Exploring Māori Identity Behind Closed Doors

An investigation of Māori cultural identity and offender change
within Waikeria Prison's Māori Focus Unit, Te Aō Marama

A thesis presented in partial fulfilment of the requirements for

the Degree of Doctor of Clinical Psychology at

Massey University, Albany,

New Zealand

Tess Chalmers

2014

"...I've been in prison most of my adult life. I really didn't give a shit about being Māori when inside, but [was more] worried about being a staunch gang member. In Te Aō Marama it's not about being a staunch prisoner, but [about] learning to be a staunch Māori. I'm not going to come back in when I get out. Te Aō Marama changed my life".

Participant Four. (2012, April 30). Personal interview. Te Aō Marama, Waikeria Prison.

Abstract

The Ministry of Justice (2013) continually reports an over-representation of Māori within the incarcerated population. An attempt to address these concerns led to the development of the Māori Focus Unit (MFU). The MFU aims to strengthen an offender's Māori cultural identity through therapeutic programmes rich in tikanga Māori (customs), potentially resulting in offenders, once released from prison, leading pro-social, non-offending lifestyles (Department of Corrections, 2009b; Ministerial Review Report, 2005). However, limited studies inform the relationship between MFU participation, Māori cultural identity and offender change.

The current research, based at Waikeria Prison's MFU, Te Aō Marama, attempted to explore offender change through cultural identity theory of indigenous offending (Chalmers, Williams, & Gavala, 2012; Snowball and Weatherburn, 2008). This theory proposed that, through the destructive effects of colonisation, indigenous peoples lost aspects of their values, beliefs and traditions, while becoming acculturated into the colonising population. This was suggested to have resulted in a decrease in Māori cultural identity, wellbeing and pro-social behaviour, and an increase in anti-social attitudes, cognitions and behaviour (Gale, Bailey-Harris, & Wundersitz, 1990; Pearson, 2001).

The current study employed a repeated measures research design in the naturalistic setting of Te Aō Marama. Quantitative measures explored the relationship between Māori cultural identity, wellbeing, anti-social cognitions and attitudes, and pro-social and anti-social behaviour over time spent in Te Aō Marama. Further, participant feedback generated through interviews explored what offenders believed contibuted to any changes experienced.

Results suggested that offenders experienced a significant increase in Māori cultural identity, wellbeing and pro-social behaviour, and a significant decrease in anti-social attitudes, cognitions and behaviour over time spent in Te Aō Marama. Furthermore,

offenders predominantly reported that their experience in Te Aō Marama had strengthened their Māori cultural identity, and that as a result, they had experienced the changes across the aforementioned constructs. In conclusion, the study may potentially provide information in the establishment of other therapeutic environments aimed at increasing Māori cultural identity.

Acknowledgements

willingness to take part in the study and your openness in sharing you personal experiences with me. Without your participation, this study would not have been possible.

I would like to thank my friends for their willingness to stay in touch. I have relied on you for some much needed laughter and for the grounding provided by old friends. Thank you for allowing me to escape and be part of a more balanced life. I look forward to spending more time together.

This thesis is a product of all those who supported the study and those who supported me personally. I would like to acknowledge and thank you all for your contribution.

Tena koutou mo tenei

Ehara taku toa i te toa takitahi, engari he toa takitini

Table of Contents

List of Appendices

List of Tables

List of Figures

Introduction and Overview

There does not exist one type of offender, one category of offending, or one cause for each offence. What is consistent across forensic literature is the disproportionately high level of offending by minority groups (Becroft, 2009; Fergusson, Horwood & Lynskey, 1993; Phinney, 1990). These disparities are evident across the indigenous peoples of the United States, Canada, Australia, the Pacific and New Zealand (Bachman, 1992; Brzozowski, Taylor-Butts, & Johnson, 2006; Memmot, Stacy, Chambers, & Keys, 2001). Literature reports the disproportionately high rates of offending and recidivism amongst New Zealand's indigenous population, Māori (Department of Corrections, 2001; Doone, 2000; Fergusson, 2003; Masters, Trynes, Kaparu, Robertson, & Waitoki, 2003; McFarlane-Nathan, 1999; Singh & White, 2000).

According to the New Zealand census, Māori made up 14.9 % of the New Zealand population in 2013 (Statistics New Zealand, 2013). In the previous year, Department of Corrections and Statistics New Zealand released a report which suggested that 51% of the incarcerated population identified as Māori (Statistics New Zealand, 2012). Research by Weatherall, Wilson, Harper and McDowall (2007) suggested that each year around 100,000 people are convicted of a crime in New Zealand, and about 42% of those convicted identify as Māori; with the proportion increasing as the seriousness of offending increases. Furthermore, the Department of Corrections (2007) asserted that the current figures did not adequately convey the extent of Māori overrepresentation.

The Ministry of Justice (2009) suggested that total arrests of New Zealanders over 1997-2006 increased by 4%, whereas Māori arrests increased by 10%. Re-offending statistics presented by the Department of Corrections (2009c) indicated that Māori offenders made up 55% of the re-imprisonment statistics, considerably higher than the rate for any other ethnicity.

1

Marie (2010) pointed out a key fact regarding the Māori correctional statistics. She suggested that most Māori do not offend, and that according to the Department of Corrections '*Māori Strategic Plan'* (*2008*), 95.4% of Māori over the age of 17 were not serving a sentence within the Department of Corrections or identified as engaging in criminality. Although this may imply that it is only a small percentage of the Māori population who actually offend (Marie, 2010), when comparing the Māori offending statistics to offending statistics in other ethnic populations within New Zealand, Māori are continually over-represented (Durie, 1999; Statistics New Zealand, 2012). In successive prison censuses since 1987, Māori have reflected disproportionate inmate numbers (Durie, 1999).

There has been little research conducted exploring the Māori disproportionate offending rates. Byers (2002) argued that for Māori interventions to be successful they must first explore why Māori are overrepresented in offending statistics, and then aim to address the areas identified.

A dominant and widely accepted view of indigenous offending argues that the destructive effects of colonisation and acculturation have subsequently led to an increase in anti-social behaviour (Gale et al., 1990; Pearson, 2001). The relationship between these constructs has been explained through cultural identity theory (see Chalmers, Williams, & Gavala, 2012; Snowball & Weatherburn, 2008). Stemming from cultural identity theory, the New Zealand Department of Corrections attempted to address the disproportionate rates of Māori offending through the development of the MFU. The philosophy was based on the belief that by increasing Māori cultural understanding and identity, offenders would experience an increase in wellbeing and pro-social behaviour, and a reduction in anti-social attitudes, cognitions and behaviour; ultimately reducing recidivism (Baker, 2012; Department of Corrections, 2009a; Harihari, 2012). Understanding whether the MFU increases Māori cultural identity and exploring if and how this may result in other areas of offender change,

may inform the use of the MFU in a correctional setting. As such, the focus of the current study was to explore whether offenders housed within the MFU experienced change, along with investigating what offenders believed equated to the change experienced.

Chapter One will present offender rehabilitation in New Zealand and the shift from a Western based philosophy to one which was more inclusive of the Māori worldview. The chapter will touch on international indigenous initiatives alongside the development of indigenous based correctional programmes within New Zealand. The MFU will then be introduced, and the philosophy behind its development discussed.

Chapter Two will outline cultural identity theory of Māori offending. This will first describe the Māori experience of colonisation, acculturation and loss of cultural identity. Theories of indigenous offending will then be described and critiqued. Following this, cultural identity theory will be presented and empirical research investigating the theory across an array of areas: wellbeing, mental health, education, pro-social behaviour, anti-social attitudes, cognitions and behaviour and gang association, provided. The relationship between a loss of Māori cultural identity and offending will then be explored and critiqued. Lastly, the conflict between holding a Māori cultural identity and engaging in crime will be described.

The final chapter of the literature review will explore Māori cultural identity and offender change in the MFU. This chapter will first present and critique past research investigating the MFU, and will then introduce the current study. The introduction of the current study will highlight the current research purpose, its attempt to address past research deficits, and how it may add to the current research pool. Lastly, research questions and hypotheses will be presented.

The method of the current study will be provided in Chapter Four, outlining the research design, participants, measures, procedure and ethical considerations. Following this,

Chapter Five will present the quantitative results and participant feedback. The final chapter of the thesis will review the research findings in relevance to previous research and theories outlined in the literature review. It will then discuss strengths, limitations and considerations of the current study, recommendations for future research, and finally, provide key findings and implications for clinical practise.

Chapter 1: Māori Offender Rehabilitation in New Zealand

This chapter will discuss correctional practice of offender rehabilitation within New Zealand prisons, addressing the shift from a Western-based framework, to one which is more inclusive of Māori philosophies. It will then explore how the Department of Corrections' Māori initiatives may have been grounded from Western frameworks, and will discuss the need for indigenous programmes stemming from a Māori worldview to be developed. The chapter will then present research investigating international indigenous initiatives within correctional systems, followed by an exploration of existing New Zealand indigenous correctional programmes. Finally, the chapter will introduce the MFU, discussing the philosophy behind its development and implementation nationwide.

Past and Present

Webb (2009) argued that, prior to colonisation, Māori had control over their social, economic, and cultural destiny, including their own justice system. He outlined the history of Māori criminal justice in his paper '*Māori, Pacific peoples and the social construction of crime statistics*'. Webb articulated that the Māori system of justice was rooted on social responsibilities and whakapapa links through people to their wider community. According to Hakiaha (1998) and Jackson (1987, 1988), Māori viewed imprisonment as an inappropriate and unacceptable form of punishment as it dissociated the offender from the community, did not address the reason for the offending and did not compensate the iwi (tribe), hapū (sub-tribe) or whānau (family). Prior to European settlers, Māori were able to resolve conflict through their own traditional belief system, without the influence of cultural milieu from the crown (Hakiaha, 1998; Jackson, 1987, 1988).

In the Māori worldview, no individual was seen as a single entity but as a person belonging to a wider family system (Hakiaha, 1998). When negative behaviour was

exhibited by an individual, it not only affected himself/herself but also directly impacted his/her iwi, hapū and whānau. The tribal proverb: 'Tukua ma te whakamaa e patu' (let shame be the punishment), was the philosophy in which Māori historically solved conflict, and suggested that Māori would refrain from anti-social behaviour due to the consequences of shame suffered. An example of this is the story of the Ngāti Awa people.

> *The Ngāti Awa feared their Tohunga, Te Tahi o Te Rangi, was using magic to destroy their crops, and marooned him on a local island. What the Ngāti Awa people did not know, was that their Tohunga possessed a Mauri, giving him the ability to call on the taniwha, in which he rode across the waters. When passing the Ngāti Awa, who had not yet reached land, the Tohunga said to the Taniwha that he would not seek retaliation on the people, as their shame would act as sufficient punishment, and when Ngāti Awa saw the Tohunga on the land, before they had reached the shore, they were deeply ashamed of what they had done (Hakiaha,1998).*

The Project Waitangi Report (1989) proposed that colonisation meant that for Māori society, the century old forms of social order had been disrupted and suppressed by Western settlers. The report suggested that the Western justice system was seen as superior, with the Māori system being viewed as inferior. Therefore, Māori law was gradually replaced by the dictates of the Western settler's government, in order to 'save' Māori from their own customs. The Project Waitangi Report indicated that the shift from a Māori system to a Western government included the implementation of Western based correctional rehabilitation.

Furthermore, the report argued that rehabilitative initiatives aimed at addressing offending rates were historically developed through Western perspective, and applied to the prison community without consideration of their validity for non-Western offenders. Kupenga-Wanoa (2004) suggested that forensic research involving Māori has been dominated by Western models and frameworks, failing to acknowledge a Māori worldview. She argued that the Department of Corrections system was monocultural in nature, therefore its response to Māori offending was based on a Eurocentric philosophy. Furthermore, Kupenga-Wanoa proposed that New Zealand correctional facilities mainstream prison environment may be perceived as 'culturally alien' for Māori. Convergent with this, Wikiriwhi (1998) stated that when attempts to understand, treat, and care for Māori offenders are from within a Western based framework, Pakeha models are inferred to be the only valid treatment method, implying differences between Māori and Pakeha can be standardised, or that a Māori perspective on the issue is irrelevant.

The Department of Corrections (2002) stated the objective to manage offenders with the aim of reducing re-offending. However, in light of the continual over-represented number of Māori within the justice system, the Department of Corrections identified that the Western based system may not have been successful in reducing re-offending in the indigenous group. Furthermore, McFarlane-Nathan (1999) argued that in the last twenty years, there have been several adjustments made to the Department of Corrections in an attempt to better reflect Māori paradigms. This included the consideration of the Tiriti o Waitangi (Treaty of Waitangi), and the application of its principles of partnership, protection, and participation within all correctional initiatives (McFarlane-Nathan, 1999). Byers (2002) reported that the Department of Corrections recognised the necessity of adhering to the Tiriti o Waitangi principles in achieving its goal of reducing recidivism, and that this had resulted in the inclusion of tikanga (customs and traditions) within its service.

