

**Substance Dependency Interventions for Indigenous People: What Works Where, How
and for Whom?**

A Critical Realist Synthesis

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FOR MY FAMILY

For my gurdals (daughters), who started this journey with me, but did not reach the end,

Belinda (21/11/1975-1/1/2012) and Skye (29/3/1979-17/7/2013).

Ngujima gurndls ngathi garndwairri, ganya thaga gurndls mugayarni buruula

(To dream of my daughters makes me cry, to talk of them breaks my heart).

Miss you both more every day.

And my mura (son) Justin and his numba, (partner) Sarah,

A promise fulfilled.

And to my gantharri (gran daughters), Chloe, Emma, Katlyn, Renee and Kelly, ladies we can be whatever we want and do whatever we like, as long as we are willing to put in the effort.

And to my juju (sister) Miss Rose for all her help, support and friendship

Love ya all.

Just a word.

As an Indigenous person, when I started the research journey for my PhD, I wanted to ensure that our voices – the voices of my people – were heard. And because I was the research coordinator for a substance rehabilitation service at the time I started this journey, I also wanted to ensure that the issues we face during rehabilitation were recognised and understood.

My original research targeted the perceptions and experiences of Indigenous People attending rehabilitation services for substance dependency. It was designed as a short perspective study that was both quantitative and qualitative, using approved tools such as the Kessler 10, and the Indigenous Risk Impact Screening (IRIS). I was granted ethics approval by Flinders University and I approached the Health Department of Western Australia for permission to speak to their Indigenous clients in either their direct services or their funded services.

This was the start of a 12 month adventure that required the re-writing of my research proposal, endless phone calls, emails and meetings. The Department stated that the research design was biased, as I only sought the voices of Indigenous People and that my research results could be “unfavourable” to the Department’s public image. Both over the phone and by email, they indicated that they were “afraid that something could appear in the West Australia paper”. They offered two young Indigenous persons to work on the research and stated that I was not required to be involved in the base line and follow up questionnaires.

When the Department asked for me to submit my thesis to them prior to submitting to my supervisors, and for my permission to change and/or omit what they felt was required, I stopped

the negotiations. I felt very strongly that it was important for Indigenous voices to be heard without external influences controlling what they should say, and for their expectations to be recognised for what they are – the legitimate expectations of a segment of society that has equal rights as other segments of society.

I then embarked small personal research program targeting papers that have been published on the subject of Indigenous experiences in rehabilitation programs and the results of services offered. It was at this point I made the decision to complete a critical realist synthesis of the papers I found. I discovered that there has been very little research completed regarding Indigenous People undergoing rehabilitation for substance dependency. This despite the fact that substance dependency is continually listed as a prime causal factor contributing to the high mortality and morbidity rates within Indigenous communities. Even less research exists which involves the voices of the Indigenous People who needed or used the services.

I strongly believe that as Indigenous People, we need to be heard; we need to be real partners and to take control of our health before there can be any improvements. I acknowledge that for many people uncovering new ways of thinking or new information can be unnerving but our voices need to be heard.

Allowing my peoples a voice is not as threatening or as dangerous as allowing the current situation to continue.

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DIAGRAM

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ABBREVIATIONS

A.A.

Alcoholics Anonymous

Indigenous or Torres Strait Islander:

A person who identifies as such and is accepted by the community in which he or she lives as Indigenous , according to s51 (25) of the High Court ruling in *Commonwealth v Tasmania* (1983) 46 ALR 625.

Binge drinking

Binge drinking is defined as drinking five or more drinks on the same occasion.

Culture:

‘Culture involves complex systems of concepts, values, norms, beliefs and practices that are shared, created and contested by people who make up a cultural group and are passed on from generation to generation. Cultural systems include variable ways of seeing, interpreting and understanding the world. They are constructed and transmitted by members of the group through the processes of socialisation and representation. Culture is dynamic. It changes because people’s contexts change...’ (Australian Curriculum Assessment and Reporting Authority 2011:13)

DAO :

Drug and Alcohol.

Drug:

There are various definitions of what a drug is. For the purposes of this thesis a 'drug' is any chemical, natural or synthetic substance that changes a person's mental state and that may be used repeatedly by a person for that effect. The term 'drug' includes legal and illegal substances such as alcohol, caffeine, tobacco, petrol, kava, heroin, anabolic steroids, cannabis (marijuana), psychoactive pharmaceuticals and inhalants (Commonwealth Department of Human Services and Health 1994:7).

Grey literature.

Grey literature within this context means literature that is unpublished, or published in a commercial sense, i.e. Government reports, policy statements or issue papers.

Heavy Drinking

Heavy drinking is defined as drinking five or more drinks on the same occasion on each of five or more days in the past 30 days.

HIV

Human *immunodeficiency virus*

Hepatitis C

A blood borne virus contracted when blood of an infected person enters the blood stream of another. The virus leads to progressive scarring of the liver, if left untreated can result in liver disease, liver cancer or liver failure.

Indigenous:

The term “Indigenous” is frequently used as a generalisation, used for many tribal groups. I have chosen to use “Indigenous” as this research incorporates not just Australian Indigenous people, but also the First Nations people of New Zealand, America and Canada.

This term is used within a legal capacity, and acknowledges the relationships between First Nations people, their land and culture.

Indigenous people

Defined in international or national legislation as having a set of specific rights based on their historical ties to a particular territory, and their cultural or historical distinctiveness from other populations that are often politically dominant.

IV

Intravenous administration.

Mainstream:

I have used this word within a generic capacity. It refers to non-Indigenous practices, institutions, or systems designed, commenced and supported by white community.

N.A.

Narcotics Anonymous

Poly drug use

Poly Drug use is the use of two or more drugs at the same time, or sequentially.

Substance dependency:

Covers all substance addictions including alcohol and drugs, both legal and illegal.

Use

Taken from Jaffe's definition (1965): "the use, usually by self-administration, of any drug in a manner that deviates from the approved medical or social patterns within a given culture"

WHO;

World Health Organisation

ABSTRACT.

The pandemic of substance dependency continues to spread across the world. Among colonised Indigenous populations, the incidence and prevalence similarly continue to grow, as are the associated mortality and morbidity. There is a demonstrable need to understand “how” successful rehabilitation programs or interventions are designed and developed, and what makes one intervention successful and another fail.

The issue of substance abuse now has a coordinated world approach, developed through the World Health Organisation (WHO). This approach includes targeted national approaches and smaller, community-directed interventions aimed at reducing not only the incidence levels, but also the prevalence within Indigenous communities. However, the policy directions that have served as the foundations for coordinated interventions and rehabilitation for Indigenous People appear to be failing and there is a notable gap in the desired outcomes and the reality.

Interventions set within a culturally appropriate model appear to be more effective, but they require a range of approaches and actions to ensure their appropriateness and usability. All too frequently, the success of rehabilitation interventions is simply based on the number of clients that have come through the front door of the rehabilitation service provider and participated in the interventions, even if it is attendance of only one session. Concepts about the context in which interventions are delivered, the approaches used, and real outcomes are not frequently considered.

The research undertaken in the course of writing this thesis has used a proven method for “unpacking” the “black box” of mechanisms (Pawson, 2004) that provide real change with Indigenous People. The thesis examines the suitability of interventions for Indigenous people, their cultural appropriateness, and their ability to change the rate of success. A critical realist synthesis has been undertaken to gain an understanding and provide answers to the broad research question, which is “In what contexts do substance dependency interventions work for Indigenous People? What provides the impetus for change and can successful outcomes be achieved?”

A systematic search was initially undertaken to identify both grey and peer reviewed literature on interventions for substance dependency within Indigenous communities. All types of studies were included, qualitative and quantitative, combining both the researchers’ views and the voices of Indigenous People themselves. The theoretical frameworks that formed the basis for the design of the interventions were identified, as were the adaptive theories. Consonance, linked to traditional values and ceremonies, authenticity, the use of language, of the correct pedagogy, embedded within the ethnic/cultural group, specificity, target programs for a specific group, sense of ownership and endorsement by the tribal group were the major obvious mechanisms identified.

The essential demi regularities or mechanisms were then able to be identified and linked to consonance and authenticity. Ensuring that the interventions were connected to traditional activities brought a sense of cultural safety. The use of appropriate language and acknowledged learning methods brought authenticity into the interventions. This approach of recognisable mechanisms has enabled an understanding of the differing ways of learning, of how Indigenous People have developed an understanding of the world, an understanding of their place within the

world. Being embedded within the community provided the opportunity for a sense of belonging to develop. Specific programs developed for each tribal group acknowledged that even though we are Indigenous People, we have different needs and practices. And finally, ownership and endorsement provided the conditions for the tribe to act as a group, to bring trust and pride back to their communities.

Further research needs to be conducted to establish a more specific understanding of the mechanisms, how they work and the outcomes. The impact that interventions for substance dependency have is not just on the individual, but on the tribe or community as a whole.

PREAMBLE.

As a woman of mixed race, I have been careful during this research and the process of writing the results to ensure that I have “straddled” both sides of the ethnic highway in a balanced way.

As a researcher, I have struggled to ensure that the voices of all involved are heard, but at times my need to highlight the inequitable power structures has become obvious.

As a daughter, mother, grandmother, aunty, sister, cousin, niece, lover and friend, my own need to “know” how to help my family and loved ones became the push to complete this research.

As a parent that has lost two children, I understand the pain that comes from the death of the people we love. To lose so many of our people to drug and alcohol simply continues to add to the ongoing grief and despair we feel.

As a woman who has held a 14 year old Indigenous child while they withdrew from a \$500-a-day heroin habit, then stood at their funeral three months later following their death from an overdose, there must be something we can do to stop the continuing deaths of our children and family members.

CHAPTER 1 - Introduction

Overview

In recent times, studies have demonstrated the increasing incidence and prevalence of substance dependency within colonised Indigenous communities around the world. (Degenhardt *et al* 2012). In addition the studies have demonstrated mainstream public health interventions to address dependency among Indigenous People have been essentially unsuccessful (Rowan, *et al* 2014). Substance dependency is thought to be the cause of around 3.4% of all deaths among Indigenous People in Australia (Healthinfonet 2015). This statistic relates only to alcohol comorbidities in Australia and does not include accidents, suicides or violence driven by alcohol. First Nation Indigenous People in the Americas and New Zealand Maoris suffer the same over-representation in mortality statistics attributable to substance dependency (Shore *et al* 2014).

Attempts to engage Indigenous Peoples in substance abuse interventions through mainstream health services have had only minimal successes, as Indigenous People tend not to use mainstream services or interventions, and when they do, over half do not get past the first session (McCormick, 2000). It could be argued that the interventions developed and used by mainstream health services are misguided and counterproductive. This is due to the level of “drop out ‘from the services, the differing values coupled with the “shame” and embarrassment in continuing the stereotyping of Indigenous People. But the real obstacles to participation is much deeper than simply being misguided; for many Indigenous People the lack of participation is due to the distrust of mainstream health systems, or feelings of shame and embarrassment in seeking help from white people (McCormick, 2000).

Analysing why an intervention fails to meet the needs of Indigenous Peoples is very complex, with the complexity rooted in the statements that health interventions are neither a simple

singular system nor are they linear (Pawson 200). This becomes problematic when attempting to identify or define what has caused a person to change his or her habits. Interventions are not singular actions, they are a series of interlinked concepts and actions. They are built upon the foundations of theoretical structures, of design, and implementation, management, delivery and contextual circumstances (Pawson et al, 2004).

But the complexity is not inherent or limited to the intervention itself; it applies also to the participants attending the intervention, their relationships, the contextual circumstances, the people delivering the intervention, the infrastructures through which the intervention is delivered and the relevant institutions. It involves the current and historical contexts, as well as the political, economic and social factors that impact on the person that is attending the intervention (Rycroft-Malone *et. al.* 2012).

To quote Pawson et al (2004) “interventions are complex systems thrust amidst of complex systems”. Traditional reviews and evaluations are often inflexible in approach and highly specific, they fail to cut through the complexity to reveal the true mechanisms that induce change (Pawson et al 2004).

The choice to undertake a critical realist synthesis in this thesis was influenced by the need to understand the mechanisms that induce change, and to gain insight into why some interventions work in some places, but not in others.

The research question is that the thesis seeks to answer is simple: What forms of interventions works for Indigenous People; how do they work, and in what context? Although the research question is simple enough, the methodology to find the answers is not.

The thesis will set out the methods used to conduct the synthesis, the historical and current contexts that impact on Indigenous People attending interventions and, from an Indigenous standpoint theory (Foley 2006), the mechanisms that effect internal change in those undergoing intervention.

The history of alcohol and its introduction to Indigenous People.

Substance dependency is not a new phenomenon. It has a history that stretches far beyond the modern era, the associated burdens of dependency traverses the course of history. The use of fermented drinks and the brewing of alcoholic beverages by Europeans date back to the pre-European colonial expansion (Room, *et al* 2005). Europeans have brewed and fermented alcoholic beverages in large quantities, for their own use and eventually for trade or profit down through the ages. For Europeans, the invention and development of new brewing methods enabled the brewing of alcoholic beverages in quantities, large enough to become economically viable ventures which supported trade and profit-making (Room, *et al* 2005).

Financial gain provided the impetus to further develop new, better, and quicker methods of production, resulting in new drinks to taste, new ways and patterns of consumption. Alcohol was already recognised as a marketable substance at the time of colonisation (Jernigan, 2000). The increase and ease of availability impacted not just Europeans, but also on the countries they colonised and the Indigenous People.

Prior to colonisation, the use of fermented alcohol among Indigenous People in America, Canada, New Zealand and Australia was on a minor scale (World Health Organisation, 2014), and was usually restricted to spiritual or cultural ceremonies. With the arrival of the white man came alcohol in large quantities, and more recently, a host of other substances. Coupled with the

advent of mass produced substances came new consumption patterns and rituals, customs and institutions. Traditional use changed to accommodate the easily obtainable and cheap substances, this change has proven to be devastating for Indigenous People.

The white man used alcohol as a form of payment for goods and services, or as a means of “gaining the upper hand” in negotiations (Hames 2014). Sagers *et al* (1998) believes that the use of alcohol as payment for services or goods was wide spread and even supported throughout Australia, New Zealand, Canada and America. Indigenous People modelled their consumption patterns on the colonist’s behaviour, as part of the acculturation process, mirroring the use and abuse of alcohol and tobacco, for example. This type of modelling is not restricted to the early days of colonisation (Moreton-Robinson 2014, Smart, *et al*, 1996) but continues to the present, through films, TV and radio advertisements.

Among Maori populations, alcoholic substances were not brewed for use, prior to colonisation and were introduced by the settlers. Early information indicates that Maoris showed a dislike for alcohol in the early stages of introduction. (Hutt, 1999). But they quickly began trading produce for alcohol. The trade for alcohol has been closely linked to alcohol being incorporated into ceremonial activities such as hospitality and storytelling. Colonial coercion, social acceptance and spiritual beliefs made the step to the misuse of alcohol a very small one for many Indigenous people groups.

Learning to drink, and the behaviour associated with drinking, is not an innate behaviour; it is a learnt behavioural pattern (Sobell 2013, MacAndrew *et al*, 1969, Marshall, 1979). It is something that is culturally supported by attitudes linked to intoxication and drunken behaviour (Sobell 2013, Heath, 1976, Pittman, 1967, Room, 1975). Frank *et al* (2000) hypothesise that for

Indigenous People it is learnt pattern, a sequence of behaviour, learnt and adapted from white society. Frank *et al* (2000) asserts that within the first century of contact with white people, many Indigenous People were already demonstrating significant risk factors linked to the social use of alcohol. Furthermore Frank *et al* (2000) believe that for Indigenous People, an association had developed between the use of intoxicating substances within ceremonies as a means to increasing bravery, bringing powers of healing and enlightenment.

The history and introduction to mind altering substances

Mind altering substances did not need to be introduced into indigenous communities by colonists as they were available, and used in ceremonies and incorporated within rituals. The use of the peace pipe, within sweat lodges and as a tool when “entering the dreaming” are examples of the ways in which mind altering substances were incorporated into Indigenous life (Clark 2011).

Mind altering substances can be linked to a type of Stone Age “alchemy”; decaying traces of opium and hemp have been found in frozen tombs dating back to the earliest historical periods (Goodman *et al* 2014, Rudgley, 1993). Snuff, mushrooms, and a range of plants have been linked to Indigenous ceremonial use (Clark 2011, Allegro, 1970, Wasson, 1968, Sherratt, 1991), or simply used for pleasure within many cultures. Mind altering substances have also played, and in some instances continue to play, a significant role in a variety of religions, including Hinduism, Judaism and even Christianity (Goodman 2014, Dure, 2001. Ruck *et al* 2001).

Social learning, social acceptance and familiarity have all played a notable role in the initial acceptance of alcohol by Indigenous People (Sobell 2013, MacAndrew *et al*, 1969). Given the existent use of mind altering substances among Indigenous People and the traditions associated with them, believing the white man’s alcoholic beverages or mind altering substances could also

enhance the ability to join with the ancestors would have been a small step in the minds of Indigenous People.

Current situation

There can be no doubt that Indigenous communities have felt the full effect of dependency on a range of substances, more so than within the wider communities. This is primarily due to Indigenous communities continuing to be beset by major social, environmental and economic problems that compound the issue. Homicide, accidental death, sex offenses, delinquency, violence, poor education and poor health outcomes characterize many Indigenous lives (Maru *et al*, 2012 Whitehead *et al*, 1998, Saggars *et al*, 1998).

For colonised Indigenous People the rate of substance dependency is noticeably higher than within the wider, non-indigenous community. Within Australia the report *Substance use among Indigenous and Torres Strait Islanders People*, (Australian Institute of Health and Welfare 2011), indicated that although the percentage of Indigenous People consuming alcohol is approximately similar to the wider population, there is a demonstrable decline in the proportion of Indigenous People that abstain. Additionally the use of illicit substances has increased over the last decade to 23% of the Indigenous population using illicit substances regularly, with males demonstrating a higher consumption level than females in Australia (Australian Institute of health and Welfare 2011).

The *Overview of Australian Indigenous Health Status 2014* (2015), has revealed statistics which demonstrate 22% of Australian Indigenous People 18 years or older consume alcohol at a rate calculated to be higher than a single short risk. Over 20% consumed alcohol at a level that was calculated to be a life time risk; this was particularly prevalent within remote and/or discrete

communities. Australian Indigenous People are 1.4 times more likely to drink at high risk level, and are five to eight more times (dependant on gender), likely to die from an alcohol related death.

Throughout the last decade, alcohol dependency statistics in Australia have been holding at the approximately at the same rate, and it is felt that this is due to increased substance use and abuse within Indigenous communities (Brady 2002). Amphetamines, opiates, cannabis, and poly-substance abuse have been found to be steadily increasing in Indigenous communities (Brady 2002), as does the need for treatment.

Statistics have demonstrated Australian Indigenous community members within six states of Australia make up 53 per 10,000 clients under government programs linked to the supply of methadone, suboxone and subutex (National opioid pharmacotherapy statistics, 2014), while that number fell to 17 per 10,000 within the wider non-indigenous community. Victoria and Western Australia failed to report ethnic backgrounds, but the each state governments estimated 64% of their clients linked to pharmacotherapy support programs are of Indigenous decent (National opioid pharmacotherapy statistics, 2014).

For First Nations People of America, Alaska and Canada the statistics demonstrate a similar patterns with First Nation populations are more likely to have used illicit substances. With 12.3% of the First Nation people, and 14.0% of Hawaiians reporting usage, this demographic is more likely to have an alcohol disorder at 10.7%, and are more prone to engage in binge drinking (US Department of Health and Human Services, 2014). Alcohol abuse is the largest preventable cause of death in America, with the Nation's First People again over-represented.

Similarly, studies with Maori populations have revealed a higher percentages, as opposed to the wider community for substance dependency or regular use. The most recent survey (Ministry of Health) demonstrated that within the 15-64 age group, 88.7% consumed alcohol within the last 12 months, 5.2% drank on a daily basis, with 28.1% demonstrating binge-drinking habits. Illicit drug use, primarily cannabis, is at 32.6% of the Maori population. Maori populations, as with many other Indigenous populations, demonstrate a higher level of consumption across the population at 85%.aes

It is difficult to establish an accurate statistic on people from Indigenous communities entering substance dependency rehabilitation, or the level of recidivism within the cohort. The Australian Institute of Health and Welfare (2014) indicated that an input strategy has been developed to correct invalid or missing data, but this has not yet occurred as of now. But even with the strategy in place, it will not provide sufficient data to gain a further understanding of the prevalence or recidivism levels. It will only attempt to ensure that Indigenous community members are accurately entered into the data collected for the first visit.

The Institute (2014) also recognises that there is likelihood that “client’s episodes” could possibly be omitted. The report currently notes that 1 in 7 clients in rehabilitation services are of Indigenous decent, or 14.4% of the overall client base. This equates to 15,000 Indigenous People receiving rehabilitation services within a 12 month period. The report fails to reveal the number within the cohort who actually started the program, who successfully completed treatment, or who returned for further treatment. It simply counts the number of clients that came through the doors of the treatment service; as such it is not possible to extrapolate the success of treatments from these figures.

The United States produces a similar report, noting that 2.3% of all admissions to publicly funded substance abuse treatment services are from First Nation communities (National Institute on Drug Abuse, 2009). This report is also limited to noting the admission level, and does not provide any statistics linked to private or Indigenous-based interventions and treatment programs, nor does it discuss the prevalence rates or level of recidivism.

Within New Zealand it is very difficult to obtain relevant temporal data and statistics related to the Indigenous population. The 2004 *New Zealand Mental Health Service Use Survey* found that 18,080 people attended public substance treatment services. This figure does not include private treatment centres or programs such as Alcoholics Anonymous (A.A.). Nor does the report mention ethnic backgrounds or provide any details regarding ongoing prevalence or incidence rates, and levels of recidivism. The only available information demonstrates that Maori and non-Maori people consume alcohol at approximately the same level, but Maoris are twice as likely to consume large amounts of alcohol (New Zealand Ministry of Health, 2014).

At a rate of 26%, the use of cannabis is significantly higher among the Maori population than within mainstream communities. Over one in four Maoris have had or continue to have, substance disorders, with alcohol at 24.5% and drug disorders at 14.3% of the overall population (New Zealand Ministry of Health, 2014).

The *Maori and Addiction Services Report* (2012) discuss in depth the number of services available and the costs associated with the provision of service, but fails to note the overall attendance rates. The report does however note the lack of evidence available related to how successful the interventions are, or what can be incorporated to increase the level of acceptability or support.

The costs of substance abuse cannot just be measured only in terms of immediate impacts, such as accidents or self-harm, but also needs to incorporate the development of health conditions and diseases. Alcohol is causally linked to over 60 medical conditions (Room, *et al* 2005) primarily through four major mechanisms, namely the toxic effects on organs, intoxication that impairs coordination, cognitive perception or behaviour and dependence. There are links between alcohol consumption and infectious diseases such as pneumonia or tuberculosis, due to the lowering of the human immune system (World Health Organisation, 2014). Gastrointestinal diseases, including liver cirrhosis, cancers of the mouth, colon, rectum, liver, as well as laryngeal and oesophageal cancers have all been highlighted as significant risks of ongoing consumption of alcohol. Alcohol is also thought to increase the risk for breast cancer.

Similarly the use of illicit drugs takes a substantial toll on the social structure of communities and on the lives taken over by dependency. It is estimated that between 16 and 39 million people throughout the world suffer from a drug use disorder or dependency (World Drug Report, 2014). The risk of contracting blood borne viruses rises substantially for IV drug users and viruses such as Hepatitis C and HIV, which are very closely linked to the use of injecting drugs. It is estimated that 1.7 million substance dependant worldwide are living with H.I.V today (World Drug Report, 2014). Other social impacts such as prison sentences, the breakdown of families and loss of cultural identity all are recognised risks of drug dependency, as is death.

Also it must be noted that the majority of Indigenous groups represent a minority within their countries, which impacts on the amount of money provided for services and the lack of partnerships. Within Australia, Indigenous People are only 3% of the population (Australian Bureau of Statistics, 2014). The Maori population in New Zealand is currently estimated to be 15.4% of the overall population (Statistics, New Zealand 2012), American Indians and Alaska

Natives at just 1.6% of the population (United States Census, 2012) to mention but a few. There is frequently insufficient numbers to warrant the financial and human resources required for this type of specialised, targeted services.

Research in Australia has shown that within Indigenous populations there is wide spread “ignorance “of safe procedures linked to injecting (Larson, *et al*, 1999). Furthermore there appears to be an unanticipated refusal to attend chemists or syringe exchange sites.

These well-documented risks serve to demonstrate that drug-dependant Indigenous people are at a significantly higher risk of contracting a range of blood borne viruses, especially in view of the fact that drug-dependency often involves activities that include the sharing of injecting equipment. The very concept of “sharing” carries a significant meaning within the Indigenous cultural framework.

Larson *et al* (1999) and Paquette *et al* (2012) found for many Indigenous drug users, there were clear cultural issues that affected the sharing of needles and increased the risk of transmission. Larson *et al* (1999) reported that it was not considered to be sharing if the other person was a family member, close friend or lover. Research in Canada has found that due to shared equipment for injecting, the rates of incidence and prevalence for H.I.V. within the Indigenous community is predictably higher. Woods *et al* (2008) found that during the research period, from 1996 to 2005, the rate of incidence was 18.5% vs 9.5% in the wider community.

Drug dependency among Indigenous People in Australia has been assessed at 28%. This figure relates to both metropolitan and remote communities, and is twice the level of figures for the wider community (Catto, *et al*, 2008). Catto *et al* (2008) found that the average age for first time

drug use was 16 years, younger within Indigenous communities than the national average at 17-18 years old for injecting drug use.

The Maori population demonstrates similar statistics with an estimated 1 in 3 suffering a substance disorder within their life span. The male rate for the use of rehabilitation services is twice that of the wider community, (age standardised per 100,000 of the population) (Maori and Addiction Treatment Services, 2012).

The foregoing has attempted to lay out the general state of affairs regarding Indigenous People and drug and alcohol dependency. It must however be qualified at this point that knowing how much alcohol or other substances people consume is very difficult. Indigenous People consistently refute the image of common stereotype of the “drunken Indigenous , drunken Indian, drunken Native”, regarded, by many Indigenous People, as an example of the ongoing barriers and racism that they face daily –barriers to acceptance. This has been acknowledged as affecting the statistics gathered (Saggers, *et al* 1998).

Furthermore, as there is a lack of longitudinal data available that has monitored the changes in substance use and/or dependency within Indigenous groups, there is also a risk of bias in the statistics. The lack of data casts doubt over the statistics noted in this paper and it must be assumed that the statistics can only be used as an estimation/guideline of the spread and effects of alcohol and drug use, a guideline only.

Thesis structure and flow.

This research thesis has been structured into several sections. The first chapter presents an overview, sets the historical context and lays out the information that is available regarding the current situation.

The second chapter proceeds from a policy perspective. The chapter commences by examining what is meant by policy, examines the policy behind Indigenous substance interventions, its background and analysis, historical and current Indigenous alcohol and drug policy and also looks at the use of restrictions which are currently in place as a means to limit access to alcoholic beverages.

