be given out to them and the Kaunihera.

At this stage the kaumatua do not find any ethical issues that need to be raised.

Naku noa na

William Simpson
Wellington Regional Advisor Maori Service Development

# Appendix X

DEPARTMENT
OF CORRECTIONS

Regional Office
Wellington Regional Prisons

Freyberg Road Extension, Trentham
Private Bag 47-901
Upper Hutt
Tel 0-4-528 1300, Fax 0-4-528 5645

15. May.2005

To whom it may concern,

I am the Inmates Movement Co-ordinator based at Rimutaka Prison. I have access to the Department of Corrections database.
I am happy to be the 'controller of the database' for Amanda Jones's research project.
I will identify potential participants and then distribute letters to them on behalf of the researcher, Amanda Jones.

Paula Cheesman
Inmate Movement Co-ordinator
Rimutaka Prison.