McFarlane-Nathan's (1999) paper, which discussed the implementation of kaupapa Māori rehabilitative initiatives targeting a loss of cultural identity within the Department of Corrections, asserted that tikanga Māori has been seen to enhance Māori construction of positive relationships, accountability, and responsible behaviour, leading to a reduction in future recidivism. Furthermore, Mc Farlane-Nathan suggested that any initiative which attempts to develop Māori, should enhance access to tikanga Māori.

The Department of Corrections' inclusion of tikanga has historically been integrated within Westernised psychological interventions (Wilson, Tamatea, & Riley, 2007). Durie (2003a) suggested that culturally adapted mainstream programmes contradict the values and beliefs which constitute a Māori philosophy, and do not reflect true biculturalism. He suggested that the development of culturally specific interventions may be more effective.

Alongside the introduction of tikanga, the Department of Corrections (2002) attempted to increase its cultural competency through the incorporation of cultural advisers and cultural training for correctional staff. Masters and colleagues (2003) research, which investigated the cultural training provided to Department of Corrections employees, found that staff viewed their cultural training as a form of 'lip service', and suggested that Māori protocol should rather be incorporated into daily practice. Furthermore, Hakiaha's (1998) research investigating the application of Māori paradigms in resolving Māori disparities, argued that the Department of Corrections' attempts to biculturalise the institution, had little effect on the fundamental issue of reducing Māori offending and recidivism. He stated:

"Many institutions' current thinking on biculturalism has been defined from a monocultural perspective. Pakeha decide and define the relationship with Māori people, they choose the relevance and the dimensions of Māori perspectives they will implement to suit their organisations' needs...satisfy[ing] only the theory but not the reality of biculturalism" (p. 29).

Furthermore, Te Aroha-Bryant (1998) asserted that there still remained a need to identify a way in which Māori themselves could deal with Māori offending. The Project Waitangi report (1989) stated that Māori have had little cultural input in the criminal justice process, yet it is Māori people who have the ability to effectively deal with their offending. The report suggested that the department must acknowledge its contribution in cultural denigration, trapping Māori into a Western system, and develop new initiatives which are consistent with a Māori reality.

Wikiriwhi's (1998) research, which provided the perspectives of Māori offenders in regards to effective intervention strategies, argued that the Department of Corrections must promote Māori tino rangātiratanga (self determination) in addressing Māori recidivism rates. Offenders in the study reported that Māori equivalents to existing initiatives need to be developed in order for sovereignty to be shared, as stated in the Tiriti o Waitangi. Wikiriwhi concluded that any correctional programme developed for Māori offenders should be grounded by cultural values and developed and run by Māori.

In current times there has been much advocacy for programmes and interventions that are Māori in focus, developed by Māori, provided by Māori and driven by Māori, with the development of kaupapa Māori (by Māori for Māori) programmes viewed as a priority in offender rehabilitation (Te Aroha-Bryant, 1998). When interventions are generated from within Māori communities through a kaupapa Māori approach, Māori experience is placed at the centre of the theoretical base, and Māori practices are accepted as the norm (Kingi, Aranui, Tamihana, Crossman, & Nuttall, 1991). Furthermore, Skogstad (1994), who provided preliminary data regarding service delivery at the '*Department of Justice Psychological Services Conference'*, asserted that kaupapa Māori based programmes may be most effective in reducing Māori recidivism rates. This aligned with Te Aroha-Bryant's (1998) perspective which suggested that:

"*Statisticians continue to prove that we are at the bottom of the crimes statistics heap, and yet the aim to reduce Māori offending continues to be unsuccessful. No amount of incorporating Māori values into Pakeha systems or indigenisation of mainstream systems can solve the problems. It requires more than the mere recognition of tikanga Māori. There need to be programmes created by Māori and operated by Māori based on traditional values*" (p. 174).

A consistency across Kaupapa Māori initiatives was the prospect that indigenous rehabilitative programmes were most effective when addressing colonial history, Māori identity, wellbeing and diverse Māori realities (Byers, 2002; Department of Corrections, 2001; Durie, 1998; Te Puni Kōkiri, 2000). Jones (2001) suggested that Māori intervention programmes need to be developed and run by Māori, as the experiences of colonisation and a loss of identity and wellbeing are un-familiar experiences to non-indigenous, who would have difficulty incorporating these impacts into programme development.

A Department of Corrections initiative promoting the implementation of kaupapa Māori rehabilitative initiatives targeting a loss of cultural identity, is the Framework for the Reduction of Māori Offending (FReMO, McFarlane-Nathan, 1999). This framework identified a set of fundamental factors when working with Māori, which included cultural identity, cultural tension, whānau, and whakawhānaunga (formation of whānau-like relationships). These constructs are the same set of factors identified as Māori Criminogenic Needs (MaCRNs, Maynard, Coebergh, Anstiss, Bakker, & Huriwai, 1999). Maynard and colleagues (1999) contended that failure to recognise these needs may contribute to inappropriate assessment and rehabilitation.

Marie (2010) criticised the FReMO suggesting its rationale to involve 'diminishing the history and integrity of science'. However, the FReMO may rather be seen as advocating a critical analysis of the history and philosophy of science, given science can be viewed as culturally bound and constructed (McFarlane-Nathan, 1999). Marie goes on to argue that the FReMO contains circular reasoning, as it distinguishes Māori from non Māori by culture, yet suggests it is the absence of culture that makes Māori offend. However, the FReMO distinguishes Māori from non Māori through ethnicity, and the potential diverse realties ethnicities may hold (Durie, 1995a), and suggested the absence of Māori cultural identity as a factor of Māori offending.

Overall, the research identified the need for the development of culturally specific, rather than culturally adapted, interventions for Māori. This finding was also consistent across international indigenous research.

International Indigenous Interventions

Canadian research investigating indigenous interventions within corrections suggested that modifying existing Western based frameworks was not adequate in decreasing disparities of recidivism, but that the central issue was to develop new theories and approaches that were culture specific (Levy, 2007). Convergent with this, King Smith and Gracey's (2009) literature review stipulated that indigenous people will have minimal success in interventions that fail to value their ways of knowing.

American Indian research presented by Oklahoma Cherokee Keith Harper (1998) at the Māori and Criminal Justice conference stems with this view, with Harper stipulating the need for the law makers to understand the cultural practices and ceremonies of the Indian people in understanding their appropriate law system. He stated:

"Our history demonstrates one simple fact- that while society does not understand us and accordingly they make rules that work for them and apply them to us. But they don't fit our way of being, our way of living, and thus it leads to policies that lead to our vast and sustained oppression. The survival of our way of life is dependent on our separateness" (p.15).

Harper's presentation provided an account of how American Indian issues of criminology were most effectively addressed when responded to by an American Indian worldview. He presented the example of how, over a century ago, indigenous justice was conceptualised from a differing worldview to the current Western-based justice system, in the case named 'Ex Parte Crow Dog' (1883). This case consisted of a Lakota medicine man murdering a man named Sinte Geleske. The murder was responded to by the Lakota Chief, who ordered the medicine man to gift horses and dogs to Sinte Geleske's people. Tribal sovereignty meant that the consequences of crime were less about punishment; an individualistic perspective, and more about restitution; a communal and holistic perspective (Harper, 1998). However, Harper suggested that the dominant culture did not accept this way of life, and subjected Indian crimes to federal jurisdiction.

Australian aboriginal research also stipulated the need for their justice system to reflect the aboriginal worldview. Dodson's (1998) presentation titled '*Family Group Conferencing, Mandatory Sentencing and the Stolen Generations'* explored the over-representation of offending within the indigenous peoples of Australia. He stipulated that since 1991 there had been a 61% increase in imprisonment of Australian Aboriginals, almost twice the rate of non-indigenous. Dodson suggested that these disproportional offending statistics were not evidence of innate criminality, but rather evidence of an inadequate legal system which failed indigenous people.

Consistent with this perspective, Pinnock and Douglas-Hamilton's (1998) essay which investigated anti-social behaviour in South African indigenous youth, argued that the justice system failed to adequately address indigenous offending, and suggested that exposure to the Eurocentric justice system may actually reinforce anti-social behaviour. They stated that institutions created to reduce offending, inflict emotional pain and social isolation, which may increase indigenous engaging in further anti-sociality in an attempt to address the distress.

Furthermore, a document released by the Department of Corrections (2010) indicated that the disparities of offending statistics within Pasifika peoples should be addressed through interventions reflecting a Pasifika worldview. This would include involvement from the Pacific community, as the aiga fanau (traditional Pacific family) is an essential part of any successful approach aimed at working within this population (Department of Corrections, 2010).

In a response to the concern regarding the need for international indigenous interventions to employ cultural principles, Canada has attempted to incorporate indigenous programmes within their existing justice system, which has provided promising results (Tauri, 1998). Fall's (2000) research, exploring a Canadian indigenous Sweat Lodge Ceremony (a sacred purification ceremony) within a forensic psychiatric hospital, found that offenders reported great healing gains from the indigenous ceremony. Furthermore, an indigenous programme 'Hollow Water', for Canadian Indian child sex offenders, revealed that only two aboriginal sex offenders, comprising 7% of those who underwent treatment at the programme, had reoffended over a ten year period (Couture, Parker, Couture, & Laboucane, 2001).

Multisystemic Therapy (MST) is a family and community-based treatment programme that has been applied to an indigenous juvenile population in Canada (Richards,

Rosevear, & Gillbert, 2011). Its primary principle for intervention is the inclusion of family, consistent with an indigenous worldview. A Canadian study conducted by Richards, Rosevear and Gillbert (2011) identified MST as an effective treatment programme for indigenous youth, with randomised controlled trials suggesting a decrease in number of arrests. Furthermore, Richards and researchers suggested that preliminary results of a similar programme recently trialled in New South Wales, also found substantial decreases in rates of offending by the Australian indigenous juveniles.

In Australia there are currently prison-based treatment programmes operating for indigenous sex offenders in four states; Western Australia, South Australia, Queensland, and New South Wales (Macgregor, 2008). However, Macgregor (2008) asserted that it is difficult to determine whether indigenous-specific programmes in Australia are effective, as most have only recently been implemented. The report entitled '*Evaluation of Indigenous Justice Programs in support of the National Indigenous Law and Justice Framework'* suggested initial development of an evaluation on the effectiveness of a range of Australian indigenous offender programmes designed to reduce re-offending; however, preliminary results of the evaluation are not yet available (Cultural and Indigenous Research Centre Australia, n.d).

In recognising the importance that Pacific-based approaches are integral to addressing the over-representation of offending by Pasifika peoples in New Zealand, the Department of Corrections established the Pacific Focus Unit (PFU): Vaka Fa'aola, within Spring Hill Correctional Facility in Auckland (Department of Corrections, 2013). The philosophy behind the development of the PFU was to reduce an offender's risk of offending by providing a culture-based approach to rehabilitation, with Pacific offenders encouraged to address their offending through re-connecting with their culture. This is said to provide a prisoner with a positive cultural identity, leading to a more positive self-image and an increase in

responsiveness to other programmes offered within the prison aimed at addressing offending (Department of Corrections, 2013).

Although there has been positive feedback regarding the development of the PFU, and its efficiency at reducing re-offending through connecting inmates with their Pacific culture (Department of Corrections, 2010-2011), there is yet to be any empirical research exploring the unit's effectiveness. Furthermore, the Department of Corrections (2013) expressed the need for a comprehensive evaluation to be conducted.

The need for indigenous offending to be addressed through indigenous intervention has been prominent across the international literature. Yet the scarcity of indigenous correctional programmes, alongside a lack of empirical evidence regarding their effectiveness, has been evident (Macgregor, 2008).

Māori Correctional Interventions

Over the last two decades there has been an emergence of Māori interventions within the New Zealand justice system (McFarlane-Nathan, 1999). One indigenous approach consists of restorative justice, which targets the development of accountability and victim empathy, as well as endorsing responsibility, reconciliation towards the victim, and pro-social behaviour from a Māori worldview (Jackson, 1987, 1988). Kupenga-Wanoa (2004) suggested that employing the traditional Māori approach to offending can heal internal conflict through the display of positive behaviour. She stated that, in a restorative justice approach, Māori offenders can recompense the harm done to their victims through voluntary work and other pro-social behaviour. In this sense, although a Māori individual's mana (honour or power) may be damaged through offending, this may be restored through good behaviour (Kupenga-Wanoa, 2004).