Chapter three deals with methodology used within a critical realist synthesis. It sets the foundation with an introduction and an explanation followed by the epistemology, ontology and Indigenous standpoint theory. This chapter also incorporates the search for evidence, and what was discovered, what results were found and the rationale for undertaking a critical realist synthesis.

The following Chapter, number four, outlines the methods and how the search was undertaken. What tools were used during the review process and how the tools enhanced the analysis.

Chapter five discusses the methods of analysis, basic theory development, and the processes used to develop a more detailed theory. The processes used during the search for papers to be included in outlined, as is the methods for data extraction and synthesis, and the addition of metadata.

Chapter six leads to the findings of the synthesis and discussion. The Chapter entails the context and the identification of the intervention mechanisms used, both hidden internal and external mechanisms, while Chapter six discusses the outcomes.

The final Chapter, seven, is a synopsis of the findings mentioned in Chapter six and overview.

I have attempted to adhere to the structure used for a critical realist synthesis but have deviated in several areas, primarily when linked to the Indigenous standpoint theory used within this thesis.

CHAPTER 2- POLICY, ITS BACKGROUND AND ANALYSIS, INTRODUCTION OF RESTRICTIONS.

“A critique is not a matter of saying that things are not right as they are. It is a matter of pointing out what kinds of assumptions, what kinds of familiar, unchallenged, unconsidered modes of thought and the practices we accept rest.”

Foucault, *Practicing Criticism, or Is It Really Important To Think*. 1988.

This chapter will examine the history of the colonisation processes and the developed policies that impacted on the First Nations people in Australia, America, Canada, and New Zealand in regards to substance dependency. Although, several policies will be examined, to gain a fuller picture of the emotional, social, economic impacts that frequently provided the impetus for substance dependency, there is a focus on policies, procedures and laws that placed alcohol within reach of many Indigenous people.

A short analysis will be undertaken of the development of policies affecting addictive substances as they relate to colonised Indigenous People through the early years of colonisation until the modern era. As a focus primarily the discursive policy development that has contributed to current levels of racism, and its impact on Indigenous People's lives will also be undertaken.

As policies are the bases for many interventions, developed interventions will also be examined, including the attempt to control access to a range of substances, incorporating interventions, the restricting the alcohol content in alcoholic beverages and limiting trading hours of bottle stores

and/or hotels. It will also examine the legal steps that have been taken to “protect” Indigenous People from substances, such as restrictions, and by laws, and why they appeared to have failed.

What is policy, why do we have it, what is it really for, what are the effects of policy, why does the view of the problem pose issues in policy development. ?

Policy is a designated orderly course of action, set by the government for its citizens, with specific goals and targets; policy requires a goal and an objective. It is a linear action (Bridgeman, *et al*, 2000) with a straight line from conception to where we should be. Some classify policy as a purposive course of action that an individual or group consistently follows (Anderson, 2006). A more formal definition, used by many policy developers is that policy a standing decision, or choice, characterised by behaviour that increases consistency and repetitiveness on the citizens of a country (Valenza, 2015, Eulua, *et al* 1973). In reality policy is a system embedded in government or it is simply tool of governmentality (Foucault, 1994).

All policy is the result of the recognition of what is perceived as a “problem” (Bacchi 2006). It is anticipated that the developed policy and ensuing interventions will solve the “problem”. In a normal sense, policy and interventions are set by the government. However policy can similarly be seen as a developed and implemented as a tool of control, a form of constructed political barrier with inherent punishments incorporated that targets individuals and/or groups and takes advantage, by using surveillance and a normalisation process “to produce useful, calculable citizens” (Walters, *et al* 2005). Policy sets the boundaries regarding what is acceptable behaviour; it directs citizens in their behaviour, and actions.

But the discourse conducted behind can frequently be seen as problematic when the policies are enacted. In the process of policy development, such discourse is not simply language; rather it

incorporates the understanding, the forms of knowing, that integrate the rules and barriers within the policy. This can place limits/barriers on what is acceptable to say, or think about others, about practices and objects (Lee, 2015, McHoul et al, 1993).

As stated previously policy is based on a system of governmentality. Foucault, (1994) defined this type of governmentality as not just the act of ruling, but the belief that others should conduct themselves accordingly. This type of belief is firmly entrenched within ethnic groups, within the social, political, religious and economic backgrounds of the power elite, of white governments and officials. It is developed through years of exposure to social, economy and ethnic based influences and examples. Unfortunately within colonised countries it was, and in many cases still is, entrenched in the coloniser's power, in white superiority.

Foucault (1994) has taken this theory further by expanding it to cover the public's "mentality" in a more generic model. Foucault (1994) used the phrase "government mentality" to discuss the mentalities of rule, the thinking behind the approaches used by governments. Foucault's theories (1994) incorporate the political views, the social values/views and morals of the community that influence policy. This can be by pressure groups, religious organisations or companies, even sporting bodies that lobby for changes or the status quo to their own advantage.

Bacchi,(2009) poses a similar concept of policy development, primarily that it is founded on a series of deep – seated assumptions based in culturally developed views. Views that are developed through families, educational institutions, cultural norms and economic understanding developed through our childhoods, views the public that have developed through media portrayals and input from family and friends. These assumptions also incorporate the suppositions, perceptions, the personal views taken by the general public (Kraft, *et al* 2009).

But policy can also be used as a tool to divide a society; it can set one group against another. Foucault (1992, P 66) describes this as a “dividing process”, common to the postmodern era. A simple system of divide and through policy, isolate groups within the population, i.e. youth against older people, women against men. Policy can and is frequently, perceived, conceived or written in a type of binary or polarising language, an” us vs. them “form. Policy targets specific groups in our communities, groups that can be defined by age, by ethnic backgrounds, and/or by gender. Policies for women set them apart, as do policies for young people or for Indigenous People. Policy contains a language that develops a system of hieratical categories, young/old, or male/female, Indigenous/white (Bacchi, 2009). For Indigenous People this system has been further developed through the use of media, policies and political direction, as has the view of addiction and what that looks like.

By accepting addiction as a social issue, we fail to examine how the problem is represented, and our own concepts of what the problem is. Could it be correct to outlaw all addictive substances? Is it right to jail substance dependant users? Have we focused too much on the drug dealer and not enough on intervention, what is portrayed in the news and within TV really what has happened or if not what is? Chasing the Scream (Hari, 2015) poses a very different view of the “war on drugs” to what we constantly see on the news, it represents the problem we, as community members, face daily with substance dependency in a very different light. It gives a different representation of the problem, one that challenges the political and social views seen and heard more frequently, one that I hope pushes people to examine their own concepts of what the problem really is, how it has come into play. It shows an alternative representation of the problem, one where the historical information is placed in a different light from the representation that is currently in favour. The author poses the question whether governments,

as law makers and policy developers, have supported and encouraged criminal elements to become involved in the sale of drug. It questions whether the use and possession of drug is a something that we really need to look at with a view to legalising them. We have been told for many years that the “problem” looks like this, although this concept could be incorrect and the “problem” could be very different. It is not within the scope of this thesis to argue the rhetoric behind the current policies, however the thesis seems to highlight that the methods used to identify and describe a problem needs to be closely examined.

Shapiro (1988, P 40) stated that the “presentation of a problem, does not imitate reality but are practices thought which things take on meaning and value”. Meanings developed throughout our lives through the portrayal we see, and here.

Foucault (1988, P 108) discussed the issue regarding problemization:

“Problemization doesn’t mean representation of a pre-existing object, nor the creation by discourse of an object that does not exist. It is the totality of discursive or non-discursive practices that introduce something into play of true and false ,and constitutes it as an object for thought (whether in the form of moral reflection, scientific knowledge or political analysis)”

There is a clear need to interrogate the discourse behind the policies affecting the interventions for substance dependency within Indigenous populations, and the language used (Kraft, *et al* 2009). We need to look behind the public representation, to critically analyse the political and cultural agendas and/or gains and assumptions, the hidden ethnocentric beliefs within developed policy and interventions. The significant issue that needs to be mentioned is that within this type of ethnocentric beliefs is the concept of “the other”, someone less worthy, less valuable, more

dangerous or just different. This type of belief system allows for violence, genocide and assumed superiority. It encourages and endorses racial discrimination and the subjectification of “others” (Merleau-Ponty, 2004).

Policy and interventions

Interventions are the tools of policy; they represent how we are going to either fix a problem or stop one from occurring. They are based on the destination that the government of the time thinks we all should be; the outcomes that the politicians wish to achieve, the behaviour they wish people to display. Interventions, in some cases, are the representation of a tool for ensuring we all demonstrate the required behaviour and adhere to the visions and code of conduct set by the governments and policy makers.

Within any public health intervention, there is a focus on minimizing the health inequalities of the participants. Frequently however, the effects of poverty, racism and self-esteem are neglected and their impact on the success or failure of the participant is likewise neglected (Leon, *et al*, 2002).

Public health interventions are dependent on a range of policies both within and outside the health sector, and the impact of those policies, how policies influence the development of interventions. Policies and regulations that affect the pricing of alcohol, density of bars or outlets, GST tax levels, enforcement of the laws and by-laws, the regulation of advertisement, are all part of the broad spectrum of political influences that come into play in public substance dependency interventions (McGinnis, *et al*, 2002).

Many policies, and the ensuing interventions, focus on the “handles” or tools within the policy box. The tools may include tools that represent authority, incentive and capacity tools, symbolic

or hortatory tools, learning tools and tools to change behaviour or systems (Jordon et al, 2015, Schneider, *et al.* , 1990). These tools can be as simple as incentive tools that lower the cost of an item through a government subsidy, or it could be a tool whereby taxes are introduced by the government to limit the ability of people to pay for a particular item. Symbolic or hortatory tools are assumed to provide motivation, to encourage people to change their activities or behaviour. But it should be remembered that these “tools” are developed for main stream white community members by white professionals, not for Indigenous People.

The analysis of any policy and the interventions based on policy are part of a public view, part political and part science (Kraft, *et al* 2010). It involves both a descriptive component and the use of empirical research. It is never a set formula, as it involves ever changing contextual circumstances, public views and the aims of the political party or the government of the time. But one thing that remains constant within any analysis is the politics of the time, as politics frequently trumps policy (King, *et al*, 2006). This is even truer when quick action is required or when policies become objects of political conflict (The International Journal of Human Rights, 2008). Primarily due to political and personal preferences, the views, beliefs and assumptions of the political players provide the driving force behind any policy (Bacchi 2006). This has been proven time and time again with policies affecting Indigenous People. Policies tend to become “fields of visibility”, they become how they are envisaged by the government not how they actually are (D’Abbs *et al*, 2004).

Indigenous alcohol policy

Indigenous People in Australia, New Zealand, America, and Canada have been termed “Fourth World” people (Ginsburg, 1993, Dyck, 1985). As victims of colonisation, Indigenous People, who were the original owners of the land, in the aforementioned countries, now form a very

small part of each country's population. But concurrently they have been, and are, subjected to a broad range of dysfunctional colonialist policies.

By placing Indigenous People apart from the average person, through the use of policy and embedded hierarchical social systems, it becomes a situation of us and them, where one race feels superior to another (Bacchi, 2009). A feeling of superiority supports and encourages elitist social, political and economic structures (Feagin, 2013), and provides privilege with little thought for the suffering of others or their needs. It is a privilege that in reality has not been earned, is unwarranted and simply based on the colour of one's skin (Kendall, 2012).

Native Americans, Australian Indigenous People, Canadian First Nations, and New Zealand Maoris have all undergone similar systemic exposure and enforced acceptance of alcohol (Brady, 1997). Although there was limited acceptance during the first encounters with alcohol it quickly changed. The forced acceptance of alcohol has been noted, and recorded throughout the history of colonisation. Many Indigenous People clearly demonstrated an "aversions "to alcohol, but as it was soon used as a form of payment for land, goods, women and work (Brady, 1997). As a result of this ongoing exposure, alcohol became very popular (Miller *et al*, 1996, Brady, 1997, Mancall, *et al* 2000). So popular in the early years that naturalist and physician, Duieffenbach (1843), noted in his report published as early as 1843 that "distilled spirits, being in most extensive use in all the Australian colonies, have not failed to corrupt, mentally and bodily, the natives, as well as the European settler".

American policy, introduction and colonisation.

Alcohol appears to be introduced across hundreds of "distinct peoples" (Frank. Et al. 2000), throughout America with the arrival of colonists, traders and trappers. . Miller *et al* (1996),

described the years between 1789- 1871 as the “Formative Years”, the period that alcohol was introduced and the myth of the drunken Native began.

Alcohol began its journey into American Indian culture through farmers, vendors, and distillers. The trade in alcohol within Americas can now be seen as a move by the British to aid their expansion, the “alcohol and military moved hand in hand” across the nation (Brady, 2000). By 1836 there were 10 distillers on the bank of the Missouri alone; by 1850 the tribal groups within the Mississippi region had been halved in number due to the continual consumption of alcohol and the associated ills (Unrau, 1994).

The first attempt to limit the sale and/or trade of alcohol to Indigenous People in America occurred in 1645 in Connecticut (May, 1992). The subsequent attempt in 1832 focused on limiting the amount of alcohol allowed into Indian lands, but still allowed for the consumption off Indian lands. This type of prohibition lasted for 117 years and led to the incarceration of thousands of Indigenous People. Maracle (1993) points out that the focus of the attempts of control were not as a result of the religious or temperance groups, nor in the hope of saving lives, but simply a control measure that could be, if needed or warranted, act as a mechanisms for police or Indian agents to use threats or forms of punishment against who they targeted.

Prohibition commenced in America in 1920, the Act prohibited the manufacture and sale of alcohol. Prohibition regarding alcohol ceased for the white community in 1933, but it continued for Indian populations until late 1953 (Brady, 2000). Maracle (1993) believes prohibition, in regard to Indigenous People, encouraged and supported the behaviour of “guzzling” alcohol quickly or of drinking in secret to avoid being incarcerated. However comparisons have been

undertaken of the drinking behaviours before and after the cessation of prohibition and Heath (1964) found very little, if any, change.

In America, it took over 80 years of active discrimination before any real changes were instituted. Congress enacted legislation that handed over control of alcohol to tribal officials in 1963. By 1979 over 213 tribes in America independently passed 317 alcohol control Ordinances and Amendments in an effort to control alcohol on tribal lands (Kovas, *et al*, 2007). But as Indians were American citizens and as such were under the policies and laws of the Federal Government, it was difficult for tribal groups to really enforce any regulations governing alcohol. It was an Act that appeared on the surface to support the rights of Indigenous People and their responsibility and control, but was in reality, a token gesture that had very limited impact (Kovas *et al*, 2007). The Act has failed to impact the levels of substance dependency, but it has continued to develop concepts that are linked to the inability of Native Americans to control their substance consumption.

Canada, alcohol introduction and colonisation

Canadian history demonstrates, as with America, the introduced alcohol was based in the exchange for fur and as gifts in the 1670, by French fur traders (Brady, 2000). By 1744, the standard was one gallon of brandy per four pelts of beaver (Brady, 2000). So wide spread was the practice of paying for furs with alcohol, that the Jesuits wrote that there were all night drinking parties, murders and assaults (Waldram *et al* 1995). The drinking continued until the alcohol was gone. The visits by the French were only periodic at this point, and appear to have been treated as a time of plenty, of festival (Waldram *et al* 1995, Smart *et a* 1996, Grant 1984).

In 1876 Canada passed the Indian Act, which has been recognised as the first attempt in Canada to bring colonial law into documented law for a country (Blocker, 2003). The Act covered how reserves were to be operated and managed, and defined who was considered an Indian and where they are to live. Within the Act were a variety of other sections covering every day activities, but the Act appears to be a means of “civilising” the natives (Blocker, 2003). Under sections 79 and 80 of the Act, it became illegal to sell alcohol to Indians in Canada (Blocker, 2003).

However you could trade fur, or services for alcohol.

The Act appears to remove any financial gain from the settlers through selling alcohol, to limit the trade for alcohol, but in reality forced the Indigenous People to assume the roles of an employee, servant or slave. If a person wanted to drink, the only way was to trade physical labour for the alcohol. The Act provided little protection and again placed the Indigenous People at a significant disadvantage to the settler.

Currently the treatment and interventions available for Native Canadians are piecemeal, only “status Indians” – those living on reserves – are supported with funds for interventions or treatment. The Inuit failed to sign a treaty, so their relationship with the governments is very tenuous (Whitehead *et al*, 1998), with little provisions for interventions or support. Furthermore services provided to the Metis tribal group or non-status indigenous must be provided by the local governments.

The Federal Government developed the National Native Alcohol and Drug Abuse program in 1975, which is still operating today. But again this program has failed to provide for the needs of all the native Canadians. It only services the reserves, not Native Canadians living in regional or

city centres, or the Metis people (Whitehead *et al*, 1998). This action has in a sense, established a process where even within Indigenous tribal groups, one tribal group is “less” than the other.

Interventions and programs based on who had a treaty, are an example of the discursive effects of policy, where the representation, developed through the concept/views of what the problem is, has proven to be harmful to others (Bacchi, 2009). This action has in a sense, established a process where even within Indigenous tribal groups, one tribal group is “less” than the other, one group is able to access interventions and treatment freely, the other cannot.

This could also be seen as what Foucault (1982) calls a dividing process; a space in power relationships, a use of the privileged power. One that does not really attack any group or institution but it is a form of power that makes specific individuals the subject (Foucault, 1982). It is a power that vested in the state, political power that should look at the totality of the population but in fact only serves a single group or class. In this case it does not simply divide Indigenous groups from the wider population but sets the structural bases on which perceived value is established, in that the group benefiting from the policy or program feels that they are “better “ than the group not receiving the benefits of the policy or program. It has further stigmatised the minority group, the groups with no treaty, a group that is not included in the totality of the government’s vision.

Within Canada over the last two decades there has been an effort to support independent tribal groups in controlling access to alcohol on communities. An example of this action is Tununermiut community where the established community council governs the amount of alcohol in the community. Anyone wishing to bring alcohol into the community must have permission,

and such permission could only be obtained after it has been proven that the person does not have any alcohol-related problems (Matthiasson, 1992).

New Zealand, introduction of alcohol and colonisation

Within New Zealand, McDowell, (2015) and Hutt (1999) have stated that until approximately the 1850s there was little consumption, but by the 1860s alcohol was appearing in ceremonial *hui* (gatherings). It had become part of the hospitality offered by Maoris, part of the story telling and talk.

Maori's began to suffer the stereotype of the "drunken, lazy native", with commonly-held beliefs emerging concerning the inability of Maoris to either control or use alcohol appropriately. This stereotyping resulted in the *Sale of Spirits Ordinance* in 1847 (Mancall, *et al*, 1999), purportedly as a means to shield the Maoris from alcohol abuse. But in reality it came into being, not out of concern for the health of Indigenous People or "for the ardent" use of alcohol but for the safety of the European settlers (Mancall, *et al*, 1999). The Act gave the supply and control of alcohol to the settlers. It stopped any economic benefit from falling into Indigenous hands and reduced their ability to have control over the consumption patterns of their people. Furthermore it set the basis for the development of the myth of Indigenous People having no control over the substance and being unable to control their baser side. The myth of the "drunken Maori" was now born.

Many Maori elders argued that the Treaty of Waitangi gave their people full citizen rights, and as such the 1847 Ordinance breached the Treaty. The Treaty gave British citizenship rights and privileges to Maori people, making them equals with the British settlers (Ward, 2015, Durie, 1998b, Belich, 1996). But it was not until after the World War II that the distinction based on skin colour was eliminated (McDowell, 2015, Hutt, 1999).

The post-war period brought a change, almost a relaxation of previous discriminatory policies against Maoris. The concept of equality as defined in the Waitangi Treaty, which include the right to consume alcohol, was the instigator for the repeal of laws and policies that prevented Maoris for enjoying the same rights as the white community (Brady 1997).

Maoris tribal groups appointed “Maori wardens” to deal with any alcohol related issues and Maori patrons of hotels. Maoris attempted to manage the issues surrounding “sly grog shops” (a term used for unlicensed suppliers of alcohol), (McDowell, 2015,Hutt, 1999). But ultimately this has proven to have little impact on alcohol-related issues which Maoris suffer today. The statistics demonstrating the spread of alcohol substance dependency for Maoris show very little difference from other Indigenous colonised populations.

Australia, introduction of alcohol and colonisation

Australia’s Indigenous People followed the same pattern as many other colonised countries, with alcohol becoming almost part of a “cultural norm” (Castro, *et al*, 2014). Convicts were paid partly with alcohol, primarily rum, as were Indigenous People. By 1837 laws had been passed to limit access to alcohol by Indigenous People, and again this was not for the benefit of the health and wellbeing of Indigenous People, but as a means to control settlers’ fear of violence (Commonwealth Government. 2001). The fear experienced was based on the cultural misunderstandings and then, on the fight for survival, a fight for control of the land. As with other colonised Indigenous People, prohibition was the first step in 1838, with further changes, brought about by the New South Wales government which included legal restrictions. The government had stated that alcohol was “productive of serious evil to the said Indigenous Natives” (Bell, 1995. P29).

During this period the early governments hindered efforts to develop and increase the brewing of alcohol as a measure to decrease the consumption of spirits (Welbourn, 1987). It was believed that if the distillation and availability of spirits were low, there were opportunities to control the level of drunken “lewd” behaviour, not only of settlers but also of Indigenous community members.

By 1930, all the Licensing Acts of every state in Australia prohibited the sale of alcohol to Indigenous People (Brady, 2007). These policies had the same effect as within Indian communities in America. It just forced the consumption behind closed doors; with illegal trade prevalent (Moran, 2016, Beckett, 1964). Policies akin to this can be seen as either a concern for the health and wellbeing of Indigenous People or as a means of negating fears of intoxicated uncontrolled natives (Brady, 2007).

It was during the 1940s that the concept of issuing Exemption Certificates within Australia was developed, giving a select few Indigenous People similar rights to a white person (McCorquodale, 1987), but only if they lived as white people and demonstrated the capacity to be “white”. In Western Australia, the Native Citizenship Rights Act of 1948 (McCorquodale 1987), was passed, a legislation which set out what was required in order to be “white” and a citizen. To achieve this lofty goal an Indigenous person was required to “dissolve tribal and native association” including family ties, have served in the armed forces and/or changed their lives to one that had “the manner and habits of a civilised life” (McCorquodale 1987). They were required to demonstrate “good behaviour”, high standards of hygiene and intellect, not have any communicable disease and be of industrious habits.

The Act contained an extensive list of criteria that essentially stated that if a person could be “white” in thought and body, then he or she would be accepted as a lesser white. Indigenous people with “dog tags”, the symbol of acceptance as white, were still actively discriminated against; the dog tags, simple tags of metal that hung on the necks of Indigenous Australians, as they were came to be known, offered no real protection (Eggleston, 1976).

These bans lasted until the 1960s, but even with then the changes incorporated “special” measures, which were kept in place to “protect” tribal indigenous communities from the influence of the wider community (Brady, 2007). It is understandable that the policies engendered resentment, feelings of exclusion and were felt to be discriminatory in nature (Brady, 2004, Eggleston, 1976).

The 1967 Referendum that endorsed constitutional change brought the right to vote for Indigenous Australians, and was thought to be the end of discriminatory policies and laws, and that life would change. The right to drink alcohol appears to have been closely related to the concept of equality, to the abolishment of discriminatory laws and policy. “We are citizens now, we can drink liquor” (Myers 1986), Indigenous People thought they could now consume alcohol as a white person did.

In reality, however, the right to consume alcohol was not a federal issue. Each state had enacted laws and policies independently and legislation passed in the mid-1800s was still in force. It should be noted at this point that the decrease in trading hours for hotels and the attempt to cease the consumption of alcohol by Indigenous People matched the rise in the temperance movements (Myers 1986). Although there is little evidence that the temperance movement had any real impact on the policies and laws, it still influenced decisions regarding the access to alcohol.

Nonetheless, even after the 1967 Referendum and the repeal of several states' legislation, the basis of laws and policies could still be classified as discriminatory (Eggleston, 1976, Brady, 2004). An example of this is South Australia where Indigenous People not living in "primitive conditions" were able to drink. The discourse behind this action of forcing Indigenous People to leave their land and family in order to exercise their right to drink was to force them to pretend to be white (Brady, 2004).

This change represented tensions in liberal views, one between universal dignity and authentic identity (Kowal, 2015). The principles of universal dignity demand equality for all, while authentic identity demands recognition of the differences. This tension created and continues to create difference, continues to be the instigator of gaps that encourage racist policies and actions (Kowal, 2015).

But as stated previously, the right to vote was not linked to the right to drink, Indigenous community members were then faced with local prohibition. The locally imposed "grogging regimes" came into play and these varied from settlement to settlement (Samson, 1980). The focus was to "teach" Indigenous People to drink. The concept of rationing alcohol, the "integrated hypothesis" as it was named, was based on the epidemiological research of the time. The research results indicated that alcohol should be integrated into daily life as it would provide the means to stop alcoholism (Walsh *et al*, 1987). As a result of the accepted research, canteens and clubs were set up in many missions and reserves with a single focus of distributing alcohol. The first alcohol canteen operating in South Australia was established by a Lutheran Mission in 1963 (Brady, 2000) on the premise that by establishing the canteen and allowing easy access to alcohol, Indigenous people would learn to consume alcohol in a "civilized" manner (Brady,

2000). This type of involvement by an organisation that portrayed them as saving people would have added a sense of respectability for many Indigenous People regarding the consumption of alcohol.

So quickly was this flawed concept accepted that Indigenous People in regional towns moved to start social clubs, again accepting the concept that they were not entitled to enter public bars but needed to be separated from mainstream society. We now recognise the health issues that arise from the daily consumption of alcohol, and the increased risk of dependency with easy, cheap daily access (Jin *et al*,2013) The move to establish Indigenous-run clubs appears to be based on restrictions that publicans placed on accepting and serving Indigenous people in mainstream liquor facilities. Dress codes began; the dress codes entitled the publicans to refuse service to any one they considered did not adhere to the established dress code, as did a range of both covert and overt discriminatory actions and policies including the Northern Territory Two Kilometre Law (Brady, 1997). The Two Kilometre Law stipulated that people were not allowed to drink in public places or unoccupied private lands within two kilometres of a licensed premise.

Australian policies regarding access to alcohol for Indigenous People were insidious, in that they applied to some and not to others. Some Indigenous communities were designated dry (free from alcohol) and others wet (allowed alcohol). Over the last two decades the use of a range of restrictions has been implement in several small towns, Elliot, Tennant Creek, Curtin Springs in the Northern Territory, Halls Creek and Derby in Western Australia (d'Abbs *et al*,2007) again as a means of limiting access to alcohol.

Elliot has enacted restrictions regarding the maximum limit that can be bought, Halls Creek has no sales before 12 o'clock and began with limiting the amount of casks of wine that could be purchased, but now the restrictions only allow light beer to be purchased. Derby instituted no alcohol sales on pension day, Thursdays, and Tennant Creek also will not sell alcohol on Thursdays, but they also restrict the amount of alcohol to be bought and sales to third parties. This action is thought to stop the use of taxis picking up take away alcohol (d'Abbs *et al*, 2007) which was common place for many years.