Jackson's (1987, 1988) opinion-based report, which investigated Māori overrepresentation within the New Zealand correctional system, argued that a restorative

15

justice approach to Māori crime encourages mutual agreement and promotes healing. Moreover, Richards, Rosevear and Gillberts' (2011) research asserted that a restorative justice approach can reduce indigenous recidivism. Their evaluation of Te Whānau Awhina conferencing programme in New Zealand, which deals primarily with young Māori offenders, found that reconviction rates were lower among restorative justice participants than among the comparison group. Furthermore, Luke and Lind's (2002) study suggested that indigenous youth who underwent a restorative, indigenous approach to treatment, had a 15-20% lower risk of re-offending than indigenous juveniles who underwent a Western treatment approach.

MST, as discussed in the international indigenous literature, has also been used in a New Zealand Māori population through Te Hurihanga (turning point) programme, for 14-16 year old male indigenous offenders (Centre for Research, Evaluation and Assessment, 2009). This indigenous approach was a community-based intervention, with its fundamental aspect being the incorporation of whānau. Preliminary evaluation suggested that the offenders in the programme, their whānau, and other stakeholders all reported positive changes within the offender (Centre for Research, Evaluation and Assessment, 2009).

Although both a restorative justice approach and a MST approach incorporate indigenous elements in attempting to reduce the disparities in Māori offending, they fail to address how indigenous individuals have come to be overrepresented in crime statistics, and how their approach addresses these areas (Gregory & Takagi, 2004). Furthermore, other criticism has argued that restorative justice fails to effect real change and to prevent recidivism (Allison, 2002). Through exploring the theoretical basis of why Māori are increasingly offending, indigenous treatment approaches may more effectively reduce re-offending (Snowball & Weatherburn, 2008).

Other studies which investigated Māori-based correctional interventions attributed their success to using Māori values and concepts, in an attempt to rebuild a Māori individual's culture (Cooper, 2012; Te Puni Kōkiri, 2000). This was particularly prominent across literature investigating Māori violent offending (Brewin & Coggan, 2004; Cooper, 2012; Nakhid & Shorter, 2014; Taonui, 2010; Te Puni Kōkiri, 2009).

Nakhid and Shorter's (2014) study, which explored the perspectives of four Māori ex-inmates experiences of rehabilitation programmes, suggested that the programmes which focused on Māori culture were the most helpful for the participant's management of aggression. Moreover, Taonui's (2010) opinion piece published in '*Vulnerable Children and the Law',* reported that rebuilding a violent offender's culture through teaching the beliefs and values of the ancestors and the history of colonisation may dissipate anger by raising consciousness, enhance a sense of belonging, and promote self-worth.

Convergent with this, Cooper (2012), in collaboration with the Ngāti Hine Health Trust, explored multiple stakeholder perspectives (individual, whānau, practitioner, and Ngāti Hine hapū representative), of what may reduce Māori whānau violence. The qualitative analyses revealed the importance of culture in increasing a sense of self-worth, belonging, connectedness and wellbeing, and in reducing whānau violence. Furthermore, research conducted by Te Puni Kōkiri (2009), investigating Māori family violence programmes which had tikanga values and practices at their core, found that the culturally distinct approaches were successful at reducing family violence. Finally, Ngāti Porou Community Injury Prevention Project aimed at reducing family violence, was found to improve violence prevention through a Māori cultural framework (Brewin & Coggan, 2004).

The benefits of attending to the cultural context when attempting to reduce Māori offending, has also been found with Māori sexual offenders. Billing's (2009) evaluation of Te Kakano, a community programme for Māori male child sex offenders which incorporates

tikanga and is implemented by Māori clinicians, found that participants highly valued the programme's focus on cultural concepts and practices. Participants suggested that learning and implementing tikanga provided a framework for social interactions and for alleviating distress. Furthermore, many participants reported post-programme improvements in their intimate relationships and a strengthened ability to identify the impact of their offending on their victim and wider communities. Similar results have been found in studies investigating the effectiveness of incorporating Māori cultural principles and practices in working with incarcerated child sex offenders (Nathan, Wilson, & Hillman, 2003) and adolescent sexual offenders (Geary, 2007).

There remains a lack of empirical evidence regarding how, and if, the inclusion of culture in indigenous interventions reduce Māori offending (Kupenga-Wanoa, 2004). Furthermore, although the inclusion of culture has shown promising results in Māori correctional interventions, with Māori still the largest offender group in New Zealand, the need to use other indigenous approaches remains crucial (Tanczos, 2000).

The Department of Corrections (2009b) and the Ministerial Review Report (2005) asserted the need to provide a more effective response to reducing Māori offending through culturally-based interventions rich in tikanga Māori and grounded in a Māori worldview. This resulted in the establishment of the MFU (Department of Corrections, 2003; Huriwai, 2001; Masters et al., 2003).

The Māori Focus Unit (MFU)

The MFU is a 60-bed custodial unit operating with a six-month minimum length of stay and a 24 month maximum length of stay (Department of Corrections, 2009b). The MFU acts as a therapeutic community, rich in Māori cultural principles and practices, substantiated from a Māori framework (Department of Corrections, 2009b). It provides treatment that is not available in regular custodial units, from a worldview based on Durie's (1985) Te Whare

Tapa Whā (the four sides of the house) model, which considers the physical, spiritual and emotional wellbeing of the individual along with the whānau as the main support system.

Daily operations within the specialized unit include courses on te reo (Māori language), tikanga, kawa (protocol or etiquette), wairua (spirituality), whakapapa and the effects of colonisation, all used as a medium to create change in the attitude and behaviour of Māori inmates. The MFU covers offending-related needs, such as violence, substance abuse, and relationship matters, in a cultural context, relating what has been learned to the offenders' personal experiences (Byers, 2002). Offenders also attend their own intervention programmes, specified in their individual intervention plan, which run outside of the unit; work placements and anger management groups (Ministerial Review Report, 2005).

Prior to attending the MFU, an offender must have first successfully completed an introductory tikanga Māori programme, offered in the general prison population. Once accepted into the MFU, offenders are provided with the opportunity to participate in a Māori Therapeutic Programme (MTP); specialized treatment programmes only available to offenders housed within the MFU.

The MTP is an integral part of the MFU, and is delivered by external Māori providers who have expertise in addressing Māori offending from a culturally rich perspective. The focus of the programmes is on specific behaviours related to the inmates' criminal offending. These anti-social behaviours are addressed in a Māori environment, using traditional beliefs and customs, alongside the inclusion of cognitive behavioural therapy techniques, also delivered in a Māori context (Byers, 2002).

The MFU incorporates whānau liaison workers within each unit, who support and enhance the reintegration of the offender following release from prison, as well as assisting in the healing of whānau hurts; creating stronger connections with whānau (Byers, 2002; Ministerial Review Report, 2005). Whānau hurts occur when an offender's behaviour has

put shame on his whānau. The healing of this consequence is primarily concerned with the restoration of healthy patterns of interaction, stemming from a restorative justice approach (Durie, 2003b; Project Waitangi, 1989).

Within each MFU, whānau days are held, providing offenders with the opportunity to strengthen cultural and familial ties that are under stress during imprisonment, and allowing offenders to demonstrate what they have learned during their time in the units (Byers, 2002). Kupenga-Wanoa (2004) illustrated the importance of restoring whānau relationships, stating that whānau involvement is fundamental in reducing Māori offending and assisting with the rehabilitation and reintegration of the offender back into the community. Additionally, the MFU uses active involvement from Māori elders and local iwi members in assisting inmates in their reconnection with their Māori heritage (Byers, 2002; Department of Corrections, 2009b; Ministerial Review Report, 2005).

The MFU philosophy. The development of Māori focused, rehabilitative units, were designed in consultation with Māori communities, to support Māori inmates and address offending, in a culturally appropriate format (Byers, 2002; Department of Corrections, 2002). The fundamental objective of the MFU, which ties into the underlying principles of the Department of Corrections, is to reduce recidivism of Māori offenders. The MFU aims to develop the individual and his Māori connectedness through interventions and therapeutic programmes rich in tikanga Māori principles.

The aim is that, through a tikanga-based programme endorsing the principles of te o Māori, offenders will develop a positive Māori cultural identity and wellbeing, develop motivation for future involvement in culturally-based, pro-social activity and pursuits, alongside experience a reduction in anti-social cognitions, attitudes and behaviour (Department of Corrections, 2009b; Kupenga-Wanoa, 2004; Ministerial Review Report,

2005). These changes are expected to result in participants, once released from prison, leading pro-social, non-offending lifestyles (Department of Corrections, 2009b; Ministerial Review Report, 2005).

The MFU nationwide. The first MFU, Te Whare Tirohanga Māori located at the Hawkes Bay Regional Prison, was established in 1997 with the original purpose of trialling the effectiveness of tikanga and culture as a medium of reducing Māori re-offending (Ministerial Review Report, 2005). Since then, four other units at various locations have been opened; Te Whare Whakaahuru (Rimutaka Prison), Te Hikoinga (Tongariro/Rangipo Prison), Whanui (Whanganui Prison), and Te Aō Marama (Waikeria Prison, Ministerial Review Report, 2005). These units are all occupied by male offenders. At the present time, there are no existing MFUs for women (Mataki, 1998).

The Department of Corrections' document, Whaia te Ora mo te Iwi (1992), identified policies for Māori health development which included greater participation of Māori people at all levels of the health sector, consideration of Māori health needs and perspectives, and the development of culturally appropriate practices and procedures as integral requirements of Māori services (Department of Health, 1992). The MFU aligns with these policies, ensuring Māori facilitators and staff members deliver the rehabilitative service, and that the service stems from a Māori worldview adopting a tikanga Māori perspective, aligning with the culture of the offenders it houses. Furthermore, the MFU can be seen to address the philosophy of a kaupapa Māori approach, and the principles of FReMO, as it consists of a targeted intervention with prominent Māori participation in the decision making, the design, the delivery, and the usage of the service (McFarlane-Nathan, 1999).

A prominent theme identified in the indigenous offending literature was the necessity for interventions to be grounded in the culture of the indigenous group. Moreover, research

regarding the development of the MFU went on to suggest that, through incorporating cultural elements, an offender may experience an increase in cultural identity, which ultimately may reduce recidivism. The following chapter will further explore this theory in relation to Māori offending.

Chapter 2: Cultural Identity Theory of Māori Offending

This chapter will explore Māori offending in relation to cultural identity theory. It will first discuss colonisation and acculturation, and the Māori experience of these processes. It will then investigate theories of indigenous offending, introducing cultural identity theory. The relationship between cultural identity theory and wellbeing will be explored, and research exploring cultural identity theory in relation to mental health, education, pro-social behaviour, anti-social attitudes, cognitions and behaviour and gang association will be reviewed. Lastly, Māori loss of cultural identity and offending will be examined, and the conflict behind holding a secure Māori identity and offending outlined.

Māori Colonisation and Acculturation

Māori, the indigenous people of New Zealand, are suggested to be a minority group severely affected by colonisation (Fergusson, 2003; The Project Waitangi Report, 1989). Following the signing of the Tiriti o Waitangi, Māori people were exposed to a progressive process of European colonisation, which led to an increasing alienation of Māori from their culture and an imposition of the culture of the colonial nation (Fergusson, 2003; Frantz, 1968; Human Rights and Equal Opportunity Commission, 2007). This loss of indigenous culture, and the adoption of European culture, may be conceptualised through the process of acculturation.

French (1961) defined acculturation as the process by which one culture adopts certain aspects of another culture. However, this definition was criticised for its lack of specificity (Cusick, 1998). Foster (1960) proposed a more detailed definition of acculturation. He suggested the 'conquest culture' model, characterized by a removal process, in which elements of the minority culture are modified or eliminated, and then an indoctrination stage develops, in which the dominant culture enforces aspects of their culture

on the minority group. Moreover, Del Pilar and Udasco (2004) suggested that ethnic minority group members risk experiencing stress and marginalisation if they do not integrate with the dominant culture. Yet, by successfully integrating, minority group individuals risk becoming alienated from their ethnic group, leading to a loss of cultural identity. Furthermore, individuals who fail to integrate, but also fail to retain their culture, are left 'cultureless' (Del Pilar & Udasco, 2004).

Harper (1998) proposed that indigenous peoples all share similar stories of colonisation and acculturation, experiencing a struggle to maintain what it is that 'is them'. This was evident within the loss of 'all things culture'; the loss of schooling systems, language, tribal governments, and the way of life (Allen, 2002; Battiste, 2004; Hornberger, 1998). There seems to be relative consensus that colonisation and acculturation resulted in Māori losing aspects of their culture, leading to negative consequences (Durie, 1998, 2004; Pihama, Jenkins, & Middleton, 2003).

> *A fish in water knows how to be a fish. However if you take that fish and place it in a box of wet sand it cannot function properly...It still knows how to be a fish but the opportunities for it to be a fish are compromised with the change in its environment...(Lawson-Te Aho, 1998, p.220).*

The Department of Social Welfare (1986) report, named '*Puao-Te-Ata-Tu*' (day break), which identified Māori needs, suggested that Māori overrepresentation across negative statistics was best understood as an outcome of colonisation and acculturation. Furthermore, The Project Waitangi Report (1989) suggested that the process of acculturation failed to uphold the Tiriti o Waitangi principles and led to negative inventories across Māori. The report stated that the demeaning and deprivation of Māori culture created insecurity and lack of self esteem in many Māori.

Contradicting this perspective, Ausubel's (1960) paper regarding the concept of acculturation and Māori adolescents, suggested that Māori disparities may be an outcome of "resistive acculturation". This argued that Māori adolescents were being prevented from pursuing their aspirations due to their elders still holding traditional non-achievement values. Ausubel in fact suggested that the prevention of acculturation into mainstream culture resulted in an increase in youth delinquency and crime.

Contrary to Ausubel's (1960) perspective, O'Malley (1973) proposed that Māori became at greater risk of disparities across an array of statistics, due to a move from rural to urban environments, a product of colonisation and acculturation. Other research has highlighted that the settlement of New Zealand disrupted the traditional Māori way of life in favour of Western policies and biases, which subsequently impacted negatively on social, economic, health and offending statistics for Māori (Jackson, 1987, 1988; Maxwell & Morris, 1999; Pratt, 1992; Te Puni Kokiiri, 2000).

There have been a number of theoretical explanations which suggest that indigenous offending rates are due to aspects of the traditional culture itself, rather than a concequence of colonisation and acculturation (Snowball & Weatherburn, 2008). These group-level of analysis theories include predisposition to violence and genetic vulnerability perspectives (Lea & Chambers, 2007; Sutton, 2001).

Theories of Indigenous Offending

Sutton (2001) argued that indigenous people are predisposed to be violent. His archaeological research, exploring prehistoric Australian Aboriginal violence, found a greater number of 'defensive' injuries to the bones of Aboriginal women than Aboriginal men. Sutton argued that this suggested family violence was widespread under 'traditional' conditions prior to white settlement. Additionally, Wolfgang and Ferracuti (1967) argued

that offending such as violence, is a socially acceptable behaviour according to indigenous group norms.

New Zealand research by Lea and Chambers (2007) proposed that indigenous people may hold a specific gene pool responsible for an increase in violence, criminal acts, and risky behaviour. This idea suggested that Māori criminality was the result of a specific gene which rendered Māori more prone to violence, criminal acts, and risky behaviour (Anonymous, 2006; Lea & Chambers, 2007). The Monoamine Oxidase Gene (MAO), known as the 'warrior gene', has been reported to show abnormalities in its expression in people with behavioural problems (Lea & Chambers, 2007).

Both the predisposition to violence and genetic vulnerability theories have endured much scepticism (Snowball & Weatherburn, 2008). Sutton's (2001) perspective, that indigenous people were traditionally violent as evidenced by injuries to Australian Aboriginal women's bones, may not be generalised to all indigenous populations. In many indigenous societies, in which current domestic violence rates are disproportionately high, women were traditionally viewed as sacred and were respected and honoured for their wisdom, vision and sacred gifts (Gutiérrez, 1991; Mikaere, 1994; Pere, 1982; The Aboriginal Justice Implementation Commission, 1999; Thornton, 1998). Additionally, if women in these traditional societies were physically abused, the perpetrators endured harsh punishment (Gutiérrez, 1991).

Furthermore, The Australian National Homicide Monitoring Programme indicated that most acts of violence by Australian Aboriginal males were directed against other indigenous males rather than indigenous females (Steering Committee for the Review of Government Service Provision, 2007), contradicting the lack of defensive wounds found on the male bones. Moreover, genetic theory does not account for individual variation and the fact that, although indigenous offending rates are higher than their non-indigenous

counterparts, there is still only a minority of indigenous peoples who actually offend (Department of Corrections, 2008).

Predisposition and genetic theories may in fact contribute to the high rates of indigenous offending. Zullo and Whitehead (1983) reported that society significantly shapes who we are, and Hogg, Terry and White (1995) proposed that what is considered normative behaviour in a particular group may be a product of the social environment. Therefore, through a self-fulfilling prophecy, if an indigenous group is viewed to be more criminally prone in society, this may subsequently increase anti-sociality within these groups (Webb, 2009).

Within New Zealand society, the political and social context continues to frame understandings of crime predominantly in terms of ethnicity, and this is particularly so for Māori (Webb, 2009). Studies have indicated that media depictions of genetics can lead to discrimination and stereotyping of the ethnic group the messages depict (Hansen, 2006; Lynch, Bevan, Achter, Harris, & Condit, 2008). Walker (1990, 1996, 2002) indicated that Māori are frequently subject to negative media representations and stereotypes. When Māori are viewed as innately criminal, this may have the detrimental effect of increasing anti-social behaviour (Blair, 2001; Hook, 2009). Maynard and associates (1999) argued that offence-related emotions and cognitions may develop through negative thoughts and feelings about an individual's Māori ethnicity. Conversely, when an individual's perception of being Māori derives from a Māori cultural base, rather than negative stereotypes portrayed in the media, s/he is more likely to find the necessary resources to work toward changing her/his offending behaviour (Maynard et al., 1999).

Other researchers have criticised the methodology and result dissemination of predisposition and genetic theory studies, arguing that they have been based on underdeveloped analyses and that findings have been sensationalised (Bevan-Smith, 2010;

Cram, 2009; Taonui, 2010; Wensley & King, 2008). An alternative perspective, also stemming from a group level of analysis, is the threat hypothesis (Tajfel, 1978).

Tajfel (1978) contended that individuals are motivated to protect the identity of their group, which may be particularly prevalent when their group's identity is in jeopardy. Therefore, threats to indigenous in-group identity by the majority out-group, such as exposure to unfavourable social comparisons, may be perceived as sufficiently threatening, evoking intergroup conflict as a means of defending that identity (Jeong, 2009).

Bourhis, Giles, Leyens and Tajfel's (1979) empirical research explored this theory by exposing Belgian Flemish speakers (in-group) to insults regarding their language by French-speaking Belgians (out-group). The findings suggested that the in-group participants exposed to the insults from the out-group, retaliated by directing obscenities towards the French-speaking out-group. Consistent with this, Branscombe, Schmitt and Havey (1999) suggested that when the severity of threat from an out-group increased, the retaliation of the in-group would also increase in severity, as a mean to protect the group's wellbeing. However, this perspective would therefore only account for indigenous offending against out-group members, and would not address indigenous offending against other indigenous people.

When attempting to understand disparities in indigenous offending statistics, it may be useful to first consider the group level, and then move to the individual level. This allows the understanding of the cultural history of the indigenous group, and then how this history may have come to affect the individual within the group. Because not all indigenous who have experienced the effects of colonisation and acculturation come to offend, it is important to be able to differentiate what aspects of the individual differ from others who do not come to offend.

Nadesu (2009) proposed that the disproportional rates of indigenous offending may relate to a range of adverse early-life and environmental factors rather than ethnicity in and of

itself. Other studies investigating indigenous violence suggested socioeconomic disadvantage and poverty as influential factors to the high levels of violence within these groups (Capobianco, Shaw, & Dubuc, 2003; Ministry of Social Development, 2006; UNICEF, 2003). Marie's (2010) critical appraisal of Māori offending, suggested that Māori offending rates may be an outcome of individual hardship. She proposed socioeconomic deprivation to be overwhelmingly evidenced as the main contributor to Māori offending. This was supported by Fergusson, Donnell and Slater (1975) who claimed the disproportionate rates of Māori offending were a consequence of poverty.

Consistent with the poverty perspective, Nakhid and Shorter (2014) found that Māori ex-offenders viewed a lack of financial resources as the main reason for their offending. They expressed that feelings of isolation and alienation from mainstream society had led them to believe that they were unable to obtain resources and access opportunities through legal means, with theft and burglary viewed as the only legitimate way of obtaining money.

On further expansion, the Māori ex-offenders stated that the robberies and burglaries were largely for the benefit of the gang they were associated with, as the gang provided a sense of belonging and whānau. This may suggest that the pressure to provide to the gang, in order to obtain a sense of belonging, may have contributed to the offending rather than offending being a direct result of poverty. Moreover, census data indicated that an over-represented degree of Māori are living socio-economically deprived in New Zealand (Statistics New Zealand, 1998; Howden-Chapman, & Tobias, 2000), yet the majority of Māori do not offend (Department of Corrections, 2008).

In New Zealand, during the 1970s, a Māori renaissance was said to emerge (Fraser, 1995). It was a movement based on Māori ethnic solidarity, with the key issues being to revitalise Māori culture, language, beliefs and customs (Greenland, 1991; Poata-Smith, 1997; Sissons, 1993). This movement helped shift the issue of Māori social inequalities from a

matter of class to one regarding the recognition of cultural identity (Poata-Smith, 1997). Fraser (1995) proposed that, through the Māori renaissance, Māori disparities were no longer viewed as the result of material inequality but were now understood to be the result of cultural identity loss.

Marie, Fergusson and Boden's (2009) empirical research used data gathered from the Christchurch Health and Development Study, in exploring Māori cultural identity and offending in 984 participants. Findings gathered from both self-report and collateral sources found that Māori who had the strongest cultural identity had a lower risk of offending than Māori who had a weaker cultural identity. They hypothesised that these differences may be due to differences in socioeconomic and childhood factors. However, comparisons of the social, family and childhood backgrounds showed that both groups had similar backgrounds, and in fact, those with stronger Māori cultural identity had been more exposed to greater disadvantage. Even after controlling for childhood factors, Māori with a weaker cultural identity remained at a higher risk of offending. This finding was replicated across other minority group individuals in the study, signifying the importance of cultural identity theory of indigenous offending.

Cultural Identity Theory

In attempting to understand cultural identity theory, it would be important to first define cultural identity. The definition of cultural identity has not been widely agreed within the literature. Kuper (1999) suggested that the word "culture" does not communicate any objective, essential quality about people, or the way they live their lives. Moreover, Te Pou o Te Whakaaro Nui (2010b) suggested culture was a broad concept that incorporates more than ethnicity, and indicated that there is not homogeneity within groups, therefore there is no single way of being Māori.

A number of studies have argued the key aspect of cultural identity to be associated with attitudes and feelings (Singh, 1977; Teske & Nelson, 1973; Ting-Toomey, 1981; Tzuriel & Klein, 1977; White & Burke, 1987), whereas other research suggested it to be based around language, beliefs, spirituality and knowledge (Rogler, Cooney & Ortiz, 1980). Furthermore, other researchers have argued cultural identity to encompass both attitudes and feelings, with collective knowledge and beliefs (Baxter, 1998; Phinney, 1990). This diversity indicates the extreme difficulty in attempting to measure cultural identity (Te Pou o Te Whakaaro Nui, 2010b).

There is a lack of empirical research investigating cultural identity theory; therefore defining the theory presents some difficulty. Phinney's (1990) broad definition suggested it may be viewed as an aspect of acculturation focused on how a minority group individual relates to her/his own group, when s/he is a subgroup of the larger dominant society. In refining this description, cultural identity theory may suggest that, through colonisation and the subsequent process of acculturation, indigenous groups lost aspects of their culture, whilst being indoctrinated by the culture of the dominant colonising nation, leading to negative consequences (Durie, 1998, 2004; Pihama et al., 2003).

The relationship between a loss of cultural identity and negative consequences has been explained as a loss of indigenous culture resulting in a loss of a sense of belonging and self esteem, contributing to negative health, educational and antisocial minority group statistics (Marcell, 1994; Nakhid & Shorter, 2014; Pere, 2006; The Project Waitangi Report, 1989; Walker, 1989). However, the theory provides more than an explanation of how indigenous groups have become overrepresented across negative disparities, as it also attempts to understand how these groups may resolve the crises (Durie, 1998). It suggests that increasing cultural identity may subsequently provide a sense of belonging and increase self esteem and pro-sociality resulting in a reduction of negative statistics across indigenous groups (Cooper, 2012; Durie, 2005; Lee, 2004; Pere, 2006; Taonui, 2010; Thomas, 1986). Therefore cultural identity theory is a story of loss and recovery; loss being attributed to the effects of colonisation and acculturation (the loss of cultural identity), and recovery attributed to the decolonisation of the mind (the development of a secure cultural identity).

Researchers have attempted to provide a definition of what a secure cultural identity may entail. Erickson (1968) and Phinney (1992) suggested a secure cultural identity to be the understanding of one's own culture, and a sense of self gained from being part of that culture. Phinney (1990, 1992) stated that it is an important aspect of overall personal identity formation, particularly prevalent for indigenous group members, and is crucial to the construction of self concept. Durie (2003b) argued that in obtaining a secure cultural identity, indigenous must not only have access to their culture and heritage, but also have the opportunity for cultural expression and cultural endorsement within society's institutions.