This has been acted as a means of limiting the access to alcohol and the amount of alcohol that people could consume. But the impact has been slightly different, it has encourage a black market trade in alcoholic drinks and again has placed all financial gain into the pockets of the white people that smuggle the alcohol into townships.

The results of past policy and the implications.

Although the restrictive policies developed and adopted in all the countries mentioned, that targeted access to alcohol were hidden behind what could be called a protectionist rhetoric, the reality was that the policies and legislation supported the concept of Indigenous People as inferior (Brady, 2000). The policies encouraged discrimination and gave the public the perception that Indigenous People were less, were inferior to the white man. Policies and laws of this type effectively prohibited Indigenous People from becoming full citizens of their own country (Brady, 2000).

These political restrictions and laws during this early period are signs of the race-based policy that only started at this time, but have continued to this day. They are state imposed and maintained policies and legislation, clearly setting the structure for a racially based hierarchal

system, with the white settlers above the Indigenous People (Brady, 2007). The discourse behind each policy and Act at this point could only have been fear, fear of being attacked by Indigenous People, fear of land being reclaimed, fear of political change (Ford, 2010) fully supported by ongoing causal stories.

The use of causal stories proliferates on the subject of Indigenous People fighting for their lands and way of life, as does the word “massacre”. Causal stories told in homes and around camp fires continued to support the concept of “blame”, of being “less”. Causal stories bring the situation from being an intellectual or emotional concept to a reality in the minds of the public (Stone, 1989). In the social arena, causation is linked to purpose and influence, and is frequently accompanied by coaxing, bribing, or threatening (Stone, 1989). This mode of storytelling brought fear of Indigenous People, pressures for change, for control and made a case for restrictions to be imposed – a step believed to be required in order to save the white man from the uncontrolled drunken savage.

Policy, did you say discrimination?

Can policy be discriminatory? Can it cause undue suffering to those it seeks to protect, and can it set a minority apart from the majority? This section will endeavour to answer these questions and demonstrate that throughout history, there has been an effort by colonial governments to not only isolate Indigenous People but also supports the image that interweaves Indigenous People with the concept of inferiority.

The historical development and implementation of policies and legislation in America, Australia, New Zealand, and Canada have created feelings of distrust, resentment of the interference of governments in tribal life, and led to resistance from Indigenous communities (Kidd, 1997). It

could be categorised as part of the ongoing drive to establish white government control over many areas of Indigenous lives, including health and education, but it also provides the basis for further resistance from Indigenous communities (Price, 2015, Fiske, 2006)).

The “problem” behind the legal and policy direction has been and continues to be represented as stereotyping of Indigenous People. It represents The Indigenous People as the “others”, a distinct group apart from main stream communities and groups, as a marked group denoted by skin colour, as troublesome and problematic (Bacchi, 2009). Through this representation of the “problems”, Indigenous People have been further stigmatised and marginalised.

It must be stated that at this time, Indigenous People had been identified as “needy”, disadvantaged and needing “special” treatment, and as such were offered protection not only from the wider community but also themselves (Brady, 2007). This has manifested in a variety of ways, moving Indigenous people to reserves so they would be “safe”, removing children so they could be educated in white ways and ignoring the cries for equality. This “protection” supports the status quo and justifies the government’s treatment of Indigenous People. The discourse behind Indigenous policy continually leaves out any statement regarding the privilege and advantages of white people. This is particularly interesting when a white person’s advantage rests so heavily on Indigenous disadvantage (Kendal, 2012), something that is hidden behind the liberal concepts of equal opportunity.

Colonisation has brought strong feelings of antipathy towards any interference by white people into tribal and culture issues. There are continuing political and social moves to limit the control of the white government over Indigenous People as seen within the United Nations, to limit control of service delivery within communities, and cries for Indigenous People to make their

own policies. The laws and policies from white people have not only attempted to control alcohol, but were also responsible for the forced removal of Indigenous people from their land (Brady, 2007), breaking the cultural links and the lives of many Indigenous People (Brady, 2007). This style of policy has far reaching affects that continue to be felt today, by many Indigenous People.

The ongoing debate regarding policy in the area of substance dependency has failed to recognise that alcohol is not the single cause of the social ills affecting indigenous populations. Poverty, lack of security in housing and food, racism and lack of economic opportunity have all impacted. Many of the social ills are partly the result of ill-informed and ill-defined social policies that impact on the social wellbeing of Indigenous People (Reading *et al*, 2009).

Many believe that substance abuse needs to be dealt with as a standalone issue not as part of a holistic approach (Brady, 2000) but that belief is incorrect. Policies that affect indigenous land have an impact on substance use; high unemployment has an impact on substance use, lack of economic opportunities affect substance abuse. Substance dependency is a symptom of disadvantage, of racist policies, of colonisation and historical trauma (Brady, 2000, King *et al*, 2009).

Furthermore there are implications that the “problems” with substance dependency within Indigenous communities is solely the result of poor choices by uneducated Indigenous People. This in turn affects the view Indigenous People have of themselves. It reinforces the public concept of a drunken native, and reflects that image back to Indigenous People as the truth.

The other perception that needs to be discussed is the view the general public have of their government. This type of policy compels people to view their government as compassionate,

caring and generous towards the Indigenous populations (Bacchi, 2009). It supports the ongoing perceptions of the public, it supports the power structure of the day keeping political parties in power and entrenching white supremacy over Indigenous People.

How the problem of substance abuse is viewed, how the problem is represented directly impacts daily on Indigenous lives. It influences the spread and amount of resources and the financial allocation for services. It influence's the development, implementation and delivery of services within communities. It limits the types of interventions available for Indigenous People and how they are presented.

The use of restrictive methods, such as discussed previously, with limiting access and alcohol content for drinks, has now developed further into a restriction on what can be bought by an Indigenous person. Within Australia, an example this type of restrictive measure that is currently being used by the government to stop the purchase of alcohol and its impact, is the introduction of the Basics Card, a form of quarantining of welfare payment in order to ensure alcohol is not purchased. This has produced feelings of inferiority, embarrassment and distress to the people the policy seeks to support (Women's Experience of Income Management in the Northern Territory, 2011).

There is a reported loss of respect and dignity linked to the cards used by women, a sense that the government and by default, the Department of Social Security, feel they were incompetent not only as money handlers but also as parents (Women's experience of income management in the Northern Territory, 2011).

The use of the card poses further difficulties linked to their acceptance within shops and additional costs when used (Women's Experience of Income Management in the Northern

Territory, 2011) So stigmatised is the use of the card that women are hesitating to leave violent relationships which in many cases would mean they would have to use the card as part of the benefit. (Women's Experience of Income Management in the Northern Territory, 2011)

Alternatively it supports the public view that Indigenous People are incapable of looking after themselves, incapable of feeding their children or understanding the use of money.

Government, media and public opinion.

The governments of each country mentioned above have spent considerable sums of money in an attempt to limit the availability of range substances. But they have also attempted to shed responsibility by the passing of treatment, intervention and rehabilitation for substance dependency to Indigenous communities. The governments have stated this is part of their endeavour to lower the prevalence of substance dependency by handing the need to Indigenous communities. But it has been found that many Indigenous services that are responsible for treatment and rehabilitation are poorly funded, resulting in poor pay, and employees with little experience and limited qualifications (Gray *et al*, 2000). It has be found that limited funding being granted by governments , resulted in limited service delivery and misunderstanding regarding what an intervention is. There are also ideological barriers from Indigenous service providers. Many are resistant to programs linked to harm minimisation or the use pharmacotherapy programs (May, 1970).

Public media has also plays a significant role in the development of policy and political agendas that continue to impact on services and interventions. What is seen and read, the daily news on televisions, all influence the development of policy and public opinion. Colebatch (2002) has stated that the media serves to remind us of the importance of politically constructed policy, and its capacity to shape attitudes and practice. Hollinsworth (2005) has noted that media narratives

and representations are set within institutional codes that tend to sensationalise issues within Indigenous People and their communities. They continue to push the concept of an uncontrolled Indigenous person, by emphasising irrational or pathological behaviour, by showing violence and police arresting Indigenous People (Hollinsworth 2005). Stereotyping is one of the many constructions formed by the media; media reinforces the concepts and ideas people have developed (Harding, 2005).

This type of media portrayal play a roles in influencing policy and political direction (Gamson *et al* 1989). It supports the ongoing stereotyping of Indigenous People as not being “ready” to have control over their lives (Harding, 2005), not being able to manage their affairs.

Drug policy.

Historically the introduction of policies and legislation for the miss-use of drugs has taken a very different path. Indigenous People have been incorporated in the same legislation and policy direction as the wider community regarding the legal issues associated with substance sale, possession and use. In many countries drug policy is a patch work of different policies and Acts attempting to interlink together to cover all drug issue. Other countries have purposefully constructed inter-related policy for a holistic approach (Babo *et al*, 2010) and lack the fragmentation linked to possession, use and supply with one simple policy or Act (Kleiman, 1992). As with alcohol policy drug policies target specific sections of our community (Bacchi, 2009), and as with alcohol, they imply the stereotype of a drug-crazed person attacking you in the street or climbing through your child’s bedroom window. When coupled with the stereotype of an Indigenous person the image changes to an Indigenous drug-crazed addict (Means, 2013). It reinforces the belief developed throughout the last century of a useless, dangerous native.

Policy makers and the policy they bring into the arena are frequently based on the views of the politicians in power (Rodrick, 2013). On their fear, on public opinion and their personal experiences. But in many countries there is a strain between basic beliefs and attitudes surrounding the polarised concept of harm reduction verses that of no tolerance. The United States has actions linked to refusing to engage with harm reduction strategies, has also demonstrated a steep rise in the incidence and prevalence of a range of communicable disease such as hepatitis C, and HIV (Nelson, *et al*, 2011).

As with alcohol, there are regulations and taxes which target prescription and/or legal drugs, just as there are policies, prohibitions and interventions that relate to both legally and illegally obtained drugs. “Doctor shopping” a practise where legal drugs, prescribed for pain control or mood swings, are sourced from a range of medical practitioners as a means of gaining more than would normally be prescribed, has become so popular that many countries have introduced linked systems in attempt to track large drug users. These activities interplay with policy direction (Bender, 2013, Kleiman, 1992), through public outcry, though the numbers of people dependant on prescription drugs that become public knowledge. Many feel this does not serve the needs of the community that the approach is reactionary and piecemeal, but it is constantly repeated on the news and radio station.

It is felt by a few that the development of drug policy over the last few decades has been based on several fundamental misconceptions which have led to what thought of as inadequate policies and laws (des Jarlias, 1998). The first misconception relates to incorrect pharmacological decisions, errors such as those which propagate the idea that marijuana is an addictive narcotic, while tobacco is safe (Des Jarlias, 1998) or that smoking marijuana will not increase the chances of cancer in the throat and mouth. Additionally there is a school of thought

that a person's drug use can be controlled by substituting one substance for another (Des Jarlais, 1998). This particularly relates to the use of methadone, buprenorphine, and suboxone as a means of supplying and supporting a person's attempts to ensure their basic health (Walsh, *et al*, 1995). But the use of a range of pharmacotherapies bring a host of other issues with it, lack of appetite, loss of muscle and as stated by Wesson (1997) , should only be used as "the treatment of last resort". The other issue that is frequently overlooked is the comorbidities that can instigate or accompany substance dependency including mental health issues and pre-existing conditions that can be further exacerbated by the substance of choice.

These types of misconceptions and the use of pharmacotherapy have had a significant impact on Indigenous communities. Over 48,000 Australians receive pharmacotherapy every day, but this number has come very close to doubling over the last 6 years. For Indigenous People in Australia 1 in every 10 patients using pharmacotherapy for opioids are Indigenous. For Australian Indigenous People there is a much higher risk that they will use a pharmacotherapy program at some point in their lives, 3 times the national risk (National Opioid Pharmacotherapy Statistics, 2014).

There is also the view that addictive, repetitive drug use can be controlled and/or mitigated by intentional behaviour (Des Jarlais, 1998). This, at first glance would seem correct, but human behaviour is determined largely by environment, by antecedents and consequences (Sniehotta, 2009). The basis of intentional behaviour centres on personal intent, but intent is not enough to bring change in the majority of substances dependency suffers, nor does it bring new behaviour (Sheeran, 2002). The mechanisms within the development of substance dependency are linked to emotional and physiological processes (Webb *et al* 2010), and are dependent on the environment.

Finally, for Indigenous People the most important basic misconception is that drug use only affects foreigners and minority “problem” groups (Des Jarlais, 1998). The view that dependency primarily to drugs is a “white fellas” problem, has created an atmosphere within Indigenous community of stigmatization for any drug user (Perlman, *et al*, 2014) which generates a climate of fear for many people. Fear to admit they have a dependency, fear to seek help and fear of being ostracised within their community.

Drug policy appears to be pragmatic at best, and appears to have had little impact on the ever increasing numbers of drug users (Transform, 2009). This is principally true across all populations but more so within Indigenous groups. The pragmatic approach appears to be centred on the basic principles of drug use. The views that we should accept drug use and look towards harm minimisation, or that drug use is inevitable places many people far from their ethical and moral stance (Maelatt *et al*, 2011, Kleiman, 1992). Our moral stance tells us that this should not be happening and needs to be stopped, but the pragmatic approach of the current drug policy appears to focus on how can we reduce the harm occurring. Much of the more popular and current published papers demonstrate that the pragmatic approach heavily influences the development of policy (Maelatt *et al*, 2011, Kleiman, 1992).

There is also the continuing, and the little spoken of, tension between drug policy and research within the drug area (Hari, 2015). This highlights the concepts surrounding the truth of dependency and what works to break the cycle. Many researchers have become embroiled in this debate when the research results do not match the view or understanding that politicians or funding bodies have of the “problem” (Axelrod, 2015). This is only one of the range of challenges which many substance dependency researchers have to overcome, areas such as

accessing funding, securing participants, presenting findings and having them made public enough to stimulate conversation or precipitate change (MaKeganey, 2011).

The need for research and understanding is fundamental to challenges that are faced daily by the communities in which we live. The use of research in this subject area is imperative to change the policy direction and the interventions derived therefrom. We need to debate our policy approach and use the research we have to change “otherwise we will continue to accumulate knowledge and stock pile research findings that simply tell us what we know and goodness knows we have enough of these already “ (Hunter, 2008).

As principal goal of drug policy is to stop drug use, so the policy and legal direction frequently incorporate a criminal component. The policies and subsequent laws are meant to deter use, to encourage people to attend rehabilitation and interventions, to “dob in a dealer” and stand firm with little tolerance for drug use (Reinarman *et al*, 2004). The concept of punishment has failed to deter both Indigenous and wider community members from commencing drug use or to stop drug use (Kande, *et al* 1992: Hall *et al*, 1999).

In summary drug and alcohol policies have been developed on the basis of discrimination that continues to support the unequal power structures. The policies have also sought to establish and maintain the view of Indigenous People being incapable of managing their own affairs, of being helpless and needing the government control.

This type of guardianship policy has been developed with the underlying belief that the social norms of Indigenous People need to change to reflect white norms. That the discourse related to narratives of insufficiency and negativity frames the ongoing policy governing Indigenous lives (Fforde, *et al*. 2013).

This policy approach has flowed into the design and the development of interventions used for Indigenous People who are substance-dependent. It is a system that fails to understand the basic differences between Indigenous and white people, one that appears to justify its own existence based on the perceived inferiority of Indigenous People.

CHAPTER 3

Approach

Methodology

This chapter will outline the approach used regarding the methodology and search for evidence. It begins with an introduction and an explanation followed by the stand taken for stand on epistemology, ontology and Indigenous standpoint theory.

This chapter also seeks to answer questions related to what can be classified as evidence, how evidence can be found and the paradigms used to describe research.

Introduction.

Any intervention developed and used within public health has its foundations in a single, simple, concept; that the intervention will improve the health of the target group or individual, that it will increase health knowledge and reduce the risk of poor health outcomes (Campbell *et al*, 2000). Interventions incorporate the development and establishment of policies and strategies that provide information, and support, which enables community members to take charge of their health and to make informed choices. Simply put, public health interventions seek to create “health literacy” (Nutbeam, 2000; Baum, 2002; Childress, et. al 2002). Interventions are customarily designed for individuals, not populations as a whole, although the impact of the intervention can be felt throughout the community (Thomas, 2010).

Interventions can also be classified as a method or a tool to that seeks to bring change, to influence people to make positive changes, positive change on an individual level (Doyle 2011). Pawson (2006) theorises that the contextual layers of in intervention consists of the individual capacities of those involved, the interpersonal relationships that support the intervention, the institutional setting and the wider infrastructure. Interventions are opened ended, but regularly feedback upon themselves. They evolve as they are used and as the participants become more skilled at recognising the targeted behavioural changes sought by an intervention (Pawson, *et al* 2005

But how interventions and the evidence we use to assess them i.e. appropriate changes in behaviour, is a question that has been frequently asked. It is a question that appears to have a variety of answers, with no definitive process and answers that can be given.

Within many current evaluations and research is range of methods that incorporate examination of the activities use, and the concepts that underlay the principle of how we understand illness, and the more intricate philosophy of what is health and what is an intervention. These frequently sit uncomfortably with the acceptance or rejection of what is considered the reality, the ontology, how knowledge gathered/collected and understood (the epistemology) and how the research is undertaken, the methodology.

The understanding of knowledge, how it is gathered, stored and used, the beliefs, the social/economic values and concepts all interplay within this space. The concepts of critical theory, constructionism and post modernism also add to the landscape and contest the reliability and validity of some of the methods used for evaluation and research and the findings.

Positivism, post-positivism, critical theory and constructionism are regularly cited as the main paradigms of research and are those most frequently seen in research publications linked to

intervention studies. They are used within two primary paradigms, that of the realist, and the relativist. One could be called “objectist” and the other “constructionist” (Baum, 2002). One is a paradigm where there is only one acceptable reality, totally separate from the research that can be discussed and described, while the other is based in truth and where knowledge is socially constructed, with the researcher as part of the reality being examined. Both are part of the growing need for an understanding that crosses both methodological and disciplinary lines required to evaluate complex interventions with communities (Judge *et al*, 2001).

Repeatedly the evidence related to successful interventions is found based in concepts of generalization, in that we believe that the same set of factors within an intervention will generate the same results, regardless of age, ethnic or social/economic background. Simply put, the theory of the transference of knowledge and understanding (Pawson, 2002) fails for not only Indigenous People but also people from a variety of ethnic backgrounds or young people, as it is based on white middle class knowledge, assumptions and understanding of the “problem” (Brayboy *et al* 2009). Interventions are usually developed with a one size fits all model; they fail to recognise the cultural differences and/or needs of others.

Koelen, *et al* (2001) argues that although great steps have been taken throughout the 20th century, there is still a persistent need to understand how health risk factors, the salutogenesis, and the role of the environment and its effect on interventions. Koelen *et al* (2001) argues that the primary dilemmas can be divided into three basic areas. He lists those as intervention and outcomes dilemma, the number dilemma and the group dilemma.

The intervention and outcome dilemma, is reflected within the aim of a health intervention, the aim is not only to change the individual’s behaviour but also seeks to change the circumstances

required for ongoing change. This is frequently seen as a change in the social/economic and political arenas but is also as frequently seen to be out of the scope of all intervention.

The number dilemma is related to the use of biomedical research studies design which many people still use for public health intervention research. Such research designs are not capable of recognising and providing evidence related to real changes within the social or individual context. Finally there is the control group dilemma, looking at the difficulty of quantifying the desired outcomes (Koelen et al 2001).

But as the previous chapters have noted the continual growth in the number of Indigenous People suffering substance dependency have demonstrated a need to understand how the interventions are impacting and if they are causing change. This is of primary concern given the lack of research in this area and the limited evidence that the interventions have facilitated any personal change. There is a need to transfer our focus from acceptance of research which incorporate, and frequently is limited, to systematic searches, that link outcomes and design together as a means of measuring success. Researchers have used the same research, to uncover the same evidence, this continues to direct policy development and the ensuing intervention (Thomson et al, 2004). Research that is limited, and often isolated, to white people suffering substance dependency.

Within a public health intervention and policy, researchers tend to place research and the evidence found in very broad terms. For example, they fail to consider population mortality and morbidity, risk ratios or incidence or prevalence; the evidence merely focuses on if it worked or did not. Very little emphasis is placed on the mechanisms embedded within the interventions that essentially make the intervention successful. Pawson (2002) describes this approach as a “lazy linguistic habit”, in that we simply state if it worked or not, with no view or comment

regarding why it worked or did not. In reality it is not the program or intervention that worked, but the context and mechanism within the intervention that has “worked”, the aspects of causality that have come together and induced personal change (Pawson, *et al* 2004).

Added to the list of barriers is the need to provide any type of evidence, this becomes paramount within many research programs, as does balancing the varying views of the stakeholders involved, all of which impact on the findings (Stringer 2013, McGrath, 1981).

Research processes and methodologies should act like Lego, in that they interlink and build upon each other. While we search not only for explanations, we also search for “blocks” of data that build upon each other to provide evidence. But the dilemmatic view that many researchers have encountered, specifically regarding the research methods used, is frequently based on or surrounded by the questions asked (Ahmed, 2010). We research the data that the structures are drawn from, but not only within the data but also by the questions we seek to answer (Ahmed, 2010). Our questions, our approach to the reviews undertaken are formulated from the conceptual or theoretical framework we impose on the data we examine and the analysis. This in its self-causes a dilemmatic argument, do we choose the path we have developed ourselves or the path our feet have already began to use due to the limited focus of the questions asked? Or do we leave the trodden path and look over the wall? (Ahmed, 2010). In this case the research question posed is targeted specifically to white policy makers and the developers of interventions, as a means of expanding their knowledge and understanding of what work, and how for Indigenous People with dependencies related to a variety of substances.

Within research into public health intervention the ongoing dialogues concerning activities within interventions, the philosophies and theories upon which the activities/policies are based,

is frequently founded on the acceptance or rejection of the paradigms they are based on. As noted previously paradigms inform the epistemology, the study of knowledge and justified belief or how we come to know and understand. The ontology, specification of a reality, and how an intervention works (Pawson, 2002), by the methodology used, the research methods, how objects, concepts or other entities exist and link to each other. Finally how theories and methods all interplay to provide outcomes (Rychetnik, *et al*, 2004).

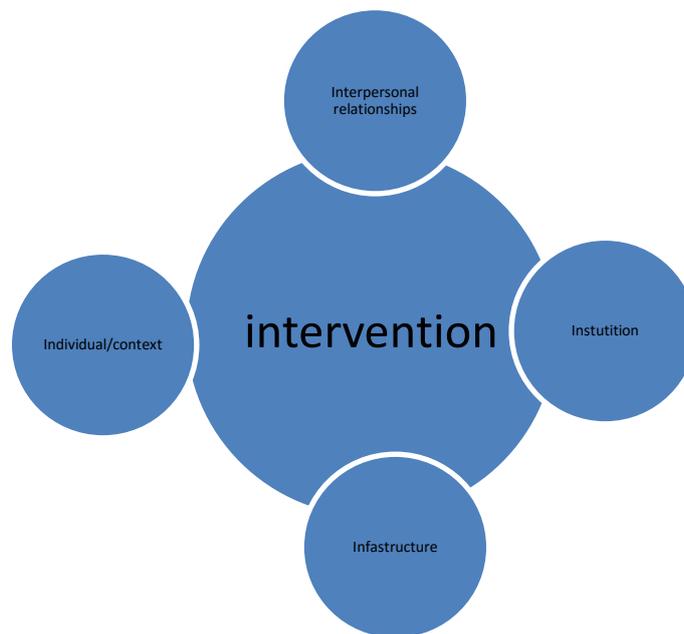


Diagram 1-Interventions and impacting factors

A generative model can be used to suggest a causal outcome linked to an intervention. The model demonstrates how the links and/or events come together to allow for the identification and an understanding of mechanisms, how they interconnect within the context in which the intervention occurs (Pawson, 2006). Interventions are complex, context dependent and can be problematic (Pawson *et al*, 2004). The evaluation of causality depends on the level and type of evidence sought. It is influenced by the design of the studies included in the synthesis, the

context or circumstances, and personal attributes of the people attending and delivering the intervention or undertaking the research (Pawson, 2006).

A critical realist synthesis allows for the contextual circumstances to be identified, which include the historical context that has resulted in the policy and intervention direction currently in use. It supports the search for adaptive mechanisms incorporated within the interventions and provides an understanding of why one intervention works and why the next does not (Pawson *et al*, 2004).

The approach taken, epistemology, Ontology and Indigenous stand point theory.

Epistemology can be loosely defined as a process that questions what knowledge is, how it can, or is acquired, and if it really is pertinent to anything. Within critical realism, epistemology is more frequently referred to as epistemology dialectic, the production of knowledge, the dialectic of explanation, the formation of knowledge (Hartwig, 2007).

The epistemology will pose questions concerning the relationships between the knower and known; is there one known reality or are there multiple? (Krauss, 2005). When linked to the ontology the answers show not only the relationships and knowledge but also things/ideas/actions come together to work, how they really are (Denzin *et al*, 1998).

But for Indigenous People, our way of knowing, our way of understanding, differs from the wider population. Our understanding of the world is based on our knowledge, and is shared with the world around us; this changes the epistemology within interventions. For the wider community knowledge is something studied for and gained, something that belongs to the person that has gained it (Wilson, 2004).

Within Indigenous life, philosophy or ontology has three worlds that interact, all with close relationships. Our worlds consist of the physical world that surrounds us, the human world that and our spiritual or sacred world (Foly 2003).

Our physical world incorporates our land as our mother or basis of creation, the land owns us. Our land provides food and shelter; it is the stage of our culture and our spirituality. The human world is based in our family, the rules of our behaviour, our knowledge and incorporates our capacity to change (Foly 2003). Our spiritual or sacred world is the world of healing, of our lore, of our laws and traditions.

Our knowledge is based on our relationships to the things in the world, a chair is not a chair; it is something to sit on. Our relationship to the world is different from the wider community. Knowledge is for our people to share, our “knowing” is coded, categorized and passed across and down. If we look at our epistemology, our knowledge, as something that is developed through our understanding of nature, through our spirituality, through our land, through our sources, our frameworks and reference points, the differences then start to become clearer (Goldman, 1986; Fuller, 1988; Aud, 1998). How we “know” is based on our construction of the evidence and our understanding, it is based on our experiences, on Indigenous history and the framework our culture and traditions provide.

Indigenous standpoint theory, as used within this synthesis, is directly linked to my epistemology and ontology, to my knowledge, view and understanding of the world around me. It is a refusal to accept the assumption that the gaining of knowledge and understanding, how that knowledge and information is used, is consistent for all ethnic groups. It is a refusal to accept that how Indigenous People are created and understood by “others” will in fact serve to

assist Indigenous People in this and many other situations linked to gaining information and how information is used (Nakata, 1997). It is an attempt to decolonise what we see, what we hear and what has been found in the synthesis.