Cooper (2012) suggested a secure Māori cultural identity to be a protective factor, in that it provides connectedness to cultural practices, collective support, and resilience, through the acquisition of knowledge and skills. Furthermore, other studies have argued that having a secure cultural identity often indicates that kinship relationships are intact, which is closely

linked to wellbeing (Durie, 2001; Kruger et al., 2004). This was reflected in Wenn's (2007) model of Māori wellness, '*Kaupapa Hauora Māori*', which suggested a link between cultural identity and wellbeing. Cooper argued that a secure cultural identity is positively correlated to wellbeing, and may buffer against exposure to negative life events. This was a common view across the literature (Durie, 2001; Kruger et al., 2004; Moeke-Pickering, 1996).

Houkamau and Sibley's (2011) empirical research which developed a measure of Māori cultural identity, presented a conflicting perspective. They argued that, although increases in Māori cultural identity should predict increases in personal wellbeing, a secure cultural identity may rather highlight the fact that Māori are categorically disadvantaged as a social group. Therefore, an increase in Māori cultural identity may in fact reduce satisfaction with the state of New Zealand society, subsequently decreasing psychological wellbeing (Houkamau & Sibley, 2011).

Contradictorary to this, Billing (2009) found that Māori approaches that aim to enhance cultural identity have been effective in improving Māori wellbeing. Additionally, Dukes and Martinez's (1997) study found significant positive correlations between cultural identity and wellbeing, and other empirical research suggested that indigenous people who are knowledgeable in the cultural practices of their group have strong pride and dignity and score highly on wellbeing measures (Caldwell, Kohn-Wood, Schmeelk-Cone, Chavous, & Zimmerman, 2004; Hutnik, 1991).

Furthermore, research has suggested that development of a secure cultural identity may promote pro-social behaviour, and may mitigate negative mental health and education statistics, anti-social attitudes, cognitions and behaviour, and gang association (Barlow, 1991; Durie, 2005; Harper, 1998; Te Hoe Nuku Roa, 1996; Marie, Fergusson, & Boden, 2008a; Thomas, 1986; Walker, 1989). These will be further explored below.

Pro-social behaviour. The literature has suggested a relationship between a secure cultural identity, and pro-social behaviour. Maynard and colleagues' (1999) discussion paper explored the Department of Corrections initiatives aimed at reducing Māori offending, and asserted that correctional interventions targeting Māori cultural identity may promote pro-social behaviour in Māori offenders and increase their receptiveness to other rehabilitative programmes. They argued that an increase in Māori cultural identity is correlated with the degree of other pro-social behaviour an individual engages in. Although this paper highlights the importance of focusing on specific cultural needs, no specific examples were given as to how an increase in cultural identity may increase pro-social behaviour. Furthermore, these conclusions were based on "process" and "formative" types of evaluations and were not substantiated on unfounded evidence.

Durie (2005) also articulated that interventions strengthening Māori cultural identity through enhancing cultural values and beliefs can promote positive behaviour. However his paper was not based on empirical evidence and reflected more of an opinion piece. Hoskins (2007) stated that, integral to positive participation within whānau, ethnic groups, and social groups, is a strong Māori cultural identity. His qualitative study, which consisted of interviews with two kaumatua (respected male elders), found that both participants' strong Māori cultural identity influenced their future involvement within their marae (Māori meeting house), iwi and hapū, as well as a motivation to further develop their te reo skills. Hoskins concluded that in order for Māori to demonstrate pro-social behaviour, Māori cultural identity first needs to be secure. However, it may be problematic to generalise Hoskins findings across the Māori population given the limited participant numbers in the study.

Mental health. Marie and colleagues' (2008a) empirical research examined the effects of social disadvantage and childhood adversity on mental health risks for 984 young

Māori below the age of 25 years. Data was gathered from the Christchurch New Zealand longitudinal study of a New Zealand birth cohort (the Christchurch Health and Development Study), and the association between identity and mental health disorders tested for statistical significance. Results suggested a strong Māori identity may be a protective factor in alleviating risks of mental health problems (Marie et al., 2008a).

Limitations of the study included the specific participant age group, with results unable to be generalised to Māori populations above 25 years of age. Furthermore, conducting a fine-grained analysis of the links between cultural identity and specific disorders was limited due to the relatively small sample size and relatively low rates of specific disorders (Marie et al., 2008a).

Pere's (2006) Doctoral study titled '*Oho Mauri: Cultural Identity, Wellbeing and Tāngata Whai Ora/Motuhake',* explored mental illness recovery perspectives of 17 Māori participants who had experienced mental illness, through a kaupapa Māori research paradigm. Results suggested that a secure cultural identity may be an important factor in the recovery process, whilst a lack of Māori cultural identity may increase mental illness. However, these conclusions were generated from a limited participant pool, and on completion of the research, Pere asserted that findings from the study cannot claim that a secure Māori cultural identity will protect against mental illness.

Wharewera-Mika's (2012) Doctoral thesis was concerned with understanding the needs of tāngata whaiora (mental health service user) and whānau from mental health inpatient services. The research consisted of two studies. The first quantitative study reviewed the nature and extent of tāngata whaiora admission patterns. The second study used both questionnaire and interview to investigate what tāngata whaiora and their whānau admitted to Auckland City Inpatient Mental Health Service, Te Whetu Tawera (TWT) identified as contributing to mental illness whakaoranga (recovery). Findings from study one

suggested an over-representation of Māori admissions to mental health services. Study two results suggested that engaging in cultural interventions enhanced participants' sense of cultural identity, which provided a distraction from their distress as well as an opportunity to learn new skills. While these results reflected that Māori cultural identity may positively affect Māori clients who are experiencing mental illness, the findings did not indicate that an increase in cultural identity mitigates mental illness. Rather the relationship was indirect, with activities aimed at strengthening Māori identity providing a distraction from individual's mental health symptoms. Furthermore, the study was limited to exploring tāngata whaiora and whānau perspectives from one inpatient service; (TWT), therefore it may have particular relevance to that unit only. Additionally, the principal investigator was a past employee of TWT which may present a conflict of interest.

Although there is a lack of empirical research which investigated suicide rates and Māori identity (Coupe, 2000), the research that does exist suggested isolation from cultural identity may increase indigenous suicide, and conversely, having a secure cultural identity may reduce suicide amongst Māori (King et al., 2009).

Joseph (1997) explored six kaumatua's perspectives of Māori suicide. Results indicated that the kaumatua perceived the high rates of Māori suicide to be attributed to a lack of Māori cultural identity resulting from colonisation. As in previous studies using kaupapa Māori methodologies, small sample size may limit the generalisability of the research findings. Tatz (1999) political and sociological analysis of indigenous suicide in Australia and New Zealand suggested it is those alienated from their culture who take their lives. However, contradicting this argument, Broughton (1999) suggested it was not only Māori who were alienated from their culture who were committing suicide, but young Māori immersed in Māoritanga (Māori culture, traditions, and way of life), were also taking their lives. Furthermore, Tatz's study may have more relevance for an Australian Aboriginal

population than a Māori population, as Māori participants only representing 12 of the 388 individuals interviewed.

Lawson-Te Aho (1998) explored the relationship between colonisation, Māori cultural identity and behaviour, in regards to teen suicide. Although reflecting more of a theoretical case study than empirical evidence, the paper suggested that colonisation resulted in acculturation, which created cultural alienation, and that cultural alienation may diminish the potential for youth to thrive and may lead to negative behaviour.

Convergent with this, Coupe (2000) presented epidemiological data on Māori suicide and then used existing literature to discuss possible reasons to the high suicide rate of Māori. The paper concluded that a secure cultural identity may serve as a protective factor for Māori who may be at risk of suicide. However, this link was not empirically established.

Waka Hourua (2014), a partnership between national Māori health organisation Te Rau Matatini and national Pacific non-government organisation, Le Va, is a national suicide prevention programme for Māori and Pacific communities. The programme is governed by leaders across the mental health profession representing New Zealand, the Cook Islands, and Samoa, and is chaired by Māori health leader Professor Sir Mason Durie. Waka Hourua research reflected a kaupapa Māori research design rather than empirical methodologies, in asking Māori and Pacific families and communities what they considered to be protective factors of suicide. These were factors that could lessen the risk of suicide and increase health, wellbeing and resilience of whānau, hapū, iwi, families and communities. Protective factors identified included a secure cultural identity and a sense of belonging, through an understanding of Māori and/or Pacific concepts, access to cultural resources, and connections to whānau, hapū iwi, Pacific families and communities.

National mental health organisation Te Pou o te Whakaaro Nui (2010a) presented a guide document named '*Talking Therapies for Pasifika Peoples'*, which provided beliefs

regarding appropriateness when working with Pasifika individuals and their families. The guide suggested that, given the relational and sacred boundaries that exist within many Pasifika cultures, it is important to consider cultural identity when engaging with Pasifika families. Pasifika cultural identity and wellbeing was suggested to be reliant on safe and balanced connections with others, with the va (relationship) a central tenet that exists across Pasifika cultures. Te Pou o te Whakaaro Nui presented the belief that therapy which does not consider cultural identity will not be successful.

These findings were consistent with other international literatures. Although substantiated through opinion rather than unfounded evidence, Iwamasa's (2003) study on Asian American populations suggested that, when mental health treatment was oriented within the client's cultural view, treatment adherence increased.

Empirical research conducted by Nagel, Robinson, Condon and Trauer (2009) aimed to develop and evaluate a culturally adapted brief intervention for Australian aboriginal people with chronic mental illness called Motivational Care Planning (MCP). The research used a mixed methods design in which an exploratory phase of qualitative research was followed by a nested randomised controlled trial. A total of 49 patients with mental illness and 37 carers were recruited to a randomised controlled trial that compared MCP with a clinical control condition. Results of regression analysis indicated a significant advantage for the MCP in terms of consumer wellbeing. Furthermore, Nagel and colleagues concluded that when treatment was in line with an individual's cultural perspective, treatment of mental illness may be more successful.

Education. Te Hoe Nuku Roa (1996) report for Te Pui Kōkiri, highlighted the relationship between Māori cultural identity and other areas of social and economic wellbeing and educational under-achievement. Amongst its preliminary conclusions the study

suggested a positive correlation between having a secure cultural identity and educational participation.

Concurrent with this view, Thomas (1986) found Māori children who held knowledge of their Māori culture and language, performed better academically than Māori children without cultural knowledge. The participants in the study consisted of Māori and Pakeha children attending a number of primary schools in the Waikato region of New Zealand. Māori cultural identity was assessed using a 40-item test of Māori cultural knowledge (TMK, Thomas, 1988), and academic achievement measured through achievement tests in mathematics and language. Correlations suggested that Māori children who had a stronger knowledge of Māori culture displayed higher achievement than Māori children who had less knowledge of Māori culture, particularly in language. However, results should not be generalised to populations outside a primary school aged sample.

Marie, Fergusson and Boden's (2008b) empirical research explored the roles of Māori cultural identity and socioeconomic status in educational outcomes in a New Zealand birth cohort studied from birth to the age of 25 and found contradictory results. Their study, which employed logistic and multiple regression models to test trends for significance, found that participants who had a strong Māori cultural identity, had a significantly higher rate of educational under-achievement than Māori who did not have a strong cultural identity.

In line with this research, Ausubel (1960) discussed the notion of acculturative stress within New Zealand, in regards to educational achievement in Māori and Pakeha youth. His research consisted of 100 Māori male school aged adolescents and 100 matched Pakeha adolescents. Participants completed tests of achievement and individual interviews. Further measurement was conducted via informal interviews with parents, teachers, and other school employees. Results suggested that when Māori were fully acculturated into Pakeha culture they experienced an increase in educational achievement. Ausbel concluded therefore, that

Māori children should decrease contact with the Māori community, and increase contact with wider Pakeha culture in order to develop educational aspirations. However, since there is no such thing as a "typical" Māori community, the findings in Ausbel's study cannot be generalized to Māori communities outside those used in their research.

Both Marie and associates' (2008b) study and Ausbel's (1960) study failed to acknowledge cultural differences in meaning, and did not provide sufficient weight to Māori considerations of educational success. Geisinger (1994) outlined that school success is defined differently by differing cultures, yet the term 'educational achievement' used in both studies stemmed from Western ideology. It was therefore understandable that children from a Western worldview would score higher then children identifying with a differing framework. This was evidenced when Ausubel stated that many Māori parents were confused about the standards of behaviour they should expect and demand from their adolescent children, with a high likelihood that this confusion would affect what the adolescents themselves perceived as 'correct'.

Furthermore, Ausubel (1960) indicated that Māori-Pakeha differences in educational achievement were greater in the urban than in the rural environment, despite urban Māori being more highly acculturated than rural Māori. Moreover, he stated that urban Māori parents were particularly handicapped in transmitting helpful life experiences to their children, due to a lack of adequate communication between them. Both these findings contradict his argument regarding the positive impact of acculturation and a loss of Māori cultural identity on Māori educational success.

Additionally, Marie and associates (2008b) acknowledged that Māori were subjected to adverse historical processes such as institutional racism and discrimination. However, they failed to discuss how individuals with a strong Māori cultural identity might be more likely to experience racism and discrimination in the educational system, than individuals who do not

identify with Māori ancestry (Reid, Robson, & Jones, 2000). This would have important implications for their findings. Furthermore, although Ausubel (1960) does give mention to the impact of discrimination and stereotyping on educational and vocational achievement, and in fact suggested this to be the most serious factor contributing to Māori educational disparities, his discussion of these problems is limited to two small paragraphs in the 16-page article. Rather, the majority is dedicated to blaming a lack of acculturation as the contributing problem to Māori educational underachievement.

Finally, when Marie and colleagues (2008b) controlled for socio-economic factors, the associations between cultural identity and educational outcomes were largely reduced to statistical non-significance. Therefore, the authors concluded that educational underachievement amongst Māori can be largely explained by disparities in socio-economic status during childhood, rather than cultural identity.

Contradicting both Marie and associates (2008b) and Ausubel's (1960) studies, Fitzsimons and Smith (2000) explored the dominance of twentieth century Western education epistemologies of Māori education in New Zealand. Although reflecting an opinion based on paper rather than empirical research, they suggested that Māori educational underachievement can be best understood as an outcome of systematic failure to actively recognise and nurture Māori cultural values and beliefs across the education spectrum.

Anti-social attitudes, cognitions and behaviour. International studies investigating the relationship between cultural identification and anti-sociality have suggested that a strong cultural identity may decrease anti-social attitudes, cognition and behaviour. Arbona, Jackson, McCoy and Blakely (1999) examined the extent to which identity would predict attitudes toward fighting among African American and Latino and Latina early adolescents (n=330) through self-report measures. Results indicated that, for the African American

adolescents, identity accounted for variation in adolescents' non-fighting attitudes. Moreover, feelings of pride and commitment to their identity were related to self-reported attitudes and skills in resolving conflicts with peers in nonviolent ways. However, identity was not correlated with attitudes towards fighting in the Latino and Latina adolescents. Limitations of the study include relatively low internal reliability scores of some of the self-report measures, and the potential for social desirability and recall biases to occur. Furthermore, due to the correlational nature of the analyses, it is not possible to infer any causal relations among the variables examined.

Lee's (2004) study employed seven self-report questionnaires to 142 participants Korean- Americans, in exploring the relationship between behavioural problems as moderated by identity. Through employing hierarchical moderated regression analysis, findings suggested that a secure cultural identity served as a moderator to problem behaviour. Wissink, Deković, Yağmur, Stams, and de Haan (2008) demonstrated that, for Moroccan-Dutch adolescents living in the Netherlands (n= 115), secure cultural identity was related to a lower level of problem behaviour. Through performing multivariate analyses of variance, the researchers expanded on the relationship, suggesting that stronger identity was related to a higher level of self-esteem, which, in turn, was related to a lower level of externalizing problem behaviour.

Marcell (1994) presented a sociodemographic profile of Mexican-Americans and described how a degree of cultural identification and acculturation may contribute to problem behaviour. Although the paper reflects personal perspective evidenced by past literature, Marcell argued that acculturation and a subsequent lack of cultural identity, contributed to problem behaviours in Mexican-Americans.

Lee, Steinberg and Piquero's (2010) research employed individual interviews alongside questionnaires, in exploring the relationship between identity and attitudes towards

the police in African American juvenile offenders (n=561), largely residing in Philadelphia. Findings suggested that youth who scored higher on the Multi-group Ethnic Identity Measure (MEIM) reported more positive perceptions of police legitimacy. This included more respect for the police as a legitimate authority and understanding their necessity for maintaining social order. The researchers suggested that identity development may be conceived of as a proxy for cognitive and psychosocial maturity. However, although the MEIM included questions pertaining to cultural identity, the scale primarily measured ethnic identity. Furthermore, the research analyses did not investigate how identity and attitudes towards the police inter-relate over time as adolescents transition out of adolescence and enter early adulthood. This may be important given that, as adolescents' age and mature, their identity may solidify and their views of police as a legitimate authority may alter (Lee et al., 2010).

In regards to the anti-social behaviour of substance use, empirical research by Marsiglia, Kulis, Hecht and Sills (2004) explored identity as a predictor of drug norm and use among a sample of 4324 minority ethnicities living in America. Examination of bivariate correlations and ordinary least-squares regressions suggested that strong cultural affiliation, attachment, and pride related to less narcotic use, and stronger antidrug associations. Additionally, Whitbeck, Chen, Hoyt and Adams' (2004) empirical study which employed structural equation modelling, found enculturation (the degree an individual is embedded in traditional cultural practices), was negatively associated with alcohol abuse in a sample of 452 American parents/caretakers. Furthermore, Brook, Whiteman, Balka, Win and Gursen's (1998) empirical study, which explored identity as a protective factor for drug use among 555 Puerto Ricans through regression analysis, found that a strong sense of cultural identity may protect Puerto Rican adolescents from engaging in drug use.

Inconsistent with this, James, Kim and Armijo's (2000) research, which explored the relationship between identity and substance abuse in 127 multiethnic 11 to 20 year olds,

suggested that cultural identification increased the likelihood of alcoholism across indigenous adolescents. However, the actual statistical finding was not provided in the article. Other research conducted by Spicer, Novins, Mitchell and Beals (2003), which studied alcohol use amongst Native American adolescents, found some variance in quantity and frequency of alcohol use could be attributed to cultural differences, with an increase in cultural identity increasing the amount and frequency of alcohol consumption. However, this finding was not significant. Furthermore, drawing on MacAndrew and Edgerton's (1969) theory that drunken comportment is learned, the high school students participating in the study may have lacked sufficient time to learn how to drink in culturally appropriate ways. Given this, further research on indigenous adults in the same community would provide important data.

Although empirical research exploring the relationship between Māori cultural identity and anti-sociality is scarce, authors have attempted to explore the relationship through opinion-based papers grounded on a review of the literature and personal belief. Ebbett and Clark's (2010) literature review investigating the history of alcohol use in New Zealand and its impact on Māori cultural identity, concluded that a strong sense of cultural identification could be expected to offer strength, pride, support, and a sense of belonging, buffering alcohol consumption.

Cooper's (2012) Doctoral research suggested a link between cultural identity and anti-social cognitions. The study, which aimed to describe practices which assisted whānau in the prevention or elimination of whānau violence, applied interviews to 50 participants consisting of whānau, practitioners in the field, and tribal representatives from the Ngāti Hine hapū (from Northern New Zealand), situated within a framework of Kaupapa Māori methodology. Results suggested that when interventions for whānau violence aimed to enhance Māori cultural identity, this had a positive impact on whānau members. Specifically, practitioners perceived that when cultural identity was strengthened, an individual's thinking changed,

allowing reconnection with whānau members, and mitigating further violence. However, Cooper identified that the study may have been affected by biases, with the researcher more likely to attend to participants' responses which presented a positive view of the value of Māori cultural understandings and practices, given her own belief systems. Furthermore, the sample characteristics of the study may limit generalisability.

Maynard and associates (1999) discussion paper, which explored the Department of Corrections initiatives aimed at reducing Māori offending, argued that offence-related emotions and cognitions may develop through isolation from Māori cultural constructs. Moreover, Lawson-Te Aho's (1998) theoretical case study suggested that there was an existence of a 'cultural depression', in which a loss of Māori culture resulted in destructive behaviour and negative thinking. However, although both Maynard and colleagues and Lawson-Te Aho's papers' used substantial literature reviews in building their arguments, their findings were not grounded by empirical research methodology, and therefore are not based on unfounded evidence.

Harper's (1998) presentation at the Māori and Criminal Justice conference summarised the relationship between Māori cultural identity and anti-sociality. He proposed that when Māori are forced to acculturate through the process of colonisation, they lose the ability to remain autonomous, which may result in a loss of the self, the prospect of much internalized conflict, leading to negative attitudes, thoughts and behaviour. Furthermore, Lawson-Te Aho's (1998) theoretical case study suggested a disconnection from one's culture may have caused Māori people to act outside of their essential being as Māori, and to model adverse behavioural responses. This may include association with anti-social peers such as gang members.

Gang association. Research supports the notion that when Māori do not have a secure identity, they may seek an identity elsewhere (Hook, 2009; Hoskins, 2007; Webb, 2009). Māori who are unable to maintain a sense of belonging through genealogical ties to their whakapapa and involvement in Māori culture, may seek an alternative route to attaining a sense of belonging, through gang association (Barlow, 1991; Walker, 1989).

Newbold's (2000) paper investigating crime in New Zealand estimated approximately 45 different gangs, with around six thousand full members (initiated) and fifteen thousand associated members (not fully initiated, O'Deane, 2000). The New Zealand Police (1998) indicated that gang membership was dominated by Pacific Island and Māori people. Bellamy (2009) suggested that Māori membership was particularly high in gangs such as the Mongrel Mob, Black Power and the Nomads. Hazlehurst and Hazlehurst's (1998) research was consistent with this, suggesting that, from the 40 Mongrel Mob members interviewed in the study, all were of Māori ethnicity. Moreover, Winter (1998) stated that, although the Mongrel Mob is not an exclusively Māori gang, most members are Māori.

Bellamy (2009) stated that gangs are most likely to flourish in depressed or disorganized communities lacking a sense of pride. He suggested that many Māori lost whānau networks and structures due to colonisation, and that gang affiliation may offer a family unit, providing support and social focal points. The Select Committee of Inquiry into Violent Offending (1979) argued that the gang organisation can provide a constructive and productive means of recruiting individuals, who do not hold a secure cultural identity and have difficulty fitting into accepted social environments. Moreover, Walker (1979) argued that with gang members the family unit is culturally cut off and disorganised, with Māori holding a Māori ethnicity but knowing little or nothing about Māori values and pride in their cultural heritage.

The Ministry of Social Development (2008) report asserted that Māori, who have lost the support of their extended whānau and cultural identity, are most vulnerable to gang membership. Eggleston (2000) follows this theory, suggesting that most New Zealand gang activity was due to a desire for affiliation and belonging, and Klein's (1995) research suggested identity to be an important driver of gang membership. Nakhid and Shorter's (2014) research explored prison experiences of Māori ex-offenders. It suggested that participants who had minimal knowledge or involvement in Māori protocol and practices held cultural values based on the gang culture. They go on to suggest that the gang provided a culture, a whānau and a sense of identity.

Winter's (1998) paper exploring the Mongrel Mob, suggested that the majority of Mongrel Mob chapters (location based subgroups of the gang) did not draw on Māori kaupapa (philosophy or principles), or celebrate their Māori heritage, due to a lack of Māori cultural identity and wellbeing. However, Winter presented an example of one chapter of the Mongrel Mob which reportedly providing its members with a stronger Māori cultural identity and wellbeing.

Winter (1998) conducted an interview with Pat Aramoana, the president of the Opotiki Mongrel Mob chapter located in the Bay of Plenty. Pat Aramoana suggested that members may achieve a Māori cultural identity not available in the general community, through the chapter immersing its gang members in traditional values and customs (Winter, 1998). Brown's (1993) unpublished Mongrel Mob survey, also interviewed a Mongrel Mob president, Sonny Fatupaito, from the Waikato Mongrel Mob chapter. Sonny Fatupaito reported encouraging Mongrel Mob members to practice tikanga Māori. He stated that tikanga could provide members with a stronger sense of themselves, whilst the gang would still provide a sense of belonging. Therefore, gang membership, in a primarily Māori gang, may attract Māori who are searching for cultural identity (Brown, 1993).

Furthermore, Maynard and associates (1999) discussion paper suggested that gang association may be regarded as a positive affiliation, as Māori are a collectivist people. Because Māori gravitation towards the gangs may account for their lack of belonging in other areas of their life, in terms of filling a void, gang membership may be seen as positive.

In both Winter's (1998) and Brown's (1993) studies, there was no further elaboration on what the values, customs and tikanga practiced in the Mongrel Mob were, whether they reflected Māori cultural practices outside of the gang, and whether the inclusion of Māori tikanga resulted in less anti-sociality. Moreover, given these statements were provided by Mongrel Mob presidents, it is likely responding was influenced by social desirability.