When adopting an Indigenous stand point within an epistemological and ontological framework a different type of analysis is undertaken (Nakata, 1998). It is one that is more flexible, one that provides a deeper understanding, one that brings the experience and knowledge of the Indigenous researcher into play (Pohlaus, 2002).

“Indigenous standpoint will assist our communities to be empowered, to preserve and retain Indigenous knowledge. Research from the Indigenous standpoint can be culturally acceptable to the practitioner and academically acceptable “, (Foley, P 44,2003)

The epistemological and ontological stance taken is made concrete in the axiology of this research project. The method used within this synthesis reflects the underlying world view and beliefs through Indigenous eyes.

Context, how it is seen, reviewed.

The goal of all interventions is to change people’s choices, choices that encourage and support the ongoing growth of health literacy across populations. This is done by the development of policy and interventions that target the fundamental desire to change for the benefit of the person, it is the force that continues to drive the development of interventions.

Our understanding of what comprises health, such as home, education and access to services, act as the bases for all health interventions. This is seen more as a preventative process, as opposed to a more bio-medical approach that is centred on treatment. We now understand that health is a

learnt, created condition (Stucki, 2005), one that incorporates life style, habits, upbringing, coping mechanisms, gender, race and age. By developing our understanding of what health is, and how we can all enjoy health, it has also developed our understanding of the circumstances that can either cause or influence poor choices or poor health outcomes.

Interventions focus on changing the choices we make, interventions attempt to influence our life styles and focus on developing health literacy. But, with any intervention, we also need to consider the wider social influences and conditions that we encounter daily. Pawson (2004) has stated that there are four contextual circumstances that interplay with every intervention targeting health. The capacity of the players in the intervention to accept change, the interpersonal relationships that support the change, the settings of the intervention itself, and the infrastructure that support the change. All either work to prohibit or support personal change. Evaluations or analysis of public health interventions should work towards gaining an understanding of the contextual circumstances that either cause the unhealthy behaviour or attempt to correct it.

By understanding causation, the capacity the intervention has to influence change, and its link to context, how differing perceptions of causation all impact on our understanding of interventions, would improve the benefits for all participants. Pawson (2005) has stated that people generate change, but only in specific contexts by the actions they undertake, or do not undertake, by their understanding, by their capacity for change and by the perceived liabilities that prevent change. By using a form of generative causality Pawson (2005) argues that if we want to understand how causality occurs we need to understand the mechanism (M) that cause the outcome (O). Which in this case means that having a linguistically compatible person to deliver an intervention does not necessarily mean that the intervention will be successful, it takes a

combination, of a range of mechanisms to facilitate change. The understanding, the action, and circumstances are dependent on the person, their understanding of the intervention. In this case we need to understand what makes an Indigenous person want to change, want to gain sobriety.

The search for evidence; and its nature.

Although it is acknowledged that it is difficult to actually measure change, to identify and recognise or predicted what activities can produce change, it also must be recognised that successful interventions will contain commonalities. But the identification of the commonalities is hampered by several factors, including the societal, economic, and political circumstances that surround interventions. Pawson (2005) believes we need to look at the “patterns”, the commonalities that arise with interventions, instead of outcomes.

What is the best evidence when analysing interventions is hotly contested, affected by the research methodologies, concepts of what is “best”, and being able to identify what is successful or not. Concepts expounded in literature that discuss the difficulties linked to what is evidence (Petticrew et al 2003), how the “hierarchy of evidence” can be used for public health interventions or if it can be used. Even the term “hierarchy of evidence” has been describe as “contentious” (Petticrew et al 2003), questions regarding if it can work with public health interventions or is it worth using have been asked. Additionally indirect comparisons are undertaken, examining substance dependency interventions overall to interventions targeting Indigenous People, calculations related to probability linked to expectations and the developed myths that are linked to public health research and practice (Viehbeck et al, 2014). If a systematic review could reveal all the answers, with the heterogeneity found in many results due to the external evidence included (Rhodes, et al, 2014), could it allow for a clear identification

to be made? These dilemmas have continued to cloud our understanding of what the evidence is how it can be identified and what use is it. So what can be used for evidence?

Evidence and what constitutes evidence.

There is an ongoing desire, a need, to increase our knowledge and focus, to deliver public health interventions that actually meet the needs to the participants. We have travelled and used research that has brought us more descriptive evaluations, and now we appear to be in the times of systematic reviews. But Pawson (2005) has noted two main issues with systematic reviews, the first being the amount of evidence found. Many reviews find evidence of similar interventions with similar results, secondly the issues related to the simplistic approach taken by policy makers. Policy is made through a policy cycle, one where the policy makers examine data and options, develop a solution, enacted the policy and evaluate the impact. But there are several other factors that need to be considered within this, what information is being used or discarded, what are the interest of the policy makers and finally what their beliefs are, their values or opinions. The majority of research concerns its self with if it worked or did not. The search as to why an interventions facilitated change, how the change occurred, in what settings, what context and for whom (Pawson, 2004) can bring benefit to not just the participants but also policy makers.

The methodology taken.

The methodology taken in these syntheses is based on the work of Pawson and his fellow researchers (Pawson et al, 2005, Pawson et al, 2004). This approach shifted the focus from questions related to effectiveness of the intervention or the more traditional approach, to one that sought to elucidate the mechanisms within the interventions that combined to bring change. A

critical realist's analysis allows for the more complex factors to be unearthed, and to prove an explanation of what is occurring. It also provided a format for identifying the contextual factors that influence the choices originally and what, if anything, could change the behaviour.

A preliminary meta-analysis was performed; the analysis examined the results of a number of previously published studies of Indigenous interventions. The risk of bias within the results was identified, but due to very limited numbers of published papers available the concept of bias was discarded. The risks included selection bias, where there was significantly more males than females, larger cohorts within a few defined age groups, or bias from grouping a drug addict with a person suffering alcohol dependency.

Further consideration was also given to the "file drawer effect", an idea based on the concept that journals are full of studies showing one effect, while the file drawers are full of studies showing something else or what is perceived as not significant results (Rosenthal, 1979). The search found there was no common evidence, linked to context, mechanisms and outcomes provided by any of the studies (Cumming 2013). A demonstrable gap was unearthed within published results and it was rapidly recognised that it was beyond the scope of this research to conduct any further field investigation that could discover evidence to fill the apertures.

I used the approach recommended by Weiss (1997) to discover program theories, and the approach for identifying interventions that appear to have "chains" of events that are built upon the program theory.

To summarise, my approach has been to discover the most appropriate method for gaining an understanding of the mechanisms for intervention targeting Indigenous People suffering substance dependency.

The aim of this research therefore is to contribute to the critical understanding of, and to highlight how an intervention works, in what circumstances, and what mechanisms lead to sobriety. By answering these questions it is hoped to gain some insight into how we can support and assist Indigenous People suffering substance dependency, and discover the range of filaments that come together to grow into a successful intervention.

Why a Critical Realist Synthesis?

Initially a systematic review was proposed for this research which would have provided basic answers, simply what works or not. This would appear to be as much as many would need to know. However after a review and further consideration of the papers and their content I realised that a different approach was necessary.

Substance dependency issues are frequently the result of far more complex issues, ranging from the economic backgrounds and opportunities, policy development, political structures, ethnic background, environmental issues and complex social problems. The interventions developed and used are just as complex, with a need to identify what it is about the intervention that works, for whom and in what circumstances is critical to ensuring success.

A realist's approach is firmly based in three principles related to social science; firstly that there are casual explanations that can be found, secondly, that social reality is a reality that is interpreted by the social actors, and finally that the social actors continue to evaluate their versions of reality (Rycroft-Malone *et al*, 2012). This approach is based on the concept that we are able to identify the "underlying causal mechanisms", the parts of an intervention that bring change in the participants (Rycroft-Malone *et al*, 2012). The synthesis seeks to not only identify

the causal mechanisms but also the circumstance allows the mechanism to work and when the circumstances prohibit the mechanisms from achieving the desired goal (Wilson *et al*, 2006).

The primary aim of a critical realist synthesis is “to articulate underlying programme theories and then to interrogate the existing evidence to find out whether and where these theories are pertinent and productive, primary researches examined for its contribution to the developing theory” (Pawson, P 128, 2006).

However, Howick, *et al* (2013) have repeatedly stated that the issues with extrapolation of mechanisms are based in the following four areas:

- Firstly, that many researchers fail to really understand what a mechanism is, that we frequently lack a clear understanding and process for identifying what a mechanisms is and how it works.
- Secondly, that unless we undertake the search for mechanisms within a controlled environment, we are likely to continue to fail in our search. The circumstances differ and change continually so it becomes difficult to clearly identify the required circumstances and mechanisms that lead to change.
- Thirdly, it must be recognised that mechanisms behave paradoxically, that mechanisms can and frequently exhibit inexplicable or contradictory aspects. It also must be recognised that mechanisms are based in context, something that can, and will change quickly and easily.
- Lastly, even if we do understand the mechanism we tend to revolve in “the extrapolator’s circle” (Steel, 2008). This issue involves the concept of requiring methods of accurately measuring the outcome, but before we can know the method we need to know what the value is in the first place.

These arguments highlight the risk of continually moving between the knowledge of the measurements and the value, without gaining any further knowledge. Although Howick *et al* (2013), does state it is possible under a few circumstances to recognise a “chain” of mechanisms that will interact and produce change, we must first clearly understand the context/circumstances in which the intervention is taking place. This should ensure that there will be limited issues surrounding the identification of any mechanisms found and their role in change.

There is a need to gain further understanding of the complex methodological and diverse interventions and policies in play. How the causal factors affect the interventions uptake is necessary to understand what works for who and why (Pawson *et al*, 2005). The causal “power” of any intervention is embedded in the mechanism, basically how the mechanism acts or triggers internal changes.

How or when a mechanism is triggered is dependent on a range of factors, but principally on the context/circumstances, the C in CMOs. The context can include environmental factors, historical issues, social, economic and cultural issues that can or do impact on the delivery and uptake of the intervention. How participants interpret and accept the intervention can be referred to as the mechanism, the M, in CMO. It is the mechanism that brings the change, and finally the O – what the outcome is, whether or not it worked (Pawson, 2002).

Outcome = mechanism + context

The funding and reporting conditions for many DAO services are reliant on statistics, simply counting numbers through the door and they are fragmented at best and unreliable. This type of reporting is seen as an incentive for services to deliver the service funded, with little thought for success levels of, why the interventions failed or succeeded and/or the level of recidivism (Lodenstein, *et al* 2013). Little is known of what occurs within the interventions, how the

outcomes and the causal factors come together to give a much clearer view of circumstances, mechanisms and the final outcomes.

In summary the critical realist synthesis was chosen for the following reasons:

- For an intervention to occur there needs to be a series of links/chains, of mechanisms. Pawson *et al* (2004) notes that these “links or chains” are frequently not examined or given the analysis they deserve.

The importance of the links and chains can be summarised by stating:

- The links/chains within the intervention are usually not linear, but are embedded in the social/power structures of the day; they rely heavily on the context/circumstances surrounding the intervention. By investigating the context or circumstances, it will allow for a closer interrogation of the socio-economic and political power basis and their interplay with the interventions and effects on the minority culture (Pawson, *et al*, 2004).
- Interventions are active, and densely populated. This restricts the ability to clearly identify what is working for who and how when using standard research methods. By using a critical realist synthesis the strands of an intervention can be separated and identified.
- Interventions by their design and function are open to change. They can become modified by the organisation or the person delivering the intervention and should be modified to suit the needs and circumstances of the people involved. (Pawson, *et al*, 2004). But how the changes actually interplay with the causal factors and circumstances is also critical for success.

- A critical realist synthesis will support the identification of mid-range theories, the synthesis will “unpack” the effects of context/ circumstances, mechanisms and outcomes.
- A critical realist synthesis allows for the complexity of the intervention to be embraced, and provides tools for the synthesizing to be undertaken.

Chapter 4 Methods

The chapter highlights the research procedure and methods used, the steps enacted during the synthesis and how advice and support was sought from a range of external community members.

Methods

There are a multitude of multi-faceted policies and strategies used within public health interventions and more specifically within the area of drug and alcohol dependency for Indigenous People. All state that their way should be recognised as best practice, but frequently, the concepts of “best practice” are the result of systematic reviews and the supply of limited information. Pawson (2004) has noted that the reports and/or research state that the intervention worked “to some extent” or will work “sometimes”.

There is always an underlying theory behind the development of a policy or an intervention, a basic concept developed regarding how the intervention should work and why (Pawson *et al* 2004; Pawson 2006). This logic or perception is based upon a reality that has no ability to determine or predict the outcome of the intervention (Pawson, 2003). A critical realist synthesis seeks to “articulate the underlying program theories” the thoughts and concepts behind the policy or interventions development. The synthesis interrogates any evidence that can be found, gaining an understanding of how “pertinent and productive” the policy or intervention is

(Pawson *et al* 2004, Pawson 2006). By interrogating the concepts behind the development, and focusing on what is essentially makes an intervention work, researchers are able to find the mechanisms that cause internal change (Rycoft-Malone *et al* 2012). The demi-regularities, semi-predictable, reoccurring patterns within the data examined are used to highlight the causal factors and mechanisms affecting the outcome.

A critical realist approach combines specific social science principles (Rycoft-Malone *et al*, 2012). The principles examine where causal explanations can be found, but they also recognise that social reality can only be interpreted by the people involved, and people continually evaluate their versions of reality (Delanty, 1997). All are required to establish the mechanism used within interventions. A critical realist synthesis is based on the identification of the causal factors, the underlying mechanism, the demi-regularities or patterns and focusing on gaining an understanding of how they work , when and why (McEvoy, 2003, Richards, 2003, Wilson, McCormack, 2006).

Critical realism, as with many other sciences, is based in a constructed version of Indigenous reality. A reality that is filtered through white eyes, the takes meaning from constructions based in white knowledge and understanding. One where the white scientist decides whose and what knowledge is legitimate (Foley 2013). However, there is more than one way to view knowledge, to gain an understanding of “how” and “what” and to use the knowledge. An Indigenous standpoint in this context will allow for the results of colonisation to be recognised and the effects on Indigenous life identified. This view of research will provide a deeper understanding of the mechanisms within interventions that bring behavioural change, and how the mechanisms create knowledge and engender change for Indigenous People.

As Rycroft-Malone *et al* (2012) suggest, the synthesis follows many of the steps developed and used within a systematic review. These steps include:

- That search is theoretically driven, and purposive.
- All types of information and evidence are used.
- It is an interactive process (Rycroft-Malone, *et al* 2012).

But unlike a systematic review, it seeks to identify casual factors, under what conditions they work, and what the outcome is. This understanding is critical to ensuring that the interventions developed incorporate mechanisms that will support behavioural change.

The strategies used within a systematic review heavily rest on the comprehensiveness of the search. They vary from what is frequently classed as the “traditional narrative” in that they search to identify replication, within scientifically sound, transparent procedures (Transfield, Denyer, and Smart 2003). Systematic reviews, and the ensuing meta-analysis, search for the reliability the single study could not provide. The issue is that only what is found can be reviewed and synthesised if used. They have been commonly used in disciplines and areas that favour a positivist /quantitative “tradition” (Transfield, *et al*, 2003). It has been suggested over the last decade that researchers from an “interpretivist or phenomenological position” should not use systematic reviews in the areas of social sciences (Transfield *et al* 2003). This style of research is not universally accepted as the best source of information, nor are they seen by researchers as “necessary or desirable” (Petticrew 2001). Pawson agrees that systematic reviews are not necessary and in fact for the development of policy or interventions, are almost useless (Pawson *et al*, 2004).

Searching for evidence.

Initially definitions were developed for the words and terms used in the web based research using a process recommended by Rycroft-Malone *et al*, (2004) This ensured a clear understanding of the terms used, i.e. intervention, Indigenous, substance, dependency/addiction rehabilitation, strategy, culture and knowledge (Table 1) .This occurred after reading several papers, and gaining a degree of insight into the way language has been used within the papers. The developed definitions and understanding were used for each word and/or term during the entire search.

Word or term	Assumed definition
Indigenous	Groups that have a historical ownership of land they live on that precedes invasion and colonisation.
Intervention	The act, actions or use of a tool to intervene and modify the behaviour of another person.
Substance	A drug or type of alcohol.
Dependency/addiction	A physical or mental dependency that has developed due to prolonged and repeated use.
Rehabilitation	To restore a person to their original condition, in this case to facilitate the process that allows a substance depend person to leave their dependency behind.
Strategy	A defined plan of action.
Culture	The social, moral, beliefs/customs or attitudes that set one group of people apart from another. It is a closed system that shares their social, political, economic and beliefs.
Cultural knowledge	Made up of general and specific knowledge that is pertinent or restricted to a specific ethnic group.
Strategy	Approach's or simple mechanisms used within an intervention

Table 1- Words and definitions

Specialist internet databases, such as Scopus, Proquest, Web of Science, and PubMed, were used for the data identification process, as they are now the most commonly used systems for locating information. This was supported with searches through systems such as Google Scholar for any grey literature available. Although terms and indexes can, and do vary throughout the systems, it is one of the more recognised methods for ensuring the maximum numbers are identified.

The next steps concerned the concepts of data mining and theory formulation. This is a critical component of this type of synthesis. In this stage a frame work was developed for the synthesis to be undertaken by identifying the details and variations within the research (Rycoft, *et al* 2012). This stage involves a type of traditional systematic review, to uncover what relevant papers that were available.

The inclusion of what is classified as “grey” literature is essential to ensuring all available papers were found. “What can be synthesised depends on what is found ... neglecting certain sources of research studies may result in reviews being biased” (Peersman, *et al* 1999).

A small initial search was undertaken using what can only be classified as intuitive wording and terms. This initial search was undertaken to gain a feel for the literature available, the study designs, and the number of papers obtainable. It also served another purpose, in that it clarified several points with the research question and the purpose of the synthesis. Furthermore it provided a glimpse of the theories underpinning the interventions. The decision was made to use Scopus, PubMed, Wiley, Proquest and also Google Scholar as a means of ensuring any grey literature available could be included. This mix of databases and search engines was based on strategies recommended by Peersman *et al*, (1999) and Harden *et al* (1999). After several limited searches, the list was extended to increase the number of databases to include Ovid and Infomit.

From this stage purposeful sampling system was developed (Pawson, *et al* 2004), which included “digging through” the literature to ensure familiarity with terms, concepts and the mid-range theories that provide the conceptual frameworks (Pawson 2006). I also developed and used search categories and strategies. This process was supported by the information gathered from the Cochrane Health Promotion and Public Health Field (Victoria Health, 2006). The framework used incorporated the concepts of PICO(t)- Population, Intervention, Comparison, Outcome and Type (of study) (Table 2).

	Item	Example
P	Patient	Over 18 and Indigenous
I	Intervention	Drug and/or alcohol
C	Comparison changed to context/circumstances	Colonised people
O	Outcome	Change in addictive behaviour and substance use
T	Time	Time spent within the intervention/ program

Table 2 - ICO (T) chart (Brown, *et al*, 2006)

Within this stage I used a range of approaches for the foundational scoping, and the papers previously identified were also incorporated into a “snowball” approach with regard to reference lists and/or citations. The search incorporated the use of a range of diverse electronic databases.

This approach was firstly used to safeguard the theories surrounding the “digging through” process (Rycoft-Malone *et al*, 2012), but secondly to ensure that contextual differences did not eliminate a paper. By using the recommendations of Pawson (2004) and the Centre for Reviews and Disseminations (2006), a background search of the literature was undertaken, that linked to a systematic review of interventions used for Indigenous People suffering substance dependency.

The search included several databases that held systematic reviews, such as Cochrane, Centre for Reviews and Dissemination, and the Campbell Collaboration.

This revealed very little, and failed to yield sufficient reviews required by this research. In this case it relates to how or if the test or research actually measures what it was originally developed to measure or how it reflects in reality.

Searches were then conducted on several public electronic databases, including Google Scholar, Wiley Online Library, PubMed both Central and Health, Web of Science, Science Direct, AIATSIS, ATSI Health (Informit), Sage and DRUG-Drug Data Base (informit) in an effort to identify papers missed, as recommended by the Centre for Reviews and Disseminations (2006), and Peersma *et al* (1999). The search supported the wording of the research questions and quickly became an interactive process that enabled the re-defining of the concepts, ideas and theories surrounding the development of the research questions. During this stage a basic understanding of the theories behind the interventions targeting Indigenous People, both within their communities and external to their communities was gained. The range of electronic databases used has been previously mentioned, but to ensure that any papers had not been omitted or eliminated, several basic broader internet searches were conducted (Vic Health, 2006). Within this process, databases such as Medline, Medline Plus, NIH and SciELO were searched.

The searches proved to be more difficult and more time consuming than originally anticipated. This issue has been mentioned by several authors, including Oliver (2006), Harden, *et al* (1999) as being a common issue for researchers in the area of public health. The primary concern is the variety of study designs, how the outcomes are measured and what ethnic group has been

targeted for the intervention. This was coupled with the wording used, how the databases index the papers, the “vocabulary “embedded within the system and the terms used. Each has its own system for recognition and allocation of words or terminology which provided a further shift in word searchers (Vic Health, 2006).

A process of mining through the initial papers found was used to develop mid-range theories concerning the interventions. The mining gave insight into the key terms, explanations of the key and the concepts used, and provided (Rycroft-Malone *et al* 2012).

I then began to determine which databases would be used when searching for primary published papers. The databases were chosen after several key word searches and by suggestions from a range of individuals who are employed in the field. I developed several search strategies and adopted a more simplistic approach to a type of systematic review to be used (Alejandro, *et al* 1998).

No other critical realist synthesis appears to have been completed in this area of public health interventions; there were no previous studies or papers to provide any further support, suggestions and strategies within this topic range. The decisions made at this point were based on the results of the mining and the developed understanding of the content of the majority of internet databases and search engines.

The decision was made at this stage not include any papers that involved minors, both adult and juvenile prisoners, or studies focused primarily on the use of pharmacotherapy and where the intervention was part of a compulsory parole program, or court order.

It was felt that including prisoners or juveniles would not produce reliable data; additionally the use of pharmacotherapy clouded the issue of what is success where abstinence is concerned. The use and results of interventions with prisons provides no real success rate, as the intervention is conducted with a “captive audience”. It eliminates personal choice and cannot offer an insight into the mechanisms that bring internal change, nor do the results demonstrate real change. The same reasons were applicable to interventions used as part of a parole or bail program. The use data linked to interventions used for minors, under 18 years old, was excluded due to the differing social and economic situation from adults. Indigenous people have a demonstrable hesitancy to use pharmacotherapy, as mentioned previously (Copeland, et al 2009). Additionally the use of pharmacotherapy is not a mechanism for change; it is a substitution of one drug for another which frequently continues the addiction.

It then became necessary, at this stage, to develop the specialised search techniques and strategies for each of the systems, including Google Scholar. Although a process that was very similar was undertaken in each search, each data base required its own strategy given the differences in indexing, categorising and wording chains. A searched was undertaken to examine a range of search strategies recommended for undertaking systematic reviews by Wright, *et al* (2007), Higgins *et al*, (2008). This incorporated the categorising of words, and reducing the interventions into smaller actions or parts.

This ensured that a standardised approach was used, which was heavily influenced by the PICO(T) method, referred to earlier in this chapter. The target population was Indigenous People, the intervention under scrutiny was rehabilitation processes or interventions related to drug and/or alcohol dependency. In keeping with a critical realist view this did not limit the search to any particular type of study, setting or comparison (Vic Health, 2006). The only

limitations were self-imposed and have been mentioned previously. The methodology focused on unearthing studies that focused on the where, how and who the populations was.

Previously developed specific wording and terms for each data base were used (Appendix A)

Within the terms was the need to ensure that was equal importance placed on sensitivity, the

breadth covered, and specificity , the efficiency of the search undertaken . I was consistently

aware of the risks needed to be weighed against the need for a broad breadth of studies to be

included but also the need to ensure the correct studies were found. Although the use of a

sensitive range of wording and terms is more likely to produce significantly more studies, there

is also a risk of many being irrelevant, with the possibility that key information may be missed

(Lee *et al*,2012).

Although I attempted to follow the steps recommended by Ogilvie (2005) to develop a set of

primary known studies, the preliminary searches revealed very little within a pilot search. I was

then forced to use a wider range of wording and/or terms to broaden the catchment for the

studies. The locations were broadened from Australian Indigenous People to simply Indigenous

People, and to include a variety of settings, residential and non-residential. I referred to

Indigenous People as a generic means of including all Indigenous People. I purposely searched

for studies with wide ranging designs and styles of intervention. I undertook six small pilot

searches which allowed for further refinement of wording and terms. During this process a

complete list of words and terms to be used during the final search was developed. I undertook a

simpler pilot phase with regard to mixed methods design studies.

During this phase, external input was sought from an expert group that was established at the

commencement of the thesis. The group brought with it considerable expertise in the area

of substance dependency, primarily Indigenous substance dependency. The group was involved from the development phase of the research proposal and were chosen for their specific skills.

The final group consisted of:

- Dr Roslyn Carnes, Research Fellow at Deakin University, Melbourne. Her primary research interests are within the areas of critical whiteness, Indigenous studies and qualitative research.
- Susan Vaness, an Indigenous nurse. She has been employed in the area of substance dependency for over 12 years.
- Eileen Irons, mental health professional. Specialist in the area of addiction.
- Professor Paul Ward, Head of Facility Public Health, School of Medicine, Flinders University.

The number of the Reference Group was intentionally kept to a minimum in order to ensure that the group did not become unwieldy. The purpose of the group was to provide feedback and assistance.

The first occasion the group was used was when developing the initial research words and terms. The Reference Group was provided with a list of the words used within the searches and the databases chosen. Feedback was supplied, with suggestions of additional terms or wording changes. The suggested changes were analysed against the search question, and the wording used.

The next point of involvement for the Reference Group was in the area of feedback on the final studies elected for the analysis. Lists of the studies were provided to the group, and suggestions

were made regarding any studies that they thought might be missing from the list. The final point of engagement involved the concept of what was constituted in the definition of “evidence”.

The final point of involvement was when the analysis was completed and feedback was sought. During this phase, Professor Paul Ward, Head of the Discipline of Public Health, within the School of Medicine at Flinders University was also involved. Their input was sought due to range of issues discovered during the search, theory development and synthesis phase.

Chapter 5 Analysis methods and processes.

The issues and discussions in the preceding chapters have outlined the variances in the different styles of research conducted within any analysis of public health interventions. A critical realist analysis varies from the more commonly recognised methods, and although with similar features to a systematic search in the early stages, the real difference lay in the final analyse phase. The variances lay in the processes linked to the development and evaluation of hypothesis by testing the CMOs, the circumstances, mechanisms and outcomes (Pawson *et al*,2005: Pawson *et al* 2004), the concurrent synthesis and analysis of the papers.

Basic concept and theory development.

As critical realist analysis is a theory-based approach, as such the synthesis is theory-led or theory-driven (Wong *et al* 2013). Theoretical frameworks are implicit in all interventions and program, and their existence allows for the movement from “minutiae” of interventions and programs to major concepts. It supports the gathering of knowledge regarding the differences between two or more commonly used interventions and/or programs, how they work and what the outcomes are (Wong *et al* 2013).

Within a critical realist synthesis the initial search allows for the development of how the literature reads, what the feeling is behind the interventions, how it is expected to work, but it also allows for a review of the original question. The relevant theories and the “why” a particular approach was taken can be identified and if the interventions produced the results that initially were expected.

The reasons for a theory based approach also include:

- Theory provides a guide for understanding the information gathered.
- Theory provides a focus and basis for the abstraction and understanding of the demi-regularities.
- Theory allows for understanding how the same programs show different results in alternative areas (Wong *et al* 2013).

Developing the theoretical framework to be used in an intervention is an attempt to target the “causal determinants of behaviour and change”, theories that allow for testing and provide a framework for understanding for what works (Michie, *et al*, 2008).

First steps towards understanding and identifying program theories.

Rycroft-Malone *et al*, (2012) and , Pawson *et al* (2004, Pawson 2002) provide limited recommendations at this stage, but there is an assumption that by reading several interventions , the reading and gaining an understanding will support the identification of the motivation or reasoning behind the interventions. Was it political, what was the real issue the developers focused on, what was the background to the choice made.

It should provide an understanding of:

- What is the true target of the intervention and what is the content of the intervention?
- What are the contextual circumstances?
- Are there clear objectives stated?
- What are the outcomes? (Rycroft-Malone *et al*).

This process attempts to identify the theory behind the interventions, the motivation or reasoning. What is the policy position that leads to the developed intervention? What administrative thinking or financial needs were the instigators for the development of the intervention? What is the driving force that is impacting on the development of interventions for Indigenous People involved in substance abuse?

As stated previous neither Pawson (2004), nor Rycroft-Malone (2012) offers any real direction regarding this stage in the search for data. But simply that the theory-based interventions should use an 'explicit causal pathway' that can be identified (Michie, *et al* 2004). The identification of theory in this instance has been based on the research literature, discussions with the reference group, personal experience and my Aboriginality (Rogers, *et al*, 2000).

I reviewed, and sought to identify the prevailing concept within the papers linked to what was perceived as the main factor that would support change or how the intervention was assumed to work. The principle concepts that appeared were linked to ensuring culturally appropriate staff and in many, activities. Although this was never actually stated in any of the papers, the features such as ensuring ethnically appropriate staff, providing a recognisable format for activities, provide a glimpse to the theories used. The activities are outline further in this chapter in the

form of data extraction system which was developed to enable the listing of activities, and processes enacted concepts which formed the basis of the theoretical framework (Table 3).

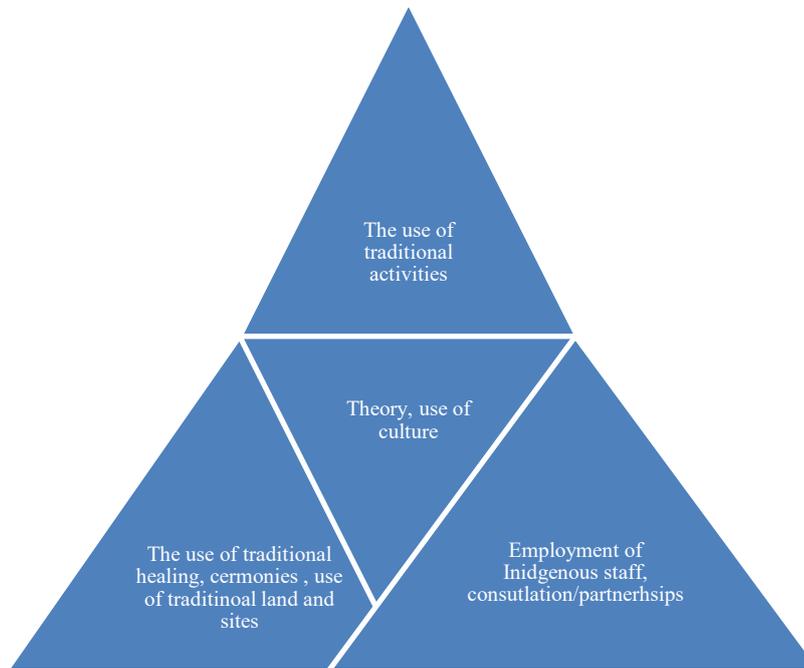


Diagram 2- Review framework

Activities were listed against each intervention, with a developed overall theory that included (Appendix B) set questions. The questions asked included:

- Was there any impact of the identified mechanisms on the overall outcome?
- Is there any interaction between the contextual circumstances and the adaptive mechanisms? (Rycroft-Malone *et al*, 2012, Pawson *et al* 2004).

The initial focus of the review was on identifying and listing the activities and processes that were used as mechanism within each intervention.

It quickly became clear that the theory of embedding interventions within a cultural contextual framework was the most popular theory. But the way this was manifested within the intervention for Indigenous People in a variety of methods varied dependant on the intervention design.

(Table 3). Pawson *et al* (2006) believes that all working theories need to be pulled to the surface, that all carry implicit sets of program theory and that during the theory development phase; all researchers need to move from a synthesis role to that of a primary researcher. I worked to ensure that efforts targeting implementation were separate from mechanism that induce change. Pawson (2004) noted that even when mechanism were present, it is centred on the participant and if they took advantage of the intervention or refused to participate, but even when it is refused we can still learn from it. It allows policy makers and developers of interventions to gain a more comprehensive understanding of what works for who.

As within any program there are risks to the development, implementation and effect. In this case the risks that could perceptibly prevent the intervention from achieving the desired results have been listed below.



Adaptation activity	Theoretical mechanisms	Theoretical response	Risks
Using traditional activities to carry the message, changing dialog to suit the participants.	Consonance, linked to traditional values and ceremonies	Recognisable as their “own” through the use of cultural activities	That the group have a high level of acculturation, poor

			acceptance of their own cultural.
The use of the same tribal/cultural group to deliver the intervention.	Authentic of the intervention, language, pedagogy, understanding	Develops feelings of ownership or belonging, for us by us.	Risks associated thought unequal partnerships and tokenisms
Set within the community, on tribal lands or historical significant sites.	Embedded with the ethnic/ cultural/dialect group.	Deeper understanding of concepts, language, through familiar environment.”	Ostracized by the community when they know, too close to home.
The use of traditional activities, culture and land to target the groups involved.	Specificity, targeted to a specific ethnic group.	Acceptance of the intervention as it is “for us”.	Reinforcement of stereotyping of cultural/ethnic group.
Visible interaction with the tribal/cultural group, sharing to ideas, concepts.	Sense of ownership	Incorporates tribal elders, gives the power to the tribe regarding cultural, traditional activities.	Rejection by the tribe for the people attending the intervention.
Partnerships with the community, community consultation.	Endorsement by tribal acceptance.	Intervention “allowed” on tribal land.	Loss of control over the intervention, and program.

Table 3 - Chains of Theorised implementation of interventions

Although the need for “cultural competence” and ensuring the principles of cultural safety are incorporated within all interventions and recognised as an integral part of the delivery of an Indigenous intervention, it is still rarely seen provided, or mentioned in the interventions (Betancourt, *et al* 2002). This could be due to the ongoing unequal power distribution within the design or development and the funding phase of the interventions, which fails to recognise and incorporate the real needs of Indigenous People.

After the initial review of papers, and a revisit, a list of theories that had been used within the interventions was developed and, following the guidelines provided by Pawson *et al* (2004) grouped, categorised and analysed (Table 3). This has been primarily based on the activities within the chain of the intervention, (Form 1) what made them more culturally appropriate, and how that manifested within the intervention.

My efforts were targeted at ensuring that the focus was identifying a more detailed theory development, and how the theory was manifested in the intervention. Pawson *et al*'s (2004) framework for critical realist theory warns of the impossibility of being able to complete a comprehensive review, and that program theories need to be set and prioritized. It is clear that at varying points, acceptances of limitations of the review phase needed to occur.

During this process the first concern was regarding the scope of what could be classified as mechanisms and the theory behind that. But it became clear the basic theories that the mechanisms were based on the use of traditional activities (consonance). They were embedded, developed specific to each Indigenous group (specificity), were within a partnership framework with the Indigenous group (ownership), were supported by the local Indigenous group (endorsed) and the activity involved the local Indigenous group (tribal acceptance) (Table 3). These five principle mechanisms basis provided the lens (Pawson 2006) used to synthesis and analyse the interventions found and the evidence within them.

Search for intervention papers and results.

This section will outline the results of the searches, culling processes used and relevance of the papers found. The processes outline previously was used for the specific purpose of uncovering any available evidence as a means of unearthing the theories behind the development of the

interventions and the mechanism targeting interventions for Indigenous People suffering substance dependency.

The initial search parameters and culling process were set during this part of the search phase.

The culling process consisted of only including studies that were:

- In English
- Conducted within the last 20 years.
- Focused on interventions targeting drug and/or alcohol.
- Focused on Indigenous community members or populations.
- Participants over the age of 18, excluding 18.
- Did not include studies regarding people that were incarcerated or under directions from a government department to attend.
- Did not use pharmacotherapy except for the detoxification stage.
- Were within Indigenous populations that had undergone colonisation.

The parameters of the initial search were set on several bases. Primarily that young adults has specific needs that differ from older adults, additionally the concept of the interventions targeting prisoners and people under the direction of a court or government department did not really indicate a willingness to change from the onset. Pharmacotherapy, in this case, could mask any choice to change.

The selection of sites to be used came through the initial search process when developing the theories behind the interventions. It was based on the number of papers with each returned in each search. The final sites chosen, in consultation with the expert advisory group and included:

- PubMed
- Scopus
- Wiley
- Proquest
- Google Scholar.

The initial search and culling of papers to be used during the synthesis,

The process of culling began with a title search; the next phase included reading the abstracts and finally reading the full paper.

The format of the search entailed:

- A review that consisted of the first 500 only within the title search phase.
- Elimination all doubles before the title check.

If I was unsure regarding the title at the initial stage, the paper was held until the second stage or third stage of elimination, which consisted of a reading of the abstract and within the final phase the full paper.

As stated previously only the first 500 from each search was initially in the title reach. The elimination of doubles was completed either manually or by using EndNote. I used the EndNote

list against the PubMed list, transferred both to an Excel spreadsheet format by using the home tab, conditional formatting, highlighting the cells and then omitted the duplicate values. This then allowed for all duplicates to be identified and removed.

The initial review was intentionally very inclusive to ensure that all available papers pertinent to topic were included (table 4). If I was unsure I left the papers in the spreadsheet until the abstract was read.

Data base	No. of records	Number after removal of doubles	Number of records after title elimination	Number of records after abstract Elimination
Scopus	2168	184	14	2
PubMed ~	1957	127	11	3
Wiley	14823	144	9	6
Proquest	354160	98	13	4
Google Scholar	39300	110	18	3
Total	412408	663	65	18

Table 4 - Numbers first search-title and abstract

A second level process was enacted that included the reading of all abstracts, this process was undertaken by myself with support from the expert group when needed (Table 5).

The earlier criteria was used to ensure that only papers that included consenting adults were used, that no pharmacotherapy was used except during the detoxification or recovery period and that each participant was involved voluntary. After consultation with the expert group and a

review of the existing papers additional criteria for elimination were also imposed at the second phase which included the elimination of:

Papers that were found during the research but failed to be include due to ,

- Demonstrate a systematic approach, rigour in the research or included only white participants.
- Were predominantly anecdotal.
- Failed to provide a numerical based result.
- Did not directly relate to an aspect of substance intervention of colonised Indigenous People (Rycroft *et al* 2012).

Before the final culling of this initial search commenced, a more detailed criteria developed for the published papers. The criteria incorporated papers that:

- Focused completely on Indigenous People suffering substance addiction, not simply a group within a larger study.
- Were written in English and conducted in an English speaking country.
- The Indigenous tribal people were part of a larger group that had undergone colonisation.
- Included active participation of the Indigenous group involved.

Data Base	Number of Records	After Full Reading
Scopus	2	0
PubMed	3	1

Wiley	6	1
Proquest	4	1
Google scholar	3	1
Total	18	4

Table 5 - Numbers remaining from culling of papers

At the start of this process it was envisaged that the strategies developed and used during the initial search phase would produce a feasible number of studies to include within the final synthesis. , however this was not the case. The final phase, of full reading of each paper, resulted in only four papers that held any conclusions that displayed a demonstrated numerical value i.e. 89% success rate. It became apparent that restricting the admittance of studies that only contained “hard data” results would restrict the synthesis process by the limited number available. A second full reading was undertaken to identify any studies containing anecdotal evidence. Additional advice was sought from the expert group regarding the acceptability of anecdotal evidence and the acceptance of a clear definition of what evidence is. Anecdotal evidence in this case relates to community acceptance and participation, to the impact the interventions has had on the person and community as a whole.

The final decision for inclusion of anecdotal results was based on the work of Pearson (2004), and his theory that there is no right or wrong way to complete a critical realist synthesis and no clear definition of what “evidence” is. This indicated that all information that assists in uncovering mechanisms and that displays any type of outcomes, should be included. Additional information and further definition was then sought from Oxford English Reference Dictionary (1995) which defined evidence as “the available facts, circumstances, etc. supporting or otherwise a belief, proposition, etc., or indicating whether a thing is true or valid”.

Pearson (2004) argues that all information should be taken into account when reviewing evidence. Further discussion and advice was sought from the expert group regarding the acceptability of anecdotal evidence and the development, for the purpose, of what evidence is.

The decision to include anecdotal results or papers with no numerical result was made and based on the limited papers available and the need to broaden our understanding of what occurs in an intervention targeting Indigenous People. It was anticipated that a broader picture of the level of acceptance within the Indigenous community, and by participants would be shown, and by the findings a concept of what the mechanisms were. This decision may appear to go against the principles of a critical realist synthesis in the strictest definition of an “outcome” but it did provide a more holist view of the interventions. The final procedure found 11 papers suitable for the synthesis (Table 6)

Data Base	No of records	Qualitative data	Anecdotal
Scopus	2	0	1
PubMed	3	1	1
Wiley	6	1	2
Proquest	4	1	1
Google Scholar	3	1	1
Total	18	4	7

Table 6- Inclusion of papers with anecdotal results

Appraising rigour, validity and reliability

Appraising evidence and quality is critical to using the evidence found. Systematic reviews contain inbuilt systems within the criteria to ensure that papers found are of a defined quality.

Data interrogation is used to identify design or selection bias, randomising, sampling or

measurement errors, and as a means of establishing the rigour of any study. But judgements can only be made “about the way research is presented rather than directly about the research itself” (Rolf, 2006). Developed lists and strategies are frequently used to “tick” off signs of rigour, validity and reliability, but a few researchers argue that it is “an illusion of technique” that we are at danger of “making a fetish of it at the expense of perfecting a craft” (Sandelowski, 1993). This type of checklist/process not used and I felt not applicable to the type of analysis used within this thesis.

In a critical realist synthesis a single study may or may not be used, it is patterns that develop throughout a range of papers that provide the bases for the development. Pawson (2005) notes that any appraisal of papers, including for rigour or basis, should very low on the process scale. I was also careful that the interventions were developed for groups, not individuals, as recommended by Pawson (2004), and finally that the papers clearly demonstrated that the target group, and intervention were aligned to the area being researched.

The process used for reviewing the studies and selecting the papers to be included, incorporated a series of set questions:

- Did the paper state the objectives of the intervention and how they were going to achieve them?
- Did the paper clearly display the context of the intervention?
- Was there any data collected at any stage of the interventions, i.e. number of participants?
- Was there any information regarding how the conclusions were drawn.

The final papers were assessed against the listed criteria and those not meeting the criteria were discarded.

List of papers included for the synthesis.

At the end of the culling process, all papers were listed within a spreadsheet and column set regarding the publication date as well as the country where the study was undertaken. This step allowed for further use as a means of data extraction using an Excel spreadsheet.

Title	Author	Date	Publication	Country
Stopping petrol sniffing in remote Indigenous Australia ; key elements of the Mt Theo Program.	Preuss, K., Brown, J.,	2006	Researchgate	Australia
The outstation model of rehabilitation in Central Australian. The case for its recognition and acceptance.	Shaw, G., Ray, T., Mcfarland, B.,	2011	Substance use and Misuse.	Australia
The story of Alkali Lake	Willie, E.,	2008	Alcoholism Treatment Quarterly	America
The red road to wellness : Cultural reclamation in Native First Nations Community treatment centre	Gone, J.,	2011	American Journal Community Psychology	America
The grog mob : lessons from an evaluation of a multi-disciplinary alcohol intervention	Abbs, P., Togni, S., Rosewarne , C., Boffa, J.,	2013	Australian and New Zealand Journal of Public Health,	Australia

Whanaungatanga : A process in the treatment of Maori with alcohol and drug use related problems	Huriwi, T., Robertson, P., Armstrong, D., Huata, P.	2001	Substance use and misuse	New Zealand
Cultural connection and transformation : Substance abuse treatment at Friendship House	Edwards, Y.,	2011	Journal of Psychoactive drugs	America
The role of culture in substance abuse treatment programs for American Indian and Alaska native communities	Legha, R., Novins, D.,	2012	Psychiatric Services,	America
American Indian culture as substance abuse treatment : pursuing evidence for a local intervention	Gone, J., Looking, P.	2011	Journal of Psychoactive Drugs	America
Incorporating Yup'ik and Cup'ik Eskimo Traditions Into Behavioural Health Treatment	Mills, P.	2011	Journal of Psychoactive Drugs	America
Community Mobile Treatment, What It Is and How It Works	Wiebe, J., Huebert , K.,	1996	Journal of Substance Abuse	America

Table 7- Papers incorporated within synthesis

Of the final studies chosen 5 were from America, 3 from Australia, 2 from Canada and the final 1 from New Zealand (Table 7).

Data extraction and synthesis

Pawson (*et al* 2006) and Rycroft-Malone (2012) provide very little structure or advise on how data synthesis is to be undertaken, or even how it is to be approached. Rycroft-Malone *et al* (2013) has summarised the approach that they used, where frameworks were used but it has been altered to suit the requirements of this synthesis.

I followed a series of defined steps that included, but were not limited to:

- The development and use of tables, which provided the essential information regarding adaptive mechanisms used and outcomes.
- The over-arching theory in each intervention.
- The identification of the chains within the interventions.
- The identification of the main theory or hypothesis manifested in each intervention.

The data was extracted based on the theoretical frame work developed during the initial phase. During the data extraction process, I developed spreadsheets that listed, and included direct quotes from papers, with the page number listed. This allowed me to return to the published paper and easily draw down the information regarding adaptive mechanisms. Once all of the data extraction was completed, it was moved to single Excel spreadsheet.

The spreadsheet enabled the key elements of each paper to be extracted and summarised (Table 8). This process entailed re-reading the papers and noting each mechanism and key element in the extraction table.

Study	Activity	Theory
Stopping petrol sniffing in remote Indigenous Australia; key elements of the Mt Theo Program.	Partnership	Use of traditional cultural activities and tribal support.
	hunting	
	gathering	
	based in tribal lands/ close to a "dreaming " place	
	supported by the community	
	More traditional life style, dreaming	
	the "elders" have an active role	
	indigenous staff	
	"healing" focus	
The outstation model of rehabilitation in Central Australian. The case for its recognition and acceptance.	based in tribal lands	Use of traditional cultural activities and tribal support.
	based in family traditions	
	elder accepts responsibility for the person	
	hunting	
	gathering	
	Indigenous staff	
The story of Alkali Lake	owned, managed and used by the tribe	Use of traditional cultural activities and tribal support.
	policy, driven , enforced and owned by the tribe	
	based on care for other tribe members	
	renew interest and use of traditional customs	
	in country	
	lead by example by elders	
The red road to wellness : Cultural reclamation in Native First Nations Community treatment centre	owned and supported by the tribe	Use of traditional cultural activities and tribal support.
	indigenous staff	
	in country	
	rational healing	

	cultural activities , sweat lodge, sun dances, powwow dances, pipe ceremonies	
	traditional crafts	
	field trips	
	spirituality	
The grog mob : lessons from an evaluation of a multi-disciplinary alcohol intervention	Some Indigenous staff	Use of traditional cultural activities and tribal support.
	In country	
Whanaungatanga : A process in the treatment of Maori with alcohol and drug use related problems	culturally competent staff	Use of traditional cultural activities and tribal support.
	support from elders	
	acceptance of personal responsibility	
	Traditional life style	
	spiritual life supported	
	traditional healing	
	taught traditional values, principles and processes	
	Indigenous staff	
	support for the development of "self"	
Cultural connection and transformation : Substance abuse treatment at Friendship House	spiritual experience	Use of traditional cultural activities and tribal support.
	supported	
	taught traditional values	
	family and community centred	
	traditional medicine	
	retraditionalization	
	traditional activities, sweat lodge, talking circles,	
The role of culture in substance abuse treatment programs for American Indian and Alaska native communities	mixed delivery sites	Use of traditional cultural activities and tribal support.
	supported by the communities	
	use of traditional and cultural activities	

	traditional healers	
	medicine wheel	
	Indigenous staff	
	incorporation of spiritual growth	
	trips and camping in traditional lands	
American Indian culture as substance abuse treatment: pursuing evidence for a local intervention.	residential treatment in country	Use of traditional cultural activities and tribal support.
	traditional activities, sweat lodge, sun dances, pipe rites	
	Tribal commitment and support	
	Partnership	
	developed and support advisory group to support activities	
	camps	
	hunting and gathering	
	Traditional crafts, carving, leather making, quillwork	
	tribal education, ritual protocol, tribal cosmology, sweet grass ritual	
	partnerships with tribal elders	
	in country	
Incorporating Yup'ik and Cup'ik Eskimo Traditions Into Behavioural Health Treatment	traditional crafts	Use of traditional cultural activities and tribal support.
	activities hunting, fishing, steam baths, ceremonies, seal bladder festival	
	Traditional medicine	
Community Mobile Treatment, what it is and how it works	family based	Use of traditional cultural activities and tribal support.
	support from within the tribe	
	implementation of cultural actives- pipe ceremony, campouts, sweat lodge	

	Indigenous staff	
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Table 8- mechanisms used within each paper

The adaptive mechanisms identified during the initial theory development were listed in an Excel spreadsheet, as stated previously, with notations for each mechanism against individual interventions. As can be seen in Table 8, the reports differed in their approach to treatment, but all based the treatment on the incorporation of traditional culture and cultural activities as the bases. All studies include both Indigenous male and female participants, across a broad range of ages, but above 18 and attending voluntarily. This process was used to ensure that the chains of inference were developed and refined, which was both an inductive and deductive process (Rycroft-Malone 2003).

Metadata

Whether to add metadata in the form of an annotation for rating each of the seven adaptive mechanisms became a question at this stage. The question arose related to if rating each study would give any further insight into the context of each intervention or whether they do not give any further insights at all, as many believe.

The decision to add metadata-style annotations was additional to understanding of what the adaptive mechanisms were. It allowed for a rating system to be implemented with the theoretical mechanism as a measuring tool.

Included within the list are the seven theoretical frameworks which included partnerships, but it must be acknowledged that within the majority of the studies, the partnerships were very unequal. One side, the funding body, provided the financial support required for the intervention to be developed and implemented, and also possessed the ability to end the intervention when it

liked. Furthermore although there were Indigenous staff, frequently they were in the minority and had little control or input into the interventions.

Using the established criteria during the theoretical development phase, the eleven studies were reread and listed against the criteria they met (Table 9). The criteria were consonance, authenticity, speciality, being embedded, a sense of ownership, endorsed by the tribal group and accepted by the tribal group. Only the five of the studies included all seven criteria. The only criterion that was met by all studies was specificity, that each intervention was specifically designed for the target group. The effects of the theory development and established criteria will be discussed further within this thesis.

Study	consonance	authentic	specificity	embedded	ownership	Endorsed and accepted
Stopping petrol sniffing in remote Indigenous Australia; key elements of the Mt Theo Program.	y	y	y	y	y	Y
The outstation model of rehabilitation in Central Australian. The case for its recognition and acceptance.		y	y	y	y	Y
The story of Alkali Lake	y	y	y	y	y	Y
The red road to wellness : Cultural reclamation in Native First Nations Community treatment centre	y	y	y	y	y	Y
The grog mob : lessons from an evaluation of a multi-disciplinary alcohol intervention	y		y	y		
Whanaungatanga : A process in the treatment of Maori with alcohol and drug use related problems		y	y			
Cultural connection and transformation : Substance abuse treatment at Friendship House	y		y	y		
The role of culture in substance abuse treatment programs for American Indian and Alaska native communities		y	y			Y
American Indian culture as substance abuse treatment: pursuing evidence for a local intervention.	y	y	y	y	y	Y

Incorporating Yup'ik and Cup'ik Eskimo Traditions Into Behavioural Health Treatment	y	y	y	y	y	Y
Community Mobile Treatment What It Is and How It Works		y	y	y		Y

Table 9- Frequency of adaptive mechanism

The process for data mining and synthesis followed a simple process linked to a series of steps.

In the first step, extraction tables were developed and populated, then separated into theoretical areas supported by adaptive theories. These tables – 7, 8 and 9 – include data extracts and the source papers and interventions (Rycroft-Malone et al 2004). The second step entailed grouping the adaptive mechanisms into areas, linked to change agents and risks (Pawson 2004). Step three combined the data extraction and identification of mechanisms or linkages with the intervention. This step resulted in a list of mechanisms.

The final step incorporated the outputs from steps two and three to give a full picture of the mechanisms in use, the contextual circumstances that interplayed with the mechanisms and the outcomes. The nature and activities linked to each mechanism were examined and noted.

Pawson *et al* (2006), tells us that recommendations from critical realists synthesis should not be used as best practice, but they do give us an insight into how interventions behave and interact with a specific context.

Chapter 6

“We are really sorry for you people. We cry for you because you haven't got meaning of culture in this country. We have a gift we want to give you. We keep getting blocked from giving you that gift. We get blocked by politics and politicians. We get blocked by media, by process of law. All we want to do is come out from under all of this and give you this gift. And it's the gift of pattern thinking. It's the culture which is the blood of this country, of Aboriginal groups, of the ecology, of the land itself. – David Mowaljarlai, senior Lawman of the Ngarinyin people

within the West Kimberley region, Western Australia, addressing a gathering of white people in his country (ABC Radio 1995)

There is a space, a gulf between Indigenous voices and non-Indigenous voices. It is a space developed and manifested by how knowledge is gained, how knowledge is situated and how it sits in the colonial/white power of scholars and how it is interpreted (Ardill, 2013). A critical realist synthesis allows for a generative understanding to causation, one that encourages us to understand how interventions are interpreted by the participants. One that steps away from the void between white and Indigenous People, one that allows the recognition of our differences and allows for understanding. The synthesis examines the interplay between the context of the intervention and the environment of the participant and the resources used.