Additionally, given group membership can have a significant influence on behaviour (Jeong, 2009), and gang associates predominantly behave criminally (Bellamy, 2009), the consequences of gaining a sense of belonging may be far outweighed by the negative consequences resulting from anti-sociality. Furthermore, any sense of Māori cultural identity gained from Mongrel Mob membership may be contradicted by the criminal identity adopted from being in a gang.

Bellamy (2009) asserted that all youth gangs in the Auckland district have a criminal component, with crime being part of the gang scene, stating that membership was about 'being bad'. Additionally, the Department of Corrections (2003) indicated that gang members had higher rates of conviction for violent crimes, compared to non-gang member offenders, and Winter (1998) suggested that Mongrel Mob members expressed cultural dislocation through anti-sociality.

Furthermore, literature on MaCRNs reflected that a loss of Māori cultural identity can increase the likelihood of membership in pro-criminal groups, and that this membership may subsequently raise the risk that anti-social behaviour will be socially endorsed or practically advocated (Maynard et al., 1999). This supports cultural identity theory of Māori offending.

Cultural Identity Theory of Māori Offending

Researchers have identified a link between colonisation, a loss of Māori cultural identity and Māori offending (Coebergh, Bakker, Anstiss, Maynard, & Percy, 2001; Maxwell & Morris, 1999; Maxwell, Kingi, Robertson, Morris, & Cunningham, 2004; Maynard et al., 1999; McFarlane-Nathan, 1999; Pratt, 1999; Tauri, 1999; Te Puni Kōkiri, 2000; Wikiriwhi, 1998). Webb (2009) articulated that, with the process of acculturation, Māori crime began to escalate. Jackson's (1987, 1988) opinion-based report reflected the ideology that Māori overrepresentation within the New Zealand correctional system was a function of an erosion of Māori culture and identity through the process of colonisation. His perspective suggested that, in effectively targeting re-offending rates, Māori offenders' cultural identity must be developed. Furthermore, Fergusson and others' study (2003), which used data from the Christchurch Health and Development Longitudinal Study (1977) in exploring possible ethnic bias in rates of convictions among a birth cohort of New Zealand young people, suggested a lack of cultural identity as a risk factor to Māori offending. The Department of Corrections (2001) policy related document titled '*Let Māori take the journey*' also asserted the need for Māori to 'recover' from their lack of cultural identity in decreasing offending statistics.

Kupenga-Wanoa (2004) argued that much of the current aetiology of Māori crime fails to address historical grievances encountered through colonisation, and suggested cultural oppression to be a contributing factor in the over-representation of Māori in the criminal justice system today. Her study, exploring Māori offending through interviews with probation officers and Māori offenders, found a lack of positive Māori identity across Māori offenders to be a prevalent factor of their high offending rates. Participants attributed the loss of Māori cultural identity to the 'loss of self', resulting in feelings of being 'divorced from

one's culture'. This is turn, was suggested to result in a loss of self-esteem, and consequently, participation in risk-taking behaviour leading to offending.

Durie (1998, 2003b) proposed a relationship between Māori who have no connection with their Māori heritage, a lack of positive cultural identity, and offending. He suggested that when Māori embrace their culture, offending may be minimized. Consistent with Durie's theoretical ideology, Ihimaera, Maxwell-Crawford and Tassell's (2004) document which provided a Māori framework for aligning mental health education with clinical practice, inferred that Māori must embrace their culture in order to resolve identity crisis, and in doing so, reduce recidivism. Moreover, Roberts (2003), who provided an analysis of The New Zealand Sentencing Act 2002, argued that when sentencing an offender, a court should consider how the sentence can assist in the offender's rehabilitation and reintegration, including addressing an offender's cultural identity. Roberts goes on to argue that rehabilitation without consideration of an offender's cultural identity is senseless.

Other researchers have suggested that if interventions are to be effective for Māori offenders, the treatment focus should target the lack of a Māori cultural identity as a risk factor for re-offending, and attempt to build a secure Māori cultural identity, in order to strengthen this as a protective factor (Becroft, 2009; Department of Corrections, 2009a; Hart, O'Toole, Price-Sharps, & Shaffer, 2007; Singh & White, 2000).

However, Marie (2010) provided a detailed critique of Māori cultural identity theory of offending in her paper '*Māori and Criminal Offending: A Critical Appraisal'*. She proposed that when Māori offending is attributed to cultural identity loss, this may be characterised as the 'wishing well approach'. In this approach, Marie suggested cultural identity theory to be a story of loss and recovery; loss being attributed to the effects of colonisation, and recovery attributed to the decolonisation of the mind. She highlighted the issue with this theory, in context to Wilson's (2004) report, which identified high-risk

offenders and illuminated the issues relative to their rehabilitation and management. Wilson stated "... it was concerning to find that the majority of those classified as high risk identify as Māori a result that has important implications for treatment interventions, especially in view of the recent research support for the inclusion of cultural elements to address responsivity issues..." (p. 62). Marie stipulated that, on initial glance, Wilson's statement could be overlooked, but on further analysis could be interpreted as inferring that problems with identity did not appear to be a specific issue for the majority of his Māori participants.

Marie's (2010) criticism of cultural identity theory of Māori offending based on Wilson's report, could be seen as problematic. Marie's interpretation of Wilson's statement may assume that the interventions which included 'cultural elements' actually aimed to increase cultural identity, and were in fact successful in doing this.

In addition, Marie (2010) assumed that identification as being Māori, as Wilson stated, constituted a secure Māori cultural identity. Wilson's comments suggested that the participants identified as being of Māori ethnicity, but did not suggest they reported having a secure Māori cultural identity. His statement was suggesting identification of ethnicity based on race, and not cultural identity based on knowledge of history, culture, customs and beliefs. Wilson's statement can in fact be interpreted as suggesting the participants were of Māori ethnicity, and that in addressing this area, interventions should be rich in cultural components.

In his report, Wilson (2004) goes on to suggest that, when participants were asked about whether they supported the inclusion of variables relating to tikanga within correctional programmes, over 50% reported support for the inclusion of culture. Furthermore, Wilson suggested that participant responses to this question provided a rich source of data that should assist in the development of correctional programmes to include cultural components.

Marie's (2010) paper suggested that ethnicity is regarded as the cornerstone of cultural identity theory of Māori offending. She suggested that cultural identity theory assumes that individuals who identify with Māori ethnicity have some inherent property that predisposes them to offending. In this sense, cultural identity theory of offending 'attributes ethnicity to risk' and can lead to the view that being a criminal is associated with being Māori. This perspective assumes that being of Māori ethnicity is the same as holding a secure Māori cultural identity. However, several authors argued that Māori ethnicity may be distinguished through blood quantum and ancestral links, and that Māori cultural identity may be distinguished through a connection with one's culture and an understanding of Māori tikanga, lore and mythology (McFarlane-Nathan, 1999; Pool, 1991).

Marie's (2010) argument does not account for individuals who are Māori in ethnicity but do not hold a secure Māori cultural identity. Marie suggested that exploring ethnic group level differences infers that all individuals who identify with Māori ethnicity were a member of the Māori community. However, exploring ethnic group level differences may in fact illustrate that not everyone who is Māori in ethnicity is part of the Māori community, and that being engaged in the Māori community does not indicate a secure cultural identity. The need to distinguish between identifying as being of Māori ethnicity, living in a Māori community, and holding a secure Māori identity was illustrated in Kupenga-Wanoa's (2004) research. Within the study, many participants identified as being of Māori ethnicity and lived within Māori communities, but within their whānau group there was still a lack of positive cultural identity.

Furthermore, Broughton, Fergusson, Rimene, Horwood and Sporle (2000) argued that, although New Zealand's population has traditionally been categorised as Māori and non-Māori, this fails to consider the diversities within the Māori population. In line with this, Chapple (2000) stipulated that the Māori population differs in its identification and

involvement with Māori culture, and McFarlane-Nathan (1999) identified the importance of distinguishing between Māori who held a 'Māori perspective' from those that were 'well-versed in tikanga', suggesting individual variation in levels of identity.

Although Marie (2010) argued that Jackson's (1987, 1988) research did not address intra-ethnic variation within the Māori group, Marie's study also failed to address the differing levels of Māori cultural identity Māori individuals may hold. Marie argued that Māori offenders may view cultural identity theory as desirable, as it may provide an external locus of control for their behaviour. She argued that by adopting cultural identity theory of offending, individuals may characterise themselves as victims of history, and in doing so, remove their responsibility for participating in unlawful activities. Moreover, Marie argued that viewing colonisation as the cause of contemporary problems may be an 'escape mechanism' allowing the avoidance of pertinent factors, such as socioeconomic deprivation, as contributing to Māori offending statistics.

Cultural identity theory of offending does not simply end at colonisation and acculturation. Although the wrongs of the past cannot be overlooked as contributing factors to the overrepresentation of Māori across disparities in statistics, for Māori offenders to adopt cultural identity theory, they must look beyond how identity was lost, and actively engage in developing a secure culture identity for the future (Durie, 1998).

Furthermore, Marie (2010) suggested offenders may see the adoption of identity theory as 'taking the easy road', with interventions stemming from this theory desirable, due to their focus on culture rather than offending. Consistent with this view, Nakhid and Shorter (2014) found that participants within their study viewed Māori cultural interventions as nothing more than a way to escape the monotony of prison life.

Contradictory to this, the evaluation of *Te Kakano* by Billing (2009) contended that, although cultural interventions may be mistaken as a 'soft' approach, if the unique needs of

indigenous groups are not met, this may result in disparate and inequitable outcomes for offenders, leaving them and their communities at risk. Moreover, international indigenous research conducted by Krawll (1994), indicated that Canadian Aboriginal offenders perceived indigenous interventions as 'harsher' than imprisonment alone, due to the pain and difficulty in admitting guilt to the indigenous community. Furthermore, Krawll argued that incarceration without an indigenous intervention, may lead an offender to externalise her/his feelings and concentrate on the unfairness of the correctional system.

Marie (2010) further contended that there are incentives for Māori offenders to adopt cultural identity theory. She suggested that offenders who choose not to commit to the identity theory risk being judged as troublesome by correctional staff, whereas those who partake in activities designed to increase their cultural identity, would be seen as compliant and genuine about their rehabilitation. However, Nakhid and Shorter (2014) indicated that the Māori ex-inmates in their study revealed their ability to use Western based correctional programmes to their advantage, in terms of reducing their prison terms. Furthermore, Rodriguez (2003) suggested that in exploring any offender's intervention experience, the impact of manipulation and psychological coercion by the prison system needs to be considered. This suggests all rehabilitative programmes may face the dilemma of incentives versus punishment, and this needs to be considered in interpreting the results.

Additionally, Marie's (2010) critique of cultural identity theory of Māori offending may be seen to infer that the link between Māori cultural identity and offending is linear. She contended that cultural identity theory suggested that Māori who successfully retrieve their cultural identity will then have an offending-free lifestyle. Moreover, Marie's main argument against cultural identity theory is that there is a lack of empirical research supporting this relationship.

By inferring that cultural identity and offending contain a linear link, this does not consider the complexity between constructs. Tauri and Webb (2012) argued that it is a misleading summation to suggest Māori theories of offending present cultural loss as the key determinant of Māori overrepresentation in the justice system. Nakhid and Shorter's (2014) study, investigating Māori inmates' experiences of correctional rehabilitation programmes, suggested that crime is multidimensional in that there is no single factor that contributes to its occurrence. Furthermore, Durie (2003a) commented on the close links between culture and other variables such as socioeconomic circumstances. Convergent with this, Marie and associates' (2009) empirical study exploring Māori cultural identity and offending in 984 participants, suggested associations between cultural identity and offending risk may be due to the influence of additional, unmeasured variables correlated with cultural identity and offending.

Previous research suggested that increasing cultural identity may lead to an increase in wellbeing, an increase in pro-social behaviour and a decrease in anti-social attitudes, cognitions and behaviours such as substance abuse (Durie, 2005; Harper, 1998; Te Hoe Nuku Roa, 1996; Marie et al., 2008a; Thomas, 1986). Furthermore, it was found that association with anti-social associates through gang membership may also be a result of a lack of Māori cultural identity (Barlow, 1991; Walker, 1989). Andrews and Bonta's (2010) extensive empirical research regarding risk factors to offending, indicated that anti-social attitudes, anti-social cognitions, past anti-social behaviour, anti-social associates, substance abuse, a lack of pro social leisure pursuits and employment, and familial issues, were all risk factors to offending.

The cross-over between the variables related to both Māori identity and empirically tested risk factors, indicates that the link between cultural identity and offending may not be direct, rather, there are other important constructs that may be influenced by a change in

cultural identity that may relate to offending. Moreover, researches supporting cultural identity theory of indigenous offending argued that there is conflict with holding a cultural identity alongside a criminal identity (Sanchez-Way & Johnson, 2000; Winter, 1998). This idea will be further outlined below.