There are several examples of critical realist synthesis, but few instructions on the “how do” (Wong *et al* 2013). Pawson’s (2004) and Wong’s (2013) have not noted any recommendations regarding the “how to”. Pawson *et al* (2006) did not, however, insisted on a full literature search, nor did they discussed in detail the “how to” regarding data extraction. This omission has provided the chance to apply a critical Indigenous lens within the synthesis, to interrogate the data found and to gain a glimpse of the real mechanisms in play. In turn this has provided an understanding of the “why”, the specifics within each of the programs that have brought change.

Although Pawson (2004) and Wong *et al* (2013) provided some instruction, it became difficult in several areas, essentially when extracting the data, and while try attempting to gain a clearer understanding of how to identify a mechanism, how they interacted with the context and how they work. Overall however, the process has proven to be flexible in approach, which as previously stated, has allowed for a different type of analysis and focus.

The process of synthesis incorporated the identification of the theories behind the development and design of studies targeting Indigenous People suffering substance dependency. This was quickly followed by the identification and clarification of the context surrounding the intervention, what the obvious and not-so-obvious “black box” mechanisms are and if their presence provided the impetus for behavioural change.

Within this section all intervention/program theories will be discussed, the obvious and not-so-obvious “black box” mechanisms, both intended and unintended, will be disclosed and discussed, and finally the outcomes will be discussed.

What is classified as the not-so-obvious mechanisms are the emotional and/or mental reactions or cues that prove meaningful changes have occurred internally, which leads to behavioural change.

Underlying program theories related to Indigenous substance dependency.

The steps discussed in the preceding chapters were used to identify and develop the theoretical framework, contextual factors and mechanisms that each intervention was based on. The enacted process allowed for the key program theories to be developed i.e. the policy direction, historical impact and for the development and design interventions to be documented. The second stage, and an essential aspect of the processes applied, required a level of abstraction when developing the mid-range theories. Mid-range theories are accepted as being “close enough” that a hypothesis can be tested against it. This is in reality required working both “backwards and outwards” (Wong *et al* 2013). This process encompassed rereading the selected papers, and performing an assessment of the papers to identify the policy or legislative background and the administrative assessments that led to the development of the intervention or program.

As part of the process the chains, both linear and nonlinear, within each intervention have been identified. The “chains” embedded within interventions can frequently behave in unforeseen ways and can become non-linear. But the use and identification of the “chains” that support and make up the activity, thought to generative change or a reaction, or what could give rise to resistance was undertaken and needs to be identified (Weiss, 1997). Within the convoluted chains of the implementation and theory are the anticipated change ‘element(s)’, the mechanisms. The mechanisms link the context and outcome together; they provide the relationship structure with formal foundations, as demonstrated in the diagram below (Diagram 3) (Weiss, 2000).

As described previously, the theory behind an intervention is the platform on which mechanisms developed. Program theory is a series of actions or interactions that attempt to keep the clients actively involved in the intervention, to induce change (Michie, *et al*, 2008). The theory can be “explicit or implicit” (Connell, *et al* 1995), it could be clear or hidden within the intervention, but they hope to instigate reactions from the clients to either reject or adopt the program (Pawson, 2004).

Identification and understanding their affect is not foolproof, nor are the interventions assured to work every time it is used. Every intervention has its risks, but for the purposes of this thesis a linear implementation chain will be used that is reasonably simplistic.



Diagram 3. Implementation chain

When examining the papers the findings highlighted the failure of mainstream rehabilitation interventions to meet the needs of Indigenous People (Rowan *et al* 2014), demonstrated by the increasing number of Indigenous People worldwide would suffer substance dependency. There is an almost overarching theme appearing, that seems to incorporate the feeling, from the papers found, that as all else had failed, why not try this? The use of culture or the linkage to culture appears to have been an option of last resort.

Many Indigenous People have developed strong views that the drug and alcohol abuse and dependency suffered by Indigenous People has been further exacerbated by the “erosion of their cultural integrity as a result of colonisation” (Brady, 1995). This places Indigenous People in a position where their life styles and beliefs are being either eroded or destroyed.

But consideration must also be given to the several other factors including limited access to services, due to isolation or distance from such services, differences and difficulties in language and customs, differing methods of gathering knowledge, traditional views of nature and the world. All the factors continue to work together to prohibit Indigenous People from accessing interventions and/or from successfully completing or gaining sobriety (Hinton, *et al* 2012). All play a role in either prohibiting Indigenous People from engaging in or raise barriers that prevent the participants from successfully completing the intervention.

But within all of the papers selected, there has been a dominant framework of cultural and/or traditional values and activities, Indigenous social mores or customs, initiated as mechanisms, and a form of regeneration of an Indigenous traditional.

Culture is usually defined as the social, moral, beliefs, customs or attitudes that set one group of people apart from another (White 2009). It is a system in which people share their social,

political, economic ideas and beliefs. But within this context it has a more limited definition and use; it is more closely linked to a shared historical and political background, of spiritual practices and beliefs and of ethnic origin

The concept of basing the intervention in tribal lands, as with The Outstation Model of Retaliation in Central Australia (Shaw et al, 2011), The Story of Alkali Lake (Willie 2008) and The Red Road to Wellness: Cultural reclamation, manifested to be the more popular theoretical mechanisms used. The activities listed act as means of regenerating traditional culture varied, all were based on very similar theoretical structures. Simply that by the use of Indigenous activities and culture the opportunity for change is more predominate. The Grog Mob: lessons from an evaluation of a multi-disciplinary alcohol interventions (Abbs et al, 2013) and Incorporating Yup'ik and Cup'ik Eskimo Traditions into Behavioural (Mills, 2011) have also demonstrated the integration of traditional activities and culture as a means of treatment, but within a differing form. Huriwi (et al 2001) in their paper Whanaungatanga : A process in the treatment of Maori with alcohol and drug use related problems : incorporated the reintroduction of a traditional life style, incorporating traditional healing and a renewal of a traditional spirituality . This type of regenerating of traditional culture has also been followed by the program Red Road to Wellness (Gone 2011), the American Indian Culture as a Substance Abuse Treatment ; Pursuing Evidence for a local Intervention (Gone, 2011), The Outstation Model of Rehabilitation (Shaw et al 2011) and the Community Mobile Treatment (Wiebe et al 1996) also presented with a similar theoretical framework.

From a historical view, the use of Indigenous culture as a means of treatment has been hypnotised, theorised and debated from the early 1930s. The actual use of culture would appear to have been only adopted over the last three decades. It has been a very slow implementation

with a low level of acceptance from main stream services, academics and medical practitioners (Brady 1995).

Throughout our lives we struggle to understand, and to improve our lives, (Pawson and Tilly 1997) and in the 20th century we began to look to the State and academics to provide the concepts and interventions that will give us wellbeing. We have developed “evaluators” to tell us if something works, if it is worth our time or energy to engage or to participate in them. Pawson and Tilly (1997) believe that the concept of evaluation is now at a watershed; that as researchers, we can no longer continue to guess what is going to work or what is working, or to assume that some things will work sometimes. As researchers, we continue to speak of how we have used and arranged tools for evaluation, the meta-analysis with its unseen secessionist concept of causality, or narrative reviews that focus on a configurational approach to causality. Pawson (2002) concludes by saying that we have, at the same time, failed to recognise the underlying mechanisms and the causal power that provide the impetus for change.

We need to stop arranging tools, and look towards what has worked, how and why.

My attention at this point was to uncover more of the adaptive mechanisms that has been found, as a means of understanding how and why some interventions work and others do not. My process at this juncture was developed and boundary not only Pawson et al (2004, 2005) and Wong (2013), but also by Weiss (1997) as all have developed a view that any change is facilitated by participants, one that can either be reject or accept, they can either see what has occurred to bring them to this stage in their lives or continue on the path they are already traveling on.

As a measure of ensuring the accuracy of the previously theorized instruments of adaptation, in within this analysis the employment of culturally appropriate staff, language, values and spirituality, the use of community was used for the synthesis, I revisited the adaptive activities previously listed above. I compared the adaptive activities within each paper as a means of finding similarities and establishing a final list.

Study	consonance	authentic	specificity	embedded	ownership	Endorsed and accepted
Stopping petrol sniffing in remote Indigenous Australia; key elements of the Mt Theo Program.	y	y	y	y	y	Y
The outstation model of rehabilitation in Central Australian. The case for its recognition and acceptance.		y	y	y	y	Y
The story of Alkali Lake	y	y	y	y	y	Y
The red road to wellness : Cultural reclamation in Native First Nations Community treatment centre	y	y	y	y	y	Y
The grog mob : lessons from an evaluation of a multi-disciplinary alcohol intervention	y		y	y		
Whanaungatanga : A process in the treatment of Maori with alcohol and drug use related problems		y	y			
Cultural connection and transformation : Substance abuse treatment at Friendship House	y		y	y		
The role of culture in substance abuse treatment programs for American Indian and Alaska native communities		y	y			Y
American Indian culture as substance abuse treatment: pursuing evidence for a local intervention.	y	y	y	y	y	Y
Incorporating Yup'ik and Cup'ik Eskimo Traditions Into Behavioural Health Treatment	y	y	y	y	y	Y
Community Mobile Treatment What It Is and How It Works		y	y	y		Y

Table 10- Frequency of adaptive mechanism

Specifically developed and targeted interventions were the most frequent mechanisms found, in all eleven papers. Ensuring the interventions was authentic, by employing staff that spoke the same dialect and where terms and body language is the same involved nine papers. As did the mechanisms of embedding the interventions into culturally appropriate surrounds and using cultural tools to support the interventions also was used in nine papers.

Acceptance by the tribal group also rated highly with eight paper detailing the acceptance of tribal elders and the general group. This was followed closely by ownership, one of the more difficult targeted mechanisms due continuing financial outlay, something the majority of Indigenous groups would struggle with. The approach of using familiar sounds, sights and values supports the reduction of distrust, by seeking support and approval from the community, additionally it demonstrates to the participants that the intervention has community support and is aligned to the community's values and spirituality (Yancey, *et al*, 2006).

Many of the interventions listed interlink, in that they provide the format for other mechanism to build on. An example of this is by conducting the mechanism within the community allows for feelings of ownership to be developed, or authentic process to be used by the use of language and the inherent understanding of language. But it became apparent that few interventions used all mechanism, and the degree to which the mechanism is used also varied. Five of the interventions used all the mechanism listed, and from the reading of each paper, the mechanisms were used continually throughout the interventions.

Theoretical development and historical impacts

Health interventions are based on theoretical frameworks that provide the concepts or basis for designing an intervention and the constructs developed to implement behavioural change

(Michie, *et al*,2008). Interventions are designed to “increase health behaviour” with a target population in mind (Fishbein *et al*, 2003). The interventions focus on changing the belief systems of the target group regarding consequences and/or benefits. All interventions incorporate a range of standard approaches including the health belief model (Skinner *et al* 2015). This model focuses on the concept that a person must believe that if her/his behaviour continues, there will be a serious or negative outcome, a belief that is clearly not a deterrent for Indigenous People using substances as the statistics of incidences and prevalence have displayed (Chapter 1 and 2).

The growth in the number of substance-dependent Indigenous people suggests that many of the available theoretical frameworks are failing to induce the change needed throughout many Indigenous communities. The locus of power is, however, appears to be slowly moving towards a theoretical framework that embraces empowerment and a form of capacity building for the tribe as a whole, one that incorporates community mobilization (Chino, *et al*, 2006). Indigenous People need to be able to be actively involved in the development of the frameworks used in interventions and create strategies that will bring behavioural change. (Chino, *et al*, 2006).

Despite the highly contested political landscape in Indigenous health, the efforts of many white, university educated , upper-middle class professionals attempting to bring about changes through cultural interventions are slowly being recognised (Kowal *et al* 2005). However, frequently interventions are seen as part of the postcolonial action (Kowal, *et al* 2005), something to be avoided at all costs by Indigenous People.

Incorporated in the papers used in the synthesis is the emerging practice of using culture as a treatment within substance dependency that focuses on members of Indigenous communities. All

the studies within the synthesis developed theoretical frameworks which not only linked to cultural and traditional activities, but attempted to bring in everyday activities linked to a traditional life style, such as hunting, fishing and handicrafts. The surprising factor is that although there has been a continual call for this theoretical framework to be used for over a decade, there is still a demonstrable reluctance to do so. Braveheart (2003), Walters et al (2002) and Brady (1995) from as far back as 1995, have all called for the introduction of Indigenous culture as means for healing and gaining sobriety.

This is based on Indigenous People having very distinctive cultural and ethnic identities that are separate from the white man (Brady, 1995), cultural and social mores that can frequently be in opposition with the majority of main stream American, Australian, Canadian or New Zealand culture.

There appears to be a well-accepted necessity for culturally sensitive programs and activities which reflect back to the participants, their own social, spiritual and moral values. But commonly the power still resided with the white people, including how, when and where the interventions is undertaken. The refusal of Indigenous participants and communities to use mainstream services or to participate in interventions are perhaps a refusal on their part to accept that “one size fits all” in an intervention (McCormick *et al* 2006), a refusal to accept any further acculturation and destruction of their traditional life.

The integration of culture and traditions into drug and alcohol interventions has been a key concept introduced over the last few decades, but it has also been loaded with a variety of assumptions (Rowan, *et al* 2014). The primary assumption being that culture can cure all, or that it is the panacea to every social and health problem. But there are variables in this, cultural

variables, and descriptors of the experiences, knowledge and understanding from the people involved. Variables that until recently have been given very little attention (Castor et al 2002). Additionally there are with issues with the efficacy in the evaluation of this type of intervention, how a systematic review can be conducted, how our ways indigenous knowing can or will interface with medical and scientific methods of measurements' (Gone 2012, P 46). This will pose a variety of barriers that could or will include personal biases, and a range of limitations that will impact when using the current methodical tools. Couple this with the ongoing power asymmetries between Indigenous communities and governments, and the cultural divergences between the groups, using culture as a tool for change could prove to be difficult. This in turn makes it challenging for Indigenous People to feel confident, to feel safe and to feel able to attend and complete a mainstream rehabilitation program (McCormick *et al* 2006).

A review of the papers selected for the synthesis was conducted with the aim of ensuring that all of the activities were identified, and to identify any mechanisms that made the interventions appropriate. When this stage was completed, the results formed the basis for the primary links of adaptive traditional mechanisms.

Language and ethnic background

The most common, and in most cases, the major adaptive mechanism, focused on the employment of Indigenous staff that came from the same tribal group, and secondly, spoke the same dialect. These mechanisms ensured that the treatment received by the clients was from people who understood the issues the clients face, were bound by the same cultural responsibilities and obligations, and were linguistically the same, thereby increasing the attendance and success rates (Anderson, *et al* 2003; Kreuter, *et al* 2002).

Language can be the cause of many misunderstanding and barriers, and could/can cause clients to leave programs. Use of the “mother tongue” has been found to increase participation and success levels (Moradi, *et al*, 2010). For many Indigenous People, English can and frequently is, a second or third language.

The limitations of language and culturally specific communications, in understanding and the transfer of concepts can have a range of negative experiences for many Indigenous People (Lowell *et al*, 2012). Language is a “linchpin” of health literacy, where the four domains – fundamental, scientific, community and cultural – can become misunderstood or ignored (Vass, *et al*. 2011).

But it also must be remembered that not all Indigenous People are the same, so staff selection based on simply the colour of their skin could fail to meet the needs of the people the interventions is targeting. We are from many differing tribal groups, with differing dialects, customs, traditions and lore. By simply employing some who is the same skin colour ignores the complexity and differences between each group, it places all Indigenous People into one category or group, that of simply being Indigenous. It also ignores that we are all individuals with connections that hold us together (Rose 1999).

Our membership in our tribal group, our place within the tribe is commonly more important than simply being Indigenous, therefore use of non-tribal or other Indigenous staff could be problematic, and cause undue stress for participants.

Use of traditional lands, sacred sites, and spiritual health.

One of the more frequent adaptive mechanism was to deliver the intervention within tribal, which provided the opportunity to use that lore grounds, birthing grounds, burial sites and areas

with historical significance. This mechanism guarantees a familiarity with the location, and also access to traditional medicines to support the physical/spiritual health of people involved in the intervention. Additionally incorporation of the use of traditional lands, sacred sites, brings Indigenous People home and provides the connectedness that they need to develop pride and to reenergise their culture, to become strong and to face their substance dependency demons.

Indigenous People belong to their land; this is something that many within the wider community have difficulties understanding. Indigenous culture and traditions are the products of the land, both “physically and metaphysically” (Goehring, 1993, P 67). To belong to the land, to have identification, these feelings have been found to enhance “problem-focused coping behaviours” (Pittman *et al* 2011 P 29), McMillan *et al* 1986), and has frequently proved successful when dealing with substance dependency.

This mechanism, if by purpose or as a by-product, supports the redevelopment of Indigenous social culture, the reenergising of Indigenous lore and traditions and the joining of the communities with a goal to bring health to all members of the community (Rowan 2014). Through an Indigenous lens it provides the opportunity to return to our roots, to let go of the white man’s ways and ideas, to be Indigenous with your communities members, with all the rights and responsibilities entailed in being a community member.

The land and the involvement of other tribal members provide a rootedness necessary for Indigenous People and their healing. This sense of ownership or rootedness within a specific area carries more than just the concept of some where to stay for Indigenous People. For Indigenous People it is more than simply where a house has been erected, rootedness is based on

sense of “cosmology and culture” it “roots [Indigenous People] to their tribal territory spiritually and emotionally” (Kingsley *et al* 2013, Hay, 1998).

Furthermore as an Indigenous person our relationship with the land and tribe can be described as “an ideological form that is self-conscious and connected to identification with the community” (Hall *et al*, 2015, Tuan 1980, P 43), it is our life blood, the force that sustains us, and provides healing. Land, for Indigenous People is part of our lives; it represents ties to our communities, to our lore, to our traditional life style and culture, to our sacred sites and our relationships with nature. Our land nurtures us, it provides food, shelter, land also provides the physical class room for learning, for educating young people, sheltering the tribe and providing medicine for the sick. To bring an intervention into our home land, with the support of our tribal group and elders, places the intervention in to a recognisable format. Something that can be or has been used in all the papers within this synthesis and has proven to be one of the more successful mechanisms

Furthermore for many land incorporates our Indigenous traditional methods of healing. The plants, water, and in the case of Australian Indigenous People, the soil itself is all used for healing not only our physical illnesses but also our spiritual diseases. Healers act as spiritual guides, interdimensional guides that intercede on our behalf, they heal us in order to bring a sense of balance, of oneness with the surroundings, with our lives and our communities (Soloman, *et al*, 2005).

The relationship to our land, our country, is directly linked to our wellbeing but this presents a struggle for many academics and health professionals to understand. It is difficult for them to understand how our relationship, our health and our wellbeing revolve around our land (Wilson, 2003).

Indigenous concepts and understanding of wellbeing encompass more than simply health; it is a more holistic understanding, a whole of life view incorporating our social, spiritual and cultural life. Indigenous cultural health is based on our kinship relationships, our social networks that provide support and advice, our relationships with our land (McNamara *et al* 2011).

Any physical or mental illness, from an Indigenous view, is based in a spiritual attack, in a demon attacking us; this is especially true when dealing with substance dependency.

Alcoholism and drug addiction is seen as white man's illness, the white man's demon, something that the white man brought with him and given to us, it is the white man's water (Douglas, 2007).

Traditional Indigenous people have a way to describe alcohol and the conceptualization of alcohol that differs from non-Natives. Alcohol is perceived as a spiritual identity that has been destructive to the Indigenous ways of life. The alcohol "spirits" continually wage war within the spiritual arena and it is in the spiritual arena that the struggle continues" (Brady 2000, Duran, *et al*, 1995). This battle requires spiritual support, ceremonies, visual/physical healing from our tribes.

"Spirituality is a feeling, with a base in connectedness to the past, ancestors, and the values that they represent, for example, respect for elders, a moral/ethical path. It is about being in an Aboriginal cultural space, experiencing community and connectedness with land and nature including proper nutrition and shelter. Feeling good about oneself, proud of being an Aboriginal person. It is a state of being that includes knowledge, calmness, acceptance and tolerance, balance and focus, inner strength, cleansing and inner peace, feeling whole, an understanding of cultural roots and 'deep wellbeing'" (Grieves 2008).

Substance dependency, as stated previously, is surrounded by connotations linked to demons, being possessed or of the five rascal's jealousy, fear, envy, resentment and inferiority (Nabbigon 2006). For many Indigenous group's substance dependency is a spiritual illness, not a physical one. Colonisation, marginalisation and injustice has developed a culture of "lost spirits", lost people. Healing within our land within this context, covers the physical, mental and spiritual needs of Indigenous people. Our healing is embedded in religious or spiritual activities that bring a community together and provide a "system meaning to make sense of suffering" (Kirmayer, *et al* 2003).

Traditional healing provides a recognisable and culturally acceptable method to cope with the pressures and pain, the feelings of loss and of being victimised. Western interventions tend to focus on the individual, not the external causes or family. Traditional healing focuses on the group, the tribe (Constantine, *et al*, 2004), it reinforces the sense of belonging, of being loved, of being cared for, of being respected and of being of value.

From an Indigenous standpoint, interventions for alcohol and drug dependency for Indigenous People need to encompass more than simply a medical or biological approach. Our fight for sobriety is a spiritual fight, which needs access to our lands, to our culture and lore. Traditional healing methods are used daily by many Indigenous People; our healing methods serve several purposes. They support the reenergizing of our way of life, provide strength and give meaning and purpose to our lives (Moghaddam *et al* 2015).

This difference in thinking and perception has been taken into consideration when developing interventions used in this synthesis. Traditional healing has a long history within our cultures; Brady (1995) describes it as a "rich heritage of healing strategies". Papers such as *The Story of*

Alkali Lake (2008), used in this synthesis, have highlight the successful use of a hybrid intervention within an Indigenous a community which has achieved 97% sobriety, something previously thought unachievable. *The Grog Mob* , also used for this synthesis , with 78% success rate (2013), and *Stopping Petrol Sniffing in Remote Indigenous Australia: Key elements of the Mt Theo program* (2006) also show a significant success rate. The recognition of healing differences and need to incorporate traditional activities within theoretical frameworks for substance abuse provide a hope for all Indigenous People suffering dependency.

Our spirituality, our physical and mental health is directly connected also to our land, family, and kin. There is more than just an emphasis placed on our social and spiritual health; it is the foundation of our health. So illness is viewed as a spiritual or social dysfunction (Maher, 2002) and “individual wellbeing is always contingent upon the effective discharge of obligations to society and the land itself” (Morgan, *et al* 1997). Our kinship obligations, our role within the tribe frequently takes precedence over our own health needs; our priority is our responsibilities, our duties, our commitments to our tribe and kin.

The processes used by colonialist governments and churches as part of the “assimilation” process has enforced a disconnection from our traditions, our culture, from our “mob”. The breakdown of traditional culture is strongly associated with the abuse of a range of substances (Braveheart 2003, Duran et al 1995, Pedigo, 1983, York, 1990). The separation of our families, removal from our tribe, detaches us from the relationships that sustain us. Detachment and cultural isolation place many of us at high risk of becoming substance dependant (Braveheart 2003). A variety of forms of acculturation attacks our lives and beliefs daily, our strength is from our traditions, our spiritual beliefs and our families.

Western medicine and western-designed interventions fail to recognise these differences between the beliefs and understanding of illness with Indigenous community members and the wider populations. The values and lack of meeting points between the two concepts of illness and healing are extensive. Indigenous People have differing belief systems, differing approaches and differing needs where our health is concerned (Eckermann *et al* 2010, Young 2003, Darou, 1987. McCormick, 1996, Trimble, 1981). Our health is firmly based within a culture and spirituality framework, reinforced throughout traditions and lore. The view we have of life and of health is based on what we have learnt as an Indigenous person, what we live every day and what we have survived (Martin *et al* 2003).

Western medicine is primarily concerned with the recognition and treatment of disease. Traditional medicine seeks to provide a meaningful explanation for illness and to respond to the personal, family and community issues surrounding illness. Traditional medicine explains not only the ‘how’ but also the ‘why’ of a sickness” (Rigby *et al* 2011). Our sickness or health is based in our land, in our spirituality and in our families, it is not viewed as an illness from a germ or bacteria.

Our health is linked to our social, environmental and spiritual needs, more than the physical body (Kirmayer *et al* 2003). Bringing the people together on their home lands, using traditional medicines provides a “healing” of their spiritual life and therefore a “healing “ of the problems they are facing (Rose, 2000). From an Indigenous standpoint it not only supports and encourages the integration of the clients back into the community, but also gives the community the opportunity to exercise their responsibilities to the community members suffering substance dependency.

Traditional activities and Indigenous staffing.

The incorporation of traditional activities, with embedding interventions in Indigenous communities, and employing Indigenous People within public health interventions is not a new concept. Many researchers (Gone, *et al* 2011: Lowery, 1998, Edwards, 2011, McCormick, 2000), have hypothesised that the use of culture, traditional activities, and the employment of Indigenous staff would ensure a higher rate of sobriety within Indigenous communities. McCormick, (2000) has discussed the use of main stream interventions and their failure to achieve the change needed. He has taken his comments further, calling for Indigenous People to be involved from the design phase, to the final outcome , for traditions and culture to be a predominant factor in every intervention instigated on an Indigenous community. Grey *et al* (2006) has echoed the same concept in their paper addressing Indigenous substance misuse and related harms. The concept is discussed in depth, targeting the need to address substance dependency in Indigenous communities quickly and the role of culturally appropriate mechanisms and Indigenous staff within any intervention undertaken.

Garrett *et al* (2000) raised the same theory concerning the practice of traditional mechanisms to treat substance dependency. French (2004) has also called for policy and intervention designers and developers to move towards a more a tribal centred theoretical framework for interventions for Indigenous People suffering substance dependency.

Incorporating traditional activities and ceremonies, as the interventions used within this synthesis suggest, should be a starting point for “devising guidelines that operationalize the cultural adaptation of substance abuse treatment paradigms” (Rupinder *et al* , 2012, P51).

Tribal support, consultation and ownership.

Gaining the support, endorsement, and the active involvement of the elders and the tribe as a whole also acts as an adaptive mechanism. This mechanism has been used in several interventions including the Story of Alkali Lake (Willie, 2008), the Outstation Model of Rehabilitation in Central Australia (Shaw et al, 2011) and The Red Rao dot Wellness : Cultural reclamation in Native First Nations Community Treatment(Gone, 2011).

The mechanism involves the development of partnerships with the tribal groups, and consultation with the Indigenous group and the employment of tribal staff to work with the clients. In the case of Alkali Lake (Willie 2008), the interventions was community developed, driven and supported. It is part of a method to ensure the cultural appropriateness of the intervention, and to develop sense of ownership within the tribal group. The mechanism seeks to incorporate the use of Indigenous local knowledge and of local power which increases the capacity of the community as a whole and also on an individual level (Paterson, *et al*, 2003: Chino, *et al* 2006).

In reality this mechanism translates to be either a partnership or ownership by the tribe, and is linked to recovered pride, about rebuilding Indigenous societies and recognising the power of our healing. This mechanism sanctions the support and input from community members, it engages community member's during the design and development phase of the interventions implemented and ensures the usability and acceptance of the intervention. The development phase, as shown in the papers within this synthesis, have shown that the involvement of tribal groups, who, when, where and how the interventions are used show a higher success rate (Potvin *et al* 2003). Partnerships encourage tribal members to assume an active role within the interventions itself.

The interaction with tribal elders and the use of sacred ceremonies requires the consent of and support from the tribal elders and groups involved. The process similarly requires the recognition by the dominant culture of the importance of Indigenous of elders. The real mechanism within this is the sense of ownership and control, something that was reduced or even lost during the colonisation process.

It must be recognised at this point that for all but a very small number the Indigenous communities, the partnerships are unequal. It is very difficult to be a partner when someone else controls and hands out the funding, when someone else sets the boundaries and barriers within the partnership, when someone else gate keeps. The partnership aim should be equality, working hand in hand to deliver an intervention. But the complications associated with funding bodies “vested interest in gate keeping” maintains a continual imbalance (Sliver 2006 P 21). Real partnerships are infrequent and often difficult to maintain give the cultural differences and funding boundaries. Allen (2004) reminds us all that a history of colonisation means that any critical dialogue undertaken does not occur on equal terms in these situations.

Problems arise from the disconnection of many Indigenous People from their cultural and spiritual life (McCormick, 2000). From an Indigenous standpoint this loss leaves us isolated from our tribe, family and kin, without our lore, our traditions and culture our lives become meaningless, we become “lost “people.

The use of AA and other established main stream programs.

Several of the interventions used within this analysis incorporated the use of traditional activities or other mechanisms intermixed with established interventions from main stream society. This have included a hybridized types of AA, and NA. This intermixing has occurred in Cultural

connection and transformation: Substance abuse treatment at Friendship House (Edwards, 2011) and where incorporated within a residential program. Indigenous participants were introduced to a “native style alcoholics anonymous “(P53). This intermixing included the use of sweat lodges and cultural activities but also mixed with the activities associated with AA style 12 steps.

The process uses a modified Alcoholics Anonymous (AA) or Narcotics Anonymous, (NA) combined with mixture with traditional spirituality and activities as an adaptive mechanism (Ridani *et al* 2015). This is an activity, where in an effort to gain acceptance with the Indigenous group targeted, encourages the sharing of names, values, similarities of a religious basis, and social mores to a more culturally appropriate wording. It is also is an adapting exercise, changing the content to the program to suit the anticipated audience.

The steps within AA and NA recognize a higher spiritual power, with several other steps focused on surrendering themselves (the participants) to that power and asking for help. This approach appears to have some merit and has been discussed for the last decade in relation to sobriety. Spirituality is central to the life of many Indigenous People, it is “an overarching construct that involves personal beliefs or values that provide a sense of meaning and unity with self, people, nature and universe” (Tse, *et al*, 2005 P19). For Indigenous People, the meaning of spirituality rests heavily on, and involves the ontology, of life; it is a way of connecting to the spirits of our ancestors and our gods (Martsof, *et al* 1998). A few concepts of this belief lends itself to the 12 Steps of AA, admitting that there is a higher power, asking forgiveness, handing over guilt and control (Greenfield *et al* 2013).

But if we analysis AA interventions from an Indigenous standpoint it does contain a few notable inherent cultural risks, firstly the risk of once again bringing white concepts into Indigenous lives, and risks of discrimination based skin colour. There are also cultural risks associated with the mixing of cultured, men who have been through our lore and un-cultured men, men who have not been through our lore, classified as boys, or men and of women within the same groups. Our clan and/or kinships responsibilities rules set our social rules, its sets the boundaries of who we permitted to speak to or be in a room with and who we can't. This would place a considerable pressure on the Indigenous staff to ensure that the social needs and restrictions of each client is acknowledged and met before the commencement in a group.

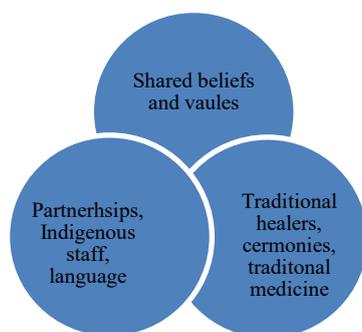


Diagram 3-Hypothesised theoretical framework

Context

Pawson and Tilley (2004) argue that consideration to the context is critical to enable a deeper level of understanding of any intervention. Understanding the context and the agents that interact “with the adopted policies and interventions” makes the research and synthesis “sensitive to diversity and change” (Pawson et. al. 2004, P 61).

Context in this instance can refer to the social, economic, historical, and political background of the target group, the Indigenous People , but it can also be the organisational or structural

setting in which the intervention takes place. But there can be little doubt that extreme poverty, lack of access to education and health services, anomie, helplessness, racism, terminal disadvantage and dispossession have created a contextual background that would be very difficult to overcome.

Health interventions are context dependent; consequently any evidence sought or evaluated must encompass the contextual environment and conditions in which the intervention is not only being undertaken, but also the context that has created the environment (Rychetnik, *et al* 2002). Everything from the staff , the organisation or host organisation , the systems used within the interventions, behavioural patterns of the interventions users, their history and networks, need to be considered and understood (Hawe, *et al*,2004). The success of any intervention is dependent on the context in which they are developed, their transferability and applicability, the political and economic setting they are used in, and circumstances of the participants (Armstrong, *et al*. 2008).

Interventions are embedded in recognisable ‘social systems’ (Pawson *et. al*. 2004), They change as they are implemented or presented over and over again, as do the participants, the environment and the contextual circumstances. It can be argued that assuming everyone has the same version of life would be more than just a simple generalization of the majority of theories; it imposes heterogeneous replication of interventions regardless of ethnic or social background. Change is dependent on the “characteristics “of the people involved, the intervention site, and the background of not only the participants but also the staff involved, as does the social, economic and political environment. Using a heterogeneous replication of an intervention regardless of ethnic or cultural background would appear to be an indication of impending failure.

Context encapsulates the location in which the intervention takes place, the culture, the community, and the historical factors that either have influenced or changed the behaviour and mental approach of the participants. It combines the social, economic, political, financial and historical events that have brought a group to the present day (McCormack, *et al* 2001). As stated previously the choice to only include papers published regarding substance dependency interventions for Indigenous People who have been colonised enables the contextual circumstances to be very similar for each group. They have all undergone violent colonisation, segregation, assimilation and enforced acculturation; they all suffer poverty, poor health and educational outcomes, and significantly higher levels of incarceration and substance dependency.

The context of contemporary life for a colonised Indigenous person is based firmly in their cultural, political, economic and historical background. As this has previously been discussed in depth within the chapter on policy and historical background, only a brief over view will be included at this point.

Colonisation is a brutal procedure, one that ensures there is only one winner, and although there are differences between the health outcomes, and cultural traditions of each nation in the synthesis, the roots of all are firmly embedded in a colonisation process, and the colonisation models they have been subjected to (Doyle, 2011). American and Canadian colonisation was based on the push for more land and resources; as such there were no limits placed by a government, absent or otherwise (Doyle, 2011). Within Australia and New Zealand the colonisation process was boundary by a government in absence, but the results were very similar. All had more than one point of “push” from the invaders, all suffered multiple slaughters and massacres, enforced removal from their land, break down of their family units and tribal

links, and the introduction (in some cases the deliberate introduction) of diseases (Doyle. 2011).

We have all been the victims of acculturation, stereotyping and racism.

The process of colonisation has had only negative consequences for Indigenous populations.

Colonisation has brought dramatic changes to Indigenous traditional life style; strangers now dominate our land, colonisers have distanced and alienated many of us from our birth right as an Indigenous person. The effects have been across all areas of our lives, our social, physical, emotional and spiritual wellbeing (Gracey, *et al*, 2009). The colonisation processes has removed Indigenous People from their traditional hunting and farming grounds, from our sacred sites, from the traditional activities , and procedures for healing, education and training enacted to teach adolescences how to be an adult, colonisation has broken down family and kin relationships.

But more importantly colonisation has impacted on our ways of knowing who we are , as Indigenous People, how we construct our knowledge, how we share our knowledge, but we continue to fight for our epistemology, our way of theorising our knowledge , our way knowing. From an Indigenous standpoint our epistemology is based in Indigenous People being the knower, how we construct knowledge and what truth is for us as a people. Our ontology is connected to the universe, our physical earth and our spiritual realm. Who we are, what we do and how we do, are the bonds that define us and join us to the spirits and earth (Foley, 2003).

As stated previously as Indigenous People we have and continue to suffer the effects of colonization, in our personal lives, in our education and in our economic independence.

Australian Indigenous People, American Indians, Canada's First Nations people and New Zealand Maoris all have suffered substantial levels of homicide, accidental deaths, suicide, child

abuse, and addiction, thought to be directly linked to colonisation and ongoing disadvantage (Bachman, 1992, Berlin, 1986, May, 1987, Atkinson, 2002, Hunter, *et al*,2002). We daily suffer racism, oppression, hopelessness, internalized oppression (Freire, 1968), historical trauma and grief (Atkinson,2002). Indigenous People have been, and continue to be, victims of disempowerment, hatred, murder, feudalistic policies, enforced acculturation and of what can only be classified as genocide. We, as Indigenous People, have faced, and continue to face starvation, diseases, violence, poverty, substantially higher levels of incarceration and of addiction, notably poorer health outcomes, lower educational levels and enforced economic dependency.

Legters, (1988) argues that the definition of genocide set by the United Nations equates to the ongoing colonisation process:

“The definition of genocide, as set by the United Nations General Assembly’s Convention on Genocide, 1948, states that : “Genocide means any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial, or religious group, and includes five types of criminal actions: killing members of the group; causing serious bodily or mental harm to members of the group; deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part; imposing measures intended to prevent births within the group; and forcibly transferring children of the group to another group. (No 1021, p. 769)”

Furthermore Legtera (1988) argues that settler colonies, and the cultural, economic, and spiritual domination incorporated with the colonisation, has increased the likelihood that genocide has been committed. He states that:

“...coerced abandonment of religious and cultural underpinnings of the subject society, pre-emption or destruction of resources necessary to native survival... transmittal of disease and addiction against which native populations have inadequate immunity, disruption of kinship and familial relations basic to the native social structure, treatment based on modes of definition that obliterate a group’s identity, and finally, outright extermination of native populations” (pp. 771-772).

The colonisation process is a complex series of pivotal and dramatic events that changed the lives of Indigenous People forever (Anderson, *et al*, 2006). Wherever it occurred, it devastated Indigenous communities, introduced new diseases, with white settlers appropriating land and food sources from the local populations. Our land provides food, shelter and medicine, it is our identity but for the colonisers it is an economic asset. Although New Zealand gained a treaty, for Australia, America and Canada the loss of land was, and still is, unstoppable and has created an environment of distrust and fear.

Our disadvantage has placed socially, educationally and financially within the poorest brackets in each country. Within Australia the statistics have demonstrated for the average Indigenous person over the age of 15, their weekly income is only \$362. This is lower by \$220 for non-Indigenous People (Australia’s Health, 2014). This statistic is easy to understand when give that the unemployment rate of Indigenous People is 17%, while for non-Indigenous it is only 5% (Australia’s Health, 2014).

Within the United States many Indigenous People live under what the American Government classifies as the Federal Poverty Line. The population of Indigenous People living under the poverty line is 143% higher than for the wider population (Krogstad, 2014). Within American and Alaskan Indigenous populations, 29.1% live below the poverty line. It also must be

mentioned that for Indigenous People living on reservations, poverty in some cases, is over three times the national average (Krogstad, 2014). Only 20% of the Indigenous populations ever achieve any high school qualifications (Hutchinson *et al* 2014), and a further 11% dropping out of school before reaching 24 years old (Krogstad, 2014).

What is unforeseen, given the health disparities between Indigenous People and the wider population, is the financial support given for health service delivery to American Indians. The costs are less than 1/3 of what is set aside for each patient by Medicaid than for the incarcerated populations (Duran, 2005).

Within New Zealand, the majority of Maori children fail to achieve any educational qualifications. The education rate is 66.3% for females and just 60% for males (NZ Social Indicators 2014). Maoris again demonstrate a much higher percentage within the unemployed sector at 12.1 % against 4.4% within the wider community (NZ Social Indicators 2014). Given that less than 60% reach an education level of year 10 or above, it is not surprising to see a high level of unemployment and a low level of income. It has also been reported that the percentage of Maoris who have suffered personal racism (2014).

Economic programs are prolific within Indigenous politics, but many feel there is a disconnect between methods used to measure poverty and what is being experienced in real life (Hunter, 2004). There needs to be recognition that Indigenous People's experience of destitution and the extent of their destitution are different from the wider community. From an Indigenous standpoint our poverty is not only based in financial terms but also in terms that encompass the high level of social exclusion we have experienced and continue to experience (Hunter 2004). Our experience has developed over many years, and is a result of "prolonged social isolation and

deprivation” (Hunter, 2004). Our poverty is deeply rooted and spread across our nations, it is persistent despite a range of, or it could be because of, dysfunctional policies and legislation. The irony in Indigenous poverty is that we are the poorest group in each country, but the land that has been taken from us has made each of those countries rich. Wealth build upon the lands and resources of the traditional owners, with little being returned to them (Cornell, 2006).

Indigenous communities have undergone enforced relocation to what can only be called penal settlements, forbidden to speak their mother languages, to follow tribal or personal spiritual life or ceremonies, in reality forced to forsake their traditional life. The sufferings of our elders and of our families have led to a position where the historical trauma suffered by colonisation is embedded in everyday life.

Braveheart, (2003) defines this loss, the unrelenting despair, as a “massive accumulation of trauma across generations”. This definition encompasses the unresolved grief and a legacy of trauma that is entrenched in the psychosocial conditions of today. As previously stated Indigenous historical losses encompass the separation of family units and tribal groups, removal of our children, the breakdown of social groups and enforced assimilation. The history of the colonisation processes is for many, clear in their minds, passed down by the people before them. It is embedded in the current Indigenous psychosocial environment, an intergenerational trauma that is ongoing.

Historical trauma, collective or intergenerational trauma, can be defined as a “collective complex trauma inflicted on a group of people who share a specific group identify or affiliation” (Evans-Campbell, 2008, P 62). It is a description of oppressed people, a description of the compounding of a series of events across defined periods of time that continue to impact on the lives of the

descendants today. The impacts can be seen at an individual, familial and communal level (Evans-Campbell, 2008: Atkinson, 2002). The historical events that Indigenous People have undergone have generated tribal distress, mourning, feelings of hopelessness and despair. It is a “cumulative emotional and psychological wounding” that as Indigenous People, we carry daily (Braveheart 2003, P 19).

Braveheart (2003) has theorised that the current social, economic and political environment continues to be exacerbated by the unresolved grief related to Indigenous losses. As colonised people, as Indigenous People, we are the least politically powerful or organised groups in the world (Whitbeck, *et al*, 2003). We have suffered over a 100 years of colonial governmentality that has resulted in poor or paternalistic policies, enforced assimilation and terminal disadvantage.

The theory of historical trauma is well documented, as is the impact of the trauma on Indigenous lives today. Throughout recent history, not only have colonised Indigenous People suffered the loss of their land, culture and traditions but also racism, persecution and now, terminal disadvantage. We as, Indigenous People, are taught, by the media, by politicians and by general public, that our Indigenous or tribal practices were “wrong”, are primitive and less than a white man’s. That we are incapable to raising our children and being parents.

The removal of our children and their loss to our communities occurred within the United States though the Indigenous boarding school policies, in Australia through the removal of Indigenous children and the breakdown of family and community links, and in New Zealand again through policy and practices dictated by the government. The removal of children from parents, and the breakdown of families have, and continue to expose children to a lack of parenting, to the

absence of family and tribal rituals, to violence and sexual abuse, and to depression (Braveheart, 1999). All these practices supported the prohibition of our traditional ways of life and spirituality, and limited the access of Indigenous people to their lands.

Historical trauma, as listed above, has been found to provide the basis for high levels of depression, feelings of anxiety, hopelessness, self-destructive behaviour, low self-esteem and anomie. For many Indigenous People, substance abuse occurs when they attempt self-medicate to mitigate the emotional pain felt, and the powerlessness.

The concepts and effects of historical trauma are well documented. It is a cumulative emotional and psychological “wounding” (Brave Heart, 2003). It is brought on by a dramatic and continual history of grief, of loss, linked to land, spiritual life and cultural activities. It has been found that thinking about what has been lost, and what is currently happening is directly linked to depression, and anger (Whitbeck, *et al*, 2004). It is also believed that being a direct descendant, or even living in the region or an area where loss has occurred, or where there is continual exposure to racism and discrimination, and other social factors increase the effects of historical trauma (Brave Heart, 2011). Elevated experiences of trauma, as well as mental and physical abuse are directly linked to a range of mental disorders, dysthymic, psychotic disorders, anxiety and a much higher risk of addiction (Beals, *et al*. 2005, Manson, *et al* 2005, Robinet *al* 1997, a, b).

Indigenous People have, and continue to, suffer poor “white” methodologies and policies regarding their health, education, housing and legal issues, and a dysfunctional form of federalism, and the stigma of being Indigenous. Within Australia, policies regarding health and substance dependency have been interlinked closely with “Indigenous Affairs”. This portfolio

includes policies on self-determination, that resulted in enforced assimilation and policies for the “protection” of Indigenous people. As such they have never been seen independently nor have they ever been fully accepted by Indigenous Australians, they are viewed as part of the colonialist approach to the disempowerment of Indigenous People.

We, as Indigenous People, are taught to think of life as a struggle with the dominate culture, of a struggle that was lost many years ago, we are taught to believe that we are inferior , that we are guilty of simply not being white. Through the media we are taught that our early deaths and sickness are our own fault that we deserve to have lost our land and our culture because it was or is inferior to a white man’s (Dolgon, 2012). We are taught that we are separate from others because we should be, we are taught to see ourselves as the white man does. We are taught fear, to be disgusted with ourselves, to be poor, to be useless and to remain that way. We have been crippled by racism and hate, making it more and more difficult for Indigenous People each time we try to stop drinking, or stop using drugs. We think our selves unworthy of love, unworthy of help and hide ourselves behind drugs and alcohol, we self-medicate. We see ourselves how we are portrayed by the media and perceived by the general public and many of the medical professionals we encounter (Browne, 2005, Hartley, 1992).

It must be acknowledged at this point that risk factors associated with substance dependency may also be affected by secondary historical trauma (Robin *et al*, 1996, Holm, 1994). Secondary trauma, caused by the storytelling, the collective memory and oral traditions has been embedded into the following generations, causing the ongoing feelings of hopelessness and loss to be transferred to the younger generations. All contributing to bring low self-esteem, substance dependency and shame.

Racism, discrimination and stereotyping have also impacted with documentable effects on the health of Indigenous People (Harris, *et al* 2006). Racism can occur at individual or institutional level, through economics or political systems. Whichever way it occurs, it ensures that Indigenous People received “less” – less access, less opportunity, less benefits from policies and interventions, less education and less economic opportunities. It encourages negative stereotyping and results in depression, anger, low self-esteem, anomie and sense of hopelessness that is overwhelming.

Given the context surrounding the interventions, and the repeated statements by both Pawson, (2005), and Rycroft (2012) regarding interventions being a product of the context they are in, it is surprising that any intervention developed and targeting Indigenous People suffering substance dependency could achieve positive results.

In the papers included in this synthesis, the context throughout supported several common contextual circumstances. All of the papers included colonised Indigenous People, which gave a common background, but the actual physical context of the intervention also involved similarities. All were conducted on tribal land, with tribal support, all have that support of the tribal group, support also that manifested in several different ways, through partnerships with the Indigenous People, through support by the elders and their active involvement, and the employment of culturally acceptable staff.

If an intervention is considered as being embedded in a social system and how an intervention works is based on the context (Pawson, 2004) , it becomes clear, through an Indigenous lens, why interventions based in a community, that are community-driven and accepted have a much higher rate of success. It appears that what should be thought of as being of paramount

importance within this type of public health intervention should incorporate the stakeholders and the user's perspective of the intervention; the suitability and cultural context. But for there to be change, the wider tribal group must permit the change to occur. Tolerance and forgiveness has to be offered and accepted, this can only transpire within the cultural context of Indigenous tribal groups.

As stated previously in this section, the context is critical to understanding how an intervention works. It is a critical component to understanding the mechanisms of change that occur or do not occur. This is a primary concern when interventions are targeting Indigenous People, it needs to be acknowledged and understood, as do the effects that historical trauma, racism and disadvantage has on physical and mental health, and on interventions targeting Indigenous People. (Larson, *et al*, 2007).

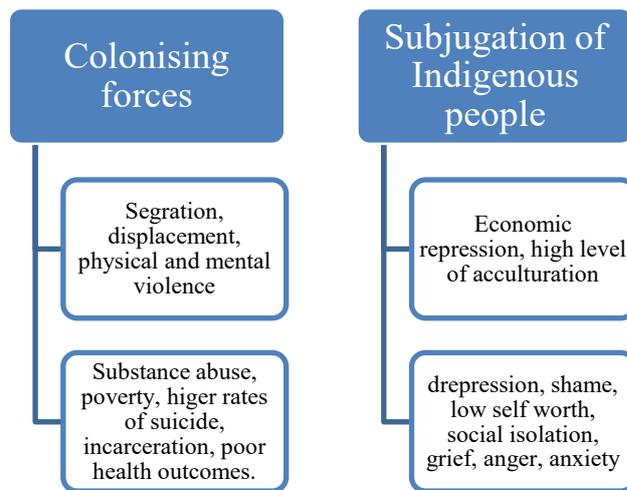


Diagram 4- Effects of colonisation

Mechanisms, the obvious and not-so-obvious.

The mechanisms embedded in any intervention is what makes an intervention be successful, what makes intervention work or not work. They are the instruments that bring internal change

or fails to alter behaviour. They are usually hidden, working behind the scenes to bring internal change (Pawson *et al* 2004).

Most interventions have a range of components but not all components are mechanisms.

Mechanisms are the way that the components bring change; a mechanism can be a single action or series of components. They explain what logically surrounds an intervention, and are founded in the theory behind the intervention, and highlight the way and use of resources that can change the thinking of the participants (Pawson *et al* 2004).

The mechanisms identified in this synthesis have been aligned to the adaptive theories embedded within the theoretical framework. The adaptive theories focused on ensuring that the interventions were authentic, specific to the needs of the tribe, that there was a sense of ownership and control over the interventions and the processes used. This has led to what should be classified as obvious mechanisms. The obvious mechanisms include, but are not limited to, use of traditional life styles, of hunting and fishing, of learning our history, our ceremonies and customs. This type of causal mechanisms is thought to provide the impetus for change, but going fishing or dancing around the fire would fail if they stood alone. It is the hidden mechanisms that are essential for change to be manifested. These are the mechanisms that induce internal change, that provide the impetus to stop drinking or stop using drugs, to change lives.

The most obvious mechanisms are embedded within the concepts of the adaptive activities; they are processes that are aligned to the theoretical framework that the intervention is based on (Table 7) identified during the initial phase of the synthesis .

Adaptation activity	Theoretical mechanisms	Theoretical response
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Using traditional activities to carry the message, changing dialog to suit the participants.	Consonance, linked to traditional values and ceremonies	Recognisable as their “own” through the use of cultural activities
The use of the same tribal/cultural group to deliver the intervention.	Authentic of the intervention, language, pedagogy, understanding	Develops feelings of ownership or belonging, for us by us.
Set within the community, on tribal lands or historical significant sites.	Embedded with the ethnic/cultural/dialect group.	Deeper understanding of concepts, language, through familiar environment.”
The use of traditional activities, culture and land to target the groups involved.	Specificity, targeted to a specific ethnic group.	Acceptance of the intervention as it is “for us”.
Visible interaction with the tribal/cultural group, sharing to ideas, concepts.	Sense of ownership	Incorporates tribal elders, gives the power to the tribe regarding cultural, traditional activities.
Partnerships with the community, community consultation.	Endorsement by tribal acceptance.	Intervention “allowed” on tribal land.

Table 11- Adaptive mechanism

The process for extracting the main theoretical mechanisms has been explained earlier in the thesis. But to briefly recap, the development of the theory behind each intervention selected began as a structural process that was based on the knowledge of the subject area gained through researching the topic. Theory is used as the basis for the design of the interventions and constructed on relevant theories of behavioural change, an understanding of the pedagogy of Indigenous knowledge and an understanding of the applicable models to be used.

While identifying the relevant theories during the research phase, a detailed list of all program theories was identified, categorised and populated within an Excel spreadsheet. This provided the basis for the development of the data extract forms. As previously stated the selected papers were assessed against the six adaptive activities (listed in table 8). The process was to establish the more common adaptive theories used within the papers and to establish the rate of use for the most popular activities.

Specificity was discovered to be the most popular, with a focus on the use of traditional activities. Within the areas identified five interventions scored across of all the adaptive theories, with three of the interventions only scoring two adaptive theories. The obvious mechanisms are embedded within the adaptive theories, but it must be recognised that the hidden mechanisms that create change, the “change mechanisms” are the primarily of interest, the ones that need to be examined.

The use of Indigenous traditions as mechanisms for change ranged from uncomplicated hunting and gathering activities, to more diverse and complex ceremonies, including pipe ceremonies, sun dances, dreaming, the medicine wheel, or seal bladder ceremonies, all incorporating traditional healing, healers and tribal elders .

Incorporating traditional activities as part of an intervention for Indigenous People suffering substance dependency has become more popular over the past few decades (Chenhall *et al* 2013, Ross, 1999). The realisation that main stream services are frequently counterproductive or misguided, and that the majority of Indigenous People attending mainstream interventions leave after the first sessions, has finally been recognised (Chenhall *et al* 2012, Sue, *et al* 1990). It has been argued for the last decade that counselling and substance interventions are “perpetuating

the colonial oppression” and fail to recognise our way of knowing or our way of viewing knowledge, producing the foundation for the failure of the intervention (King, *et al* 2009).

As Indigenous People, our ways of knowing, ways of being and ways of doing are Indigenous ways. Our ways of knowing, of gathering knowledge and understanding, incorporate the political, historical and spatial dimensions of our families, our tribe and outsiders (Martin *et al* 2003). As Indigenous People we have sets of knowledge, and no two are alike, we share our knowledge with each other in multiple ways, through dance, through song, through stories, through of daily interactions.

Our knowledge is gained through our tribal traditions, which heavily influences our views and understanding of the world, our relationships and our place in the tribe. It has been argued that Indigenous thinking is visual and circular in philosophy (Fixico 2013). A combination of the physical and metaphysical, it is developed through stories and traditions. To use an intervention without an understanding or knowledge regarding our learning style increases the risk of failure.

From an Indigenous standpoint, the change mechanism is not the use of traditional activities but internal changes that the knowledge, understanding and experiences has given us. Our experiences within the intervention provide a platform for the development of pride, a sense of belonging, and the experience increases the knowledge gained and the supports spiritual healing of the person and other members of the tribe involved in the activities. For decades we have been prohibited/ punished for engaging in tribal activities; involvement carried almost a sense of shame and fear with it (Kulis, *et al*, 2002). Now it is recognised as something we are entitled to have and practice, something we should be proud of, and something that brings the tribe together to share and experience; it is a mechanism through which we support each other, through which

are links to the tribal group are strengthened. It provides Indigenous People with a sense of belonging and a sense of pride, things that have been missing for many years for most Indigenous People.