Conflict with holding a Māori cultural identity alongside a criminal identity. Snowball and Weatherburn (1998) proposed that, through colonisation, acculturation and a loss of Māori cultural identity, traditional customs and rules no longer restrained what would be considered in traditional Māori society as unacceptable behaviour. This story of the Ngāti Awa people described earlier (Hakiaha, 1998), illustrated that when Māori held a secure cultural identity, they were bound by the constructs of traditional Māori mythology, such as inflicting shame on their whānau. Therefore, in present times, individuals who develop a secure Māori cultural identity may refrain from offending due to the prospect of inflicting shame on their whānau, conversely, individuals who have not developed a secure Māori cultural identity may not be restricted by the prospect, as they do not carry the traditional belief system housing the concept.

In line with this perspective, Thoits's (1992) empirical study, which interviewed a random sample of 700 adults, demonstrated that negative events such as committing a crime are only distressing insofar as they threaten to compromise an individual's values and identity. Thoits suggested that 'identity –relevant stressors', stressors which threaten an individual's cultural identity, are more predictive of distress than those stressors which are 'identity-irrelevant', stressors which do not compromise an individual's identity. Hence, it may be perceived that when an individual has obtained a secure Māori cultural identity, and carries the tikanga of a Māori worldview, committing crime would be distressing as it would jeopardise this identity.

McFalane-Nathan (1999) suggested that tikanga provides guidelines for behaviour and decision making. Examples of how criminal behaviour may conflict with the tikanga of holding a Māori cultural identity are evident in literature exploring the role of wāhine (women, Mikaere, 1994; Pere, 1982) and tamarirki (children, Cooper, 2012; Jenkins & Harte 2011) described below.

New Zealand research indicated high levels of Māori offending perpetrated against women (Glover, 1995). However, this contradicts the essential place Māori women hold within a Māori worldview (Pere, 1982). Mikaere (1994) stated that Māori women were essential parts in the collective whole, forming an important part of the whakapapa that linked the past with the present and the future, and that Māori mythology demonstrated the influential role that women held in Māori society.

Kahukiwa and Grace (1984) illustrated how Maui first acquired fire from his kuia (grandmother), and that it was with her jawbone that he fished up the North Island, and constructed his patu (club), in which he used in an attempt to subdue Ra (the sun). It was also Hine-nui-te-pō (female ancestors) that he turned to when he failed in his attempt to gain immortality. Additionally, Pere (1982) asserted that women are described as whare tangata (the house of humanity), and pointed out the common saying: "He wāhine, he whenua, e ngaro ai te tangata" interpreted as meaning "by women and land men are lost", referring to the vital role of women (and land) in humanity (pp 17-18).

Pere (1982) stated that due to the important role of wāhine, offending against women was regarded as exceptionally serious, and would result in rejection from the community. Jenkins (1988) suggested the loss of Māori cosmology and proverbs through colonisation destroyed Māori cultural knowledge, and in turn, mana wāhine was lost.

Through this perspective it may be conceived, that if Māori cultural identity was achieved, and traditional values gained, that Māori individuals would be more refrained from

assaulting women, due to this behaviour conflicting with a Māori worldview. Additionally, Cooper's (2012) research exploring multiple stakeholder perspectives of what may reduce Māori whānau violence, found that, through the use of concepts such as *mana tāne* and *mana wāhine*, where the traditional roles, responsibilities, and prestige of men and women were clarified, participants could consider alternatives to violence.

Also prevalent within crime statistics was the high level of Māori perpetrated offences against children (Families Commission, 2009). However, research has suggested that Māori are inherently loving and nurturing caregivers, and that violence inflicted on children has only emerged through the process of colonisation (Hill, 2011). Early research exploring Māori nurturing roles by Polack (1840) suggested that the Māori father was devotedly fond of his children, and they were his 'pride and delight', and Savage (1807) suggested that Māori children would entwine themselves around their father's neck for an entire day as a constant companion.

The Office of the Children's Commissioner report titled '*Traditional Māori Parenting'* stems with this perspective and suggested that prior to colonisation and acculturation, children were considered as taonga (treasure) and gifts from God, and were treated with loving care and indulged (Jenkins & Harte, 2011). In addition, Cooper (2012) argued that the roles of tūpuna (ancestors) and mokopuna (grandchildren or descendant of the tūpuna) may be seen as so interlinked, in that hitting a child is akin to hitting a revered grandparent. In this sense, the mokopuna is inherently representing the whakapapa and mana of that revered tūpuna. Jenkins and Harte (2011) clearly illustrated the significance of ririki (little ones) within traditional Māori society in their following excerpt.

Ririki are wairua. Children are spirit...Ririki are tapu. Tapu is special, sacred.

Children are special because they are from the ones who have gone before, the

tipuna, and they are the parents of the ones to come. They are sacred because they

whakapapa to the atua, the gods. Ririki have mana. Children have status and

power. Respect them. Children have their own power. They are the face of god;

they are wairua and they are tapu. This gives them mana...(p. 31).

Jenkins and Harte's (2011) report asserted that in a Māori world view, child abuse was shunned but that through European settlement and the following process of acculturation, the traditional idea of children being regarded as sacred was lost. In line with this, Taonui (2012) suggested that there was less violence against children in pre-European society than today, due to colonisation and a loss of Māori cultural identity. He suggested this to have occurred through a loss of tikanga alongside an indoctrination of European ideology regarding physical discipline. This was reflected in research by Chandos (1984) and Quigly (1984) which proposed that Māori were indoctrinated into European models of education and Christianity, which viewed physical disciple towards children as 'good for them'.

Sanchez-Way and Johnson's (2000) article, which explored cultural practices in American Indian correctional programmes, argued that traditional indigenous values obtained from a strong cultural identity conflict with anti-social patterns. Other international research conducted by Brant (1982), exploring violence in Nova Scotia Indians at Mi'kmaw reserves, suggested these indigenous peoples previously repressed hostility due to cultural prohibitions against violence, but may now be seen to express anger due to a loss of cultural identity.

Kruger and associates (2004) paper which presented a conceptual framework to whānau violence, and Pihama and colleagues (2003) literature review on whānau violence prevention argued that Māori individuals can change their anti-social values, beliefs, and behaviours through the adoption of tikanga-based cultural values. Convergent with this, Cooper (2012) suggested that strengthening Māori cultural identity can bring about the

opportunity to use cultural values, beliefs and practices as a framework for transforming violent behaviour. Māori participants in Cooper's study also considered that connectedness to the hapū, an understanding of the importance of whakapapa links, and knowledge of tribal lore and history, could strengthen a sense of connectedness, and change attitudes towards violence. This was described by the statement "...Actually you can't abuse me...he uri ahau nō Hine-a-maru [I am a descendant of Hine-a-maru]" (p. 147).

Furthermore, Whitbeck, Hoyt, Stubben and LaFromboise's (2001) research examined factors affecting school success for a sample of 196 fifth-eighth grade American Indian children, and suggested traditional values espoused ways of behaving that were congruent with the development of positive behaviours, and incompatible with anti-social behaviours. Moreover, Lerner, Dowling and Anderson's (2003) theoretical discussion stated that when individuals were immersed in a moral and value-laden world view, they were likely to develop moral identity and a spiritual sensibility, propelling them to contribute to the common good. Finally, Zimmerman, Ramirez, Washienko, Walter and Dyer (1994) found in a sample of 121 Native American youth that the degree to which one was embedded in their culture, traditional values and beliefs could protect against potentially harmful behaviours such as delinquency. These studies suggested that holding traditional belief systems may mitigate anti-sociality (Winter, 1998).

Given the conflict with holding a Māori cultural identity and committing crime, alongside the relationship between Māori cultural identity, wellbeing, pro-social behaviour, anti-social attitudes, cognitions and behaviours, and gang association (Barlow, 1991; Durie, 2005; Harper, 1998; Te Hoe Nuku Roa, 1996; Marie et al., 2008a; Thomas, 1986; Walker, 1989), it would appear appropriate for interventions aimed at reducing the disparities in Māori offending, to target Māori cultural identity.

Chapter 3: Exploring Māori Cultural Identity and Offender Change in the MFU

This chapter will first review past research investigating the MFU in regards to empirical research standards. The current study will then be presented, outlining how it will attempt to address past research deficits whilst adding to the research pool. Lastly, the current study's research questions and hypotheses will be provided.

Research on the MFU

"Too few programs are being developed...and tested with the rigor that would yield the proof needed to label them as evidence based" (Snyder, 2007, p. 6).

The need for empirical research regarding the effectiveness of the Department of Corrections intervention services is considered paramount to enabling on-going improvements to the services, and to also ensure the appropriate distribution of funds (Ministerial Review Report, 2005). The Department of Corrections (2009b) stipulated the significant need to provide empirical research regarding the effectiveness of the MFU.

The '*Ministerial Review report*' (2005), reviewed the MFU in accordance with the requirements as set out by the Ministerial Review Unit. However, the report failed to present any evidence around the effectiveness of the unit, and suggested this task to be extremely challenging, given the complexity of the interacting system alongside the lack of comparison data or existing models (Ministerial Review Report, 2005).

Several studies have attempted to explore the effectiveness of the MFU through participant self-report. Māori inmates in Nakhid and Shorter's (2014) study reported that their MFU experience had provided them with a sense of pride and identity alongside a greater respect for others. Additionally, Byers's (2002) research investigating correctional initiatives for Māori in New Zealand indicated that many MFU participants found the cultural therapeutic environment provided them with a sense of identity and pride they previously did

not have. Participants in Byers's study suggested that the MFU encouraged greater participation in activities, helped them to recognize the effect their offending had on others, resulted in closer relationships with whānau, and prompted acknowledgement and responsibility for their offending.

Kupenga-Wanoa's (2004) study, which interviewed probation officers and Māori offenders, found that participants regarded the MFU as successful due to operating from a Māori worldview, incorporating whānaungatanga (kinship and a sense of connection), assisting offenders to identify with their whakapapa, iwi and hapū, and being underpinned by tikanga Māori. It was suggested that through tikanga Māori, offenders are provided with the tools to develop a secure cultural identity and a sense of pride in being Māori, leading to empowerment, self-worth, and purpose (Kupenga-Wanoa, 2004).

The methodological process of each of these studies does not reflect an empirical research process. Based on De Groot (1961) empirical research cycle, empirical research begins with an area of investigation and collection of existing empirical facts. Through exploring existing empirical facts, researchers may develop a theoretical framework regarding the topic under investigation. A researcher can then develop empirical questions, and testable hypotheses. Once data has been gathered through direct or indirect observation or experience, hypotheses can be tested through analysis of the data. A researcher can then evaluate the outcome and answer the empirical questions. Furthermore, Goodwin (2005) suggested that, depending on the outcomes of the experiment, the theory on which the hypotheses were based will be supported or not supported.

Marie (2010) contended that supporters of cultural identity theory largely decry empirical research methodology for adoption of a kaupapa Māori approach. However, research by Marie and colleagues' (2009) both used empirical research methodology and supported cultural identity theory, with findings suggesting that Māori with stronger cultural

identity had a lower risk of offending than Māori with a weaker cultural identity. Marie (2010) went on to argue whether a kaupapa Māori approach can even be evaluated according to standard research aims, and suggested that the approach was not evidence based and therefore could not be objective. However, Stokes (1985) opinion paper argued that research conducted through Māori framework maintained validity stating:

"The same high standards of meticulous attention to accuracy, impartial investigation of all relevant aspects of the topic, clear presentation of issues and conclusions...apply as much in Māori research as in any other" (p. 5).

Levy (2007) proposed that when attempting to explore a Māori programme or intervention the research methodology must reflect the philosophy of the construct being measured. Therefore, kaupapa Māori programmes such as Te Aō Marama may be effectively explored through kaupapa Māori research methodology. Furthermore, the Department of Corrections FReMo initiative asserted the necessity of using Māori methodology when reviewing any initiative that has implications for Māori (McFarlane-Nathan, 1999).

In 2009, the Department of Corrections conducted an evaluation of the MFU's effectiveness. The main assessment used for this review was a semi-structured interview related to target domains for learning and change, alongside measures of attitudes and beliefs (Department of Corrections, 2009b). The results from this evaluation indicated that a positive and pro-social environment was achieved in the MFU, and participants showed a positive change in their attitudes and beliefs in relation to criminal lifestyles. However, the study was not grounded by any theoretical framework, and may reflect more of an auditing process than empirical research. After completion, the study's lack of coherence prompted the Department of Corrections to call for further evaluation (Department of Corrections, 2009b).

The purpose of an MFU placement is to encourage offenders to embrace Māori cultural values, identity and affiliations