Over the last decades it has become increasingly popular to include traditional activities and customs into public health interventions targeting Indigenous People (Struthers, *et al*, 2004). The Indigenous healing processes recognise the importance of traditional ceremonies and customs, inclusion of these activities have more impact on the participant and enable change. Culturally and spiritually we “belong” to our land and tribe.

As Indigenous People, we are taught by our tribal group to view ourselves as part of our land, our families, or kin, part of the tribe and the world we live in. It is an Indigenous way of knowing and gathering knowledge. An inherent system for the development of a sense of belonging, it gives us a sense of connectedness to our family our tribe and our land, a relatedness that is missing from our lives external to the tribe (Hill, 2006). It provides Indigenous People with what Hill (2006) calls “cultural element”, a cultural value. Something that gives us boundaries, knowledge, a sense of self, of belonging and connectedness.

Feeling that we belong provides a culturally related view of our health, of our wellbeing. Acton and Malathum, in their paper, *Basic needs and health promoting self-care behaviour in adults*, (2002) have reported increases in health promoting behaviours linked to the sense of belonging. The paper is a result of a study that specifically investigated the relationships between basic needs satisfaction (Maslow, 1970), and health promoting activities and behaviour. The research demonstrated that health promoting behaviours were linked to feelings of love, of belonging and needs satisfaction. In accordance with the hierarchy he developed, Maslow (1970), believed that

having our needs met resulted in positive behaviour motivation, a critical component of any successful health promotion or intervention. A sense of belonging supports and develops personal and social identity (Bornholt, 2000), something that is a fundamental need for all humans (Schlachet, 2000). This is something that has been greatly diminished within Indigenous communities; something that we lost during the colonisation and following years, but essential to sustaining out cultural identity, and our health.

The development of a sense of belonging, as derived from tribal membership, has been researched in a variety of settings. Hale *et al* (1999) examined the development of a sense belonging within the context of social support and physical health. Their research findings indicated that a sense of belonging provides the basis for supportive relationships, increases emotional support, provides positive affirmations and reflections of ourselves. Belonging also gives a sense of intimacy and physical comfort, and has also been implicated in the etiology of disease and successful treatments (Coll *et al* 2012, Davis, *et al* 1991; Reis, *et al* 1994).

The development of a sense of belonging needs to be supported, encouraged and utilized within any intervention linked to substance dependency, it is an integral part of a successful intervention. Belonging encompasses not just a sense of belonging to the tribe but also belonging to our individual kin, skin and clan groups. An Indigenous sense of belonging involves our relationship with our land; it can only be called a sense of belonging that is derived from the ownership of our lands (Morton-Robinson, 2003). Indigenous People's relationships with their land are an almost "ontological" belonging, something that is present within Indigenous People. Story telling during ceremonies or while hunting and fishing, by elders or other tribal members, has been underrated as a hidden mechanism for change. Story telling builds personal identity,

supported by cultural identity, both act as protective factors against the effects of trauma (Coll *et al* 2012). The greater the enculturation, the higher the risk of substance dependency (Whiteback *et al* 2004).

The telling of stories for entertainment, is recognised as Indigenous People's cultural method for communicating an idea or a goal, for teaching and educating, as a means of establishing and sustaining tribal culture. It gives a sense of meaning to our lives, to our suffering; stories guide and teach us our traditions, tribal values, and our history. Indigenous core values and beliefs are now being used as part of interventions to help Indigenous families "reconnect" with their culture, with their methods of healing and their traditions (Hodges, 2002). Again the focus is to develop a sense, through culture, of belonging, of acceptance and of sharing our grief to enable healing. The use of traditional activities and ceremonies develop and sustain Indigenous culture, this includes story telling. Indigenous culture is a source, an asset (Cross, 2003), and a foundation for mental and physical health.

Traditional activities, particularly those used within healing ceremonies; focus not only on supporting the goal of sobriety but also on developing self-esteem. Nabigon (2006), a native Sioux, discusses the concepts of self-esteem, how the healing ceremonies and customs gave him the opportunity to not only know his heritage but also to "build self-esteem" (2006). In his book, *The Hollow Tree*, he discusses how important the belief in self is, how important self-esteem is to personal growth, how "building our internal fire" and "healing our soul" is critical to sobriety. The healing within his tribal group is linked to the smoke from sweet grass. The use of "sweet grass" is very common within American Indian ceremonies, it is said that burning the grass allows you to learn respect for yourself and others, to relate, to feel and care. It is a process of breathing in the "sweet grass" and mediating on where you want to be, who you want to be. For

Australian Indigenous People the same type of activity is pursued but encapsulated within “dreaming” (Slater 2014).

Reenergising traditional activities supports Indigenous People to reconnect with their historical traditions. It “mobilises” rituals, which in turn, brings a sense of unity and solidarity to the community (Garcia 2014). The mechanism of reconnection is embedded in the use of traditional activities, sweat lodges, pipe ceremonies, and dreaming, smoking sweet grass and pipe ceremonies.

Traditional activities and ceremonies also give us, as Indigenous People, the opportunity to understand our “place” within the tribe, to develop a sense of ‘who’ we are and where we fit based on our history, our culture and our roles. For many boys and men this gives them the sense of being a “warrior” within the tribe; not a defeated, colonised and disenfranchised person, but a person that can have pride in their role, someone that has something to offer other tribal members. The feelings of emasculation is lessened, and sense of power is instilled into the person.

For young and older women it provides a social structure that accepts them, gives them a “place”, knowledge and support within their societies. It allows women to develop into strong role models within their society, role models that provide guidance and support to younger tribal members and play a significant role in tribal politics.

Many Indigenous tribes or groups have a highly structured social model, with well-defined communication lines and barriers. The roles, as they are applied within our communities, each have responsibilities and rights that are not understood by the wider community. For Australian Indigenous dialect groups there are clear kinship systems. The system defines where we fit and

although it may vary across Australia the basic system remains the same. It involves our rights and responsibility regarding our moral support within the group, both given and received. It sets out our roles in the education of the children, our roles within our families, and our place within the community. The use of ceremonies and traditional activities supports and increases our understanding of our “role”, of our “place, and of our “belonging”. For an Indigenous person this is critical to our healing, to our community members gaining and maintaining sobriety.

Similarly, American Indians also have highly developed and structured societies. The tribes have kinship relationships, with established rights and responsibilities, as do Maori and the majority of other Indigenous societies. Tribal groups are further devolved into clan, kin or skin groups and family units. We depend on our kin, tribe and clans for support, care, knowledge and in some case our physical survival.

There are frequently insurmountable cultural differences between the wider community and Indigenous communities that interact within interventions and can be the basis for failure. Coffman *et al*, (2004) found that cultural difference between staff and clients increased the complexity of care and interventions. Their research highlighted that “nurses lack cultural self-efficacy, cultural information, and cultural experience”. Feeling isolated and unable to practice your tribal culture greatly diminishes your sense of belonging, and increases the risk of failure.

When using an adaptive theory that incorporates tribal elders, the interventions develop a sense of sharing, of cultural safety and understanding. This mechanism develops high level of understanding regarding the context of the intervention and how it directly affects the interventions ability to develop change. The other emotion that correlates to the involvement of the elders of the tribe is self-worth. The view that “I am worthy of this attention from this

person”, comes into play. It has been found that people with a strong sense of “self”, with self-esteem and cultural pride “adhered more strongly to anti-drug norms” (Kulis, *et al*, 2001). Kulis *et al* (2001) found strong links between an American Indian student’s ability to say no to drugs and/or alcohol and their sense of pride in their ethnic background. This is a critical mechanism to change, as it places a “value” on the person; it ensures that the person can see their own value being reflected back to them by the community and their families.

As colonised people, for Indigenous People, their “value” has been taken with our traditional lifestyle, our tribal group; many Indigenous people have become disenfranchised and subjected to such intense racism that they fail to see that they are of any value to anyone or to see any value in their lives. To be supported, cared for and directed by an elder allows the feeling of value, of pride to be experienced and be developed.

The mechanisms used appear at first glance to simply be a way of retouching Indigenous culture, of reenergising traditions; nevertheless it becomes apparent that they are simply the obvious mechanisms. The real mechanisms are embedded in the inbuilt actions, feelings and emotions of the participants, these feelings and a sense of pride supports change. How we feel about ourselves, how we are treated by our elders and community, if we feel we belong, if we feel we are not alone, if we feel pride being Indigenous, and self-esteem; these emotions bring internal change.

Outcomes

A critical realist synthesis looks at the outcomes as a means of measuring behavioural change, a measurement linked to the success of an intervention or its failure (Pawson *et al* 2009). But the outcomes in critical realist synthesis are second to mechanisms. The limited statistical data of the

outcomes within the published papers used has forced the move towards more qualitative information as a means of measuring success. The levels of acceptance and usage support the hunches, ideas, concepts or guess work regarding the theoretical frameworks and what is thought to work and why or why it has not worked. It is hoped that the findings will bring change within policy and intervention design, development and implementation.

Within the synthesis the “hard” evidence is limited to just three papers that demonstrated clear statistical results. But having said that, all the other papers specifically noted the high level of acceptance and community involvement, which in itself, given the context, is a success.

Pawson (2002) has stated that during an evaluation of interventions and whether or not they are effective, we need to alter the way, we as researchers, conduct the evaluation and the meaning of success. It is not the interventions that work but the mechanisms embedded within the intervention that enable the participants to achieve success. It is the mechanism and the causal factors that enable the changes internally and instigate the desired outcomes. In the case of this critical realist synthesis, sobriety is the final outcome but, within this analysis, there has been very little real evidence of the final outcome.

The inclusion of anecdotal and quantitative evidence has been, as previously stated, based on Pawson’s (2004) statement that there is simply no wrong or right way to complete a critical realist synthesis. All the results found through the critical realist synthesis have been noted regardless of a statistical outcome or the lack of numerical findings. This is in accordance with Pawson’s concept that all information interplays with the outcomes, and therefore all outcomes should be considered, as well as the definition found in the Oxford Reference Dictionary which states that all the available information should be included.

The inclusion of all of the evidence must be considered to ensure that our understanding surrounding the intervention is extended, that our understanding of the intervention and the acceptance of the interventions by the participants it increased. The annotations for each study included in the synthesis are listed below, with clear statements taken from the papers demonstrating the level of success and/or acceptance.

Paper	Outcome
Stopping petrol sniffing in remote Indigenous Australia ; key elements of the Mt Theo Program.	Community developed and driven, very successful
The outstation model of rehabilitation in Central Australian. The case for its recognition and acceptance.	Only a minority return to substance dependency after the intervention
The story of Alkali Lake	Community initiated and driven 97% success.
The red road to wellness : Cultural reclamation in Native First Nations Community treatment centre	High level of acceptability by the community and commitment
The grog mob : lessons from an evaluation of a multi-disciplinary alcohol intervention	78% either stopped drinking or significantly reduced their drinking.

Whanaungatanga : A process in the treatment of Maori with alcohol and drug use related problems	Maori driven, improved treatment outcomes
The role of culture in substance abuse treatment programs for American Indian and Alaska native communities	Achieving greater treatment effectiveness
Cultural connection and transformation : Substance abuse treatment at Friendship House	Very successful, uses the Red Road approach.
American Indian culture as substance abuse treatment: pursuing evidence for a local intervention.	A return to the Red Road, traditional activities, very well accepted and used.
Incorporating Yup'ik and Cup'ik Eskimo Traditions Into Behavioural Health Treatment	Well accepted and successful
Community Mobile Treatment, what it is and how it works	Community driven, 75% sobriety

Table 9. . Rates and comments regarding levels of success.

There can be little question that the use of culture and traditional activities do impact on the success of an intervention. But the success of an intervention is not simply about the use of culture and traditional activities; it appears to require the support of the community, the time and expertise of tribal elders and the tribe generally.

The majority of interventions are developed by “white middle class” doctors, nurses and health promotion officers and these interventions are habitually recognised as having poor acceptance and participation for Indigenous People. Gone (2007) hypothesized that this is due not only to the devastating effects of colonisation but also the ongoing struggle for power embedded in the political, legal and economic structures, in the context of the intervention. The other issues Gone (2007) researched are related to the development of policy and interventions, and the lack of connectedness and understanding of Indigenous needs. This is problematic when putting processes in place to remedy something if you have no idea what it looks like when it is actually fixed. The direct result of this type of intervention continues to be a high failure and a high rate of recidivism for Indigenous People.

As previously stated, AA is frequently used in combination with traditional activities, linking the new with the old as a means of supporting participants in gaining sobriety. But intriguingly the success rate of AA as a standalone intervention has been found to be only 5 to 10% (Dodds, *et al* 2014). The Cochrane Collaboration reviewed studies of AA and the participants between 1966-2005 regarding the success of the program and no studies “demonstrated the effectiveness of AA” (Dodds *et al*, 2014, P 46). The rates of success for the AA and NA program are significantly lower than the ones achieved by at least three of the interventions within the synthesis, and with less acceptance than is noted within the papers used.

All the interventions which used culture and tradition as a basis had a higher level of acceptance within the community. The interventions were seen as being more practical for the people in Indigenous communities. The use of sponsors, within AA and NA, to support individuals attending meetings can, in many ways, almost be called authoritarianism (Kurtz, 1999), which for many Indigenous People simply follows the norm of a white person in control, telling them what to do.

NA procedure is very similar to AA, NA also encourages the participant to admit and tell of all of their wrong doings, of their inability to break their addiction and the need for a sponsor to support or direct their lives. For Indigenous People this alone would stop many from participating. The personal shame that comes with admissions would be sufficient to stop many Indigenous People from participating.

With a success rate of only 5% -10%, across the temporal period of 1966-2005, AA represents a very poor outcome for the intervention participants (Dodd, *et al* 2014). It could be argued that if the AA program, as used and presented within mainstream intervention services, was administered in Indigenous communities, the success rate demonstrated with several of the papers within the synthesis would not have occurred.

The successful result from formal mainstream rehabilitation or interventions, either as an in or out patient, is similarly low. This is particular true for the wider community within America, where the statistics show the relapse rate to be approximately 60% (National Institute on Drug Abuse). John Hopkins Medicine (2012) preformed an analysis of the relapse statistics from their in-house program and the report demonstrated between 65% - 80% relapse within the first month from the completion of the substance interventions undertaken. It is believed that for Indigenous

People, it would become more difficult to relapse within your community when your family, your kin and your tribe support you.

Mainstream rehabilitation services struggle to service the needs of the wider population and, with the issues surrounding Indigenous People, it is even more challenging. McKeganey *et al.* (2004) found during their research examining what drug users wanted from a rehabilitation or intervention, that for only 57% the goal was to be drug free. The remaining wanted either strategies to maintain their drug use, or safer methods to stabilise their use. But for all respondents in the research, it became clear that the interventions offered failed to meet the needs of the participants. Although this research was conducted in Scotland, it demonstrates that even within the wider community the current service models fail to meet the needs of the participants.

It must also be recognised that there is very limited evidence demonstrating how effective, if at all, mainstream services are for Indigenous People (Maori and Addiction Treatment Services, 2012). Furthermore, as there is such limited information concerning the level of sobriety or usage of rehabilitation programs for Indigenous community members, it would be impossible to gauge any the success of any program. This lack recorded success has impacted on the analysis.

The outcomes demonstrated by the studies used in this synthesis show that with a little effort and knowledge as well as proper consultation and partnerships with the Indigenous groups the results can be drastically different.

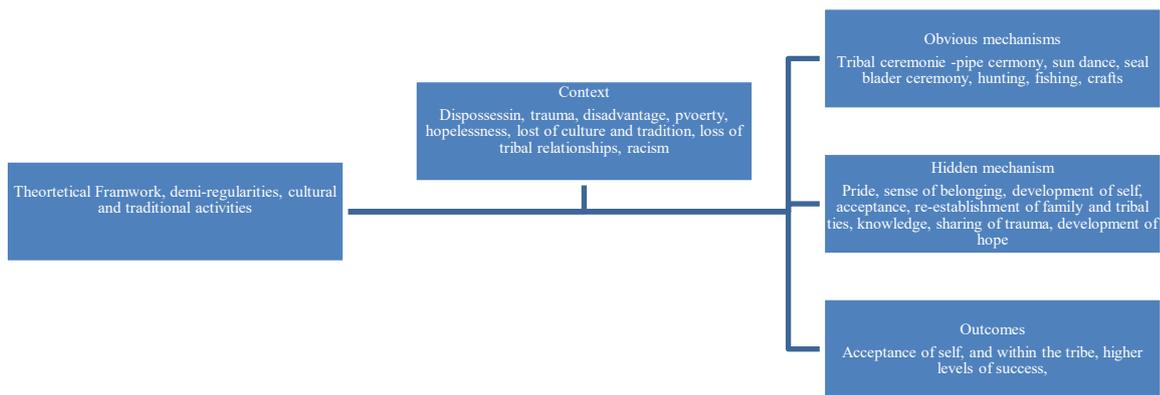


Diagram 5- Flow chart for successful interventions.

Chapter 7

Conclusion

Substance dependency in Indigenous communities continues to grow, to subject our communities to violence, poverty and adds to our ongoing burden of poor health outcomes. With the continued low education levels, poor housing, racism and lack of economic opportunity more of our people will suffer substance dependency.

The popular theories behind many interventions have failed to develop interventions that encourage and support change for Indigenous people. They are generally developed for a whole of population use, and fail to recognise the specific needs of Indigenous people and their circumstances. This lack of understanding in this area has resulted in the loss of many lives and the misery of others.

Within Australia there is very little that targets the specific needs of our Indigenous people, with the same occurring in New Zealand, and Canada. With the American Native People there

appears to be a different theme with several tribal groups developing, implementing and evaluating their own programs, and more importantly funding the interventions themselves. If this is a sign of the growth of independence in these groups it is still unclear, but it is something that other Indigenous people need to take note of and emulate where possible.

The research in this paper took the form of a critical realist synthesis, but was also viewed and guided through Indigenous standpoint theory. This allowed for not only the theories behind the development of the interventions to be identified but also for a glimpse of what works, how and in what context.

All of the identified theoretical base of the interventions listed in this thesis revolved on the concept of culture, and the introduction of cultural activities to enhance the opportunities for sobriety.

The six identifiable major theoretical mechanisms interplayed throughout all of the papers were:

- Consonance - use of Indigenous values, ceremonies and traditions into the interventions ensured that the traditions and culture were incorporated into the program. This adaptive mechanism incorporated the use sweat lodges, seal bladder ceremonies, traditional hunting, fishing, storytelling and education on traditional lore.
- Authenticity reflected the same language, understanding and conceptual values to the participants. Using the same language provides a same understanding of the words and phrases used during the intervention, but it also allows a share understanding of how knowledge is transferred and understood. Our knowledge

is the foundation of our being, of our lives. This adaptive mechanism also guaranteed that the style of learning, the pedagogy of Indigenous People was used, which enhanced the transfer of knowledge and understanding. The employment of culturally acceptable staff confers on the intervention, a high degree of cultural safety for the participants. But it also brings a shared concept and theory of what life is, what has meaning within our lives, what supports our beliefs and way of life.

- By embedding the interventions within a community setting, by grounding the intervention within our cultures, lands and traditions of the participants, it has not only allowed the intervention to be appropriate, but also provided a mechanism for tribal interaction. Embedding gave access to sacred sites, to traditional healing and medications and to our land. The use of our land provides the vehicle for our physical and mental healing, for spiritual health. Our land is not simply a cultural backdrop to the intervention, but rather a lifeline which provides for our spiritual safety and our healing.
- By being specific to the participants in the interventions, the mechanism is precise and purposeful to the needs of the Indigenous People. It makes the intervention unique to the people targeted; it is distinctive and tailored to their needs.
- Partnerships, ownership and tribal endorsement, although different in definition, are all linked to acceptance of the intervention, its approval and support by the tribe and by the elders. Partnerships or ownership provides a sense of control over the intervention, the ability to be involved in the development and

implementation of the intervention. This then allows our elders to be involved. Elders contribute to our society, their support and approval makes the intervention acceptable to the rest of the “mob”. Interventions would gain significant benefits by securing the input of tribal elders and other tribe members, including the incorporation of traditional activities, customs and healing.

This type of framework for Indigenous interventions targeting substance dependency could enrich the experiences of Indigenous People participating in the intervention, it could provide further the opportunities for change within the participants. Furthermore this framework would provide an opportunity for the tribe as a whole to come together, to share and gain traditional knowledge, to support each other and to reenergise our culture.

My belief as an Indigenous researcher is that my research must be based and seen through an Indigenous standpoint, that my strength as an Indigenous researcher is to shed light on the issues that we, as Indigenous People, face daily. But using an Indigenous lens I have been presented a range of challenges linked to the current norm and established frameworks, structures and methods used by many researchers.

I have not used my Indigenous heritage or knowledge of culture to fight against western research methodologies, but to use them to the advantage of Indigenous People. I have not resisted or fought the methods used by other researchers, but attempted to bring our understanding, our sense of reality and knowledge into the analysis. Nor have I ignored the voices of my people; it is embedded in the thesis, as is our historical and political experiences.

My strength in this thesis is being able to stand outside the common ground, ideas and concepts of western researchers in order to bring an Indigenous view point into the public arena. My thesis has been an attempt to bring an Indigenous lens to the subject matter, to draw on my cultural beliefs, experiences, the reality of my world, and to gain an insight into the real mechanisms at play which could support sobriety within my own community.

From an Indigenous standpoint, and as an Indigenous researcher, I recognise that for most researchers knowledge is external, outside of themselves, but in my case the knowledge I have gained is internal, something to be given and shared with my mob (family, tribe).

But I have also witnessed and been the victim of the misunderstanding of Indigenous practices within academia, and I am aware of the impact this has on our research and how we develop results. We have our own “science”, our own practices, our way of using our land and resources. Sillitoe (1998) hypothesised that our way of learning is less about the intellectual pursuit and more about the applied.

Finally it is surprising that given the extent of substance dependency within Indigenous populations, and the level of mortality and morbidity resulting, there is insufficient evidence, and an incomplete understanding surrounding interventions in this area.

Part of the lack of research and understanding centres on the western culture of claiming itself as the ethnocentric centre of knowledge (Fiumara, 1990). Western discourse is based in dominant cultural context, in a mindset that fails to recognise and understand social systems that are not equivalent to their own. Linda Tuhiwai Smith (1999) has discussed how western research is “encoded in imperial and colonial discourse” that it is centred on set recognisable values, subjectivity and knowledge. This conceptual view has been proven to present difficulties when

researching and when developing policies and interventions for any Indigenous issues, let alone the incorporation of a range of culturally different healing methods as a standard for treatment for substance dependency.

Smith (1999) has been quoted as stating that “research benefits the researcher and the dominant culture”, that research is “implicated in the production of western knowledge, in the nature of academic work, in the practices that have continued to dehumanise Maori and other Indigenous People and in practices that continue to privilege western ways”. There can be no doubt that white researchers fail to use a methodology that allows for the voices of Indigenous People to be heard, or for Indigenous cultural traditions to be recognised as useful, for Indigenous ways of gathering and using knowledge to be recognised and for the health effects of our cultural practices to be identified.

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[Appendix A,](#)

WORD TESTING

data Base	wording	Number
PubMed	Indigenous drug/alcohol addiction/dependency treatment	11
	Indigenous drug/alcohol addiction/dependency intervention	222
	Indigenous drug/alcohol treatment/program	48
	Indigenous substance addiction rehab/program	54
Scopus	Indigenous drug/alcohol addiction/dependency treatment	13
	Indigenous drug/alcohol addiction/dependency intervention	12
	Indigenous drug/alcohol treatment/program	5

	Indigenous substance addiction rehab/program	1
Wiley	Indigenous drug/alcohol addiction/dependency treatment	68
	Indigenous drug/alcohol addiction/dependency intervention	43
	Indigenous drug/alcohol treatment/program	1
	Indigenous substance addiction rehab/program	189537
Google Scholar	Indigenous drug/alcohol addiction/dependency treatment	34800
	Indigenous drug/alcohol addiction/dependency intervention	34800
	Indigenous drug/alcohol treatment/program	39600
	Indigenous substance addiction rehab/program	19000

Appendix B

Cultural activities – Key concepts and activities

Study	Activity
Stopping petrol sniffing in remote Indigenous Australia ; key elements of the Mt Theo Program.	Partnership
	hunting
	gathering
	based in tribal lands/ close to a "dreaming " place
	supported by the community
	More traditional life style, dreaming
	the "elders" have an active role
	indigenous staff
	"healing" focus
The outstation model of rehabilitation in Central Australian. The case for its recognition and acceptance.	based in tribal lands
	based in family traditions

	elder accepts responsibility for the person
	hunting
	gathering
	Indigenous staff
The story of Alkali Lake	owned, managed and used by the tribe
	policy, driven , enforced and owned by the tribe
	based on care for other tribe members
	renew interest and use of traditional customs
	in country
	lead by example by elders
The red road to wellness : Cultural reclamation in Native First Nations Community treatment centre	owned and supported by the tribe
	indigenous staff
	in country
	rational healing
	cultural activities , sweat lodge, sun dances, powwow dances, pipe ceremonies
	traditional crafts
	field trips
	spirituality
The grog mob : lessons from an evaluation of a multi-disciplinary alcohol intervention	Some Indigenous staff
	In country
Whanaungatanga : A process in the treatment of Maori with alcohol and drug use related problems	culturally competent staff
	support from elders
	acceptance of personal responsibility
	Traditional life style
	spiritual life supported
	traditional healing
	taught traditional values, principles and processes
	Indigenous staff
	support for the development of "self"

Cultural connection and transformation : Substance abuse treatment at Friendship House	spiritual experience
	supported
	taught traditional values
	family and community centered
	traditional medicine
	retraditionalization
	traditional activities, sweat lodge, talking circles,
The role of culture in substance abuse treatment programs for American Indian and Alaska native communities	mixed delivery sites
	supported by the communities
	use of traditional and cultural activities
	traditional healers
	medicine wheel
	Indigenous staff
	incorporation of spiritual growth
	trips and camping in traditional lands
American Indian culture as substance abuse treatment : pursuing evidence for a local intervention.	residential treatment in country
	traditional activities, sweat lodge, sun dances, pipe rites
	Tribal commitment and support
	Partnership
	developed and support advisory group to support activities
	camps
	hunting and gathering
	Traditional crafts, carving, leather making, quillwork
	tribal education, ritual protocol, tribal cosmology, sweet grass ritual
	partnerships with tribal elders
	in country
Incorporating Yup'ik and Cup'ik Eskimo Traditions Into Behavioural Health Treatment	traditional crafts
	activities hunting, fishing, steam baths, ceremonies, seal bladder festival

	Traditional medicine
Community Mobile Treatment, what it is and how it works	family based
	support from within the tribe
	implementation of cultural actives- pipe ceremony, campouts, sweat lodge
	Indigenous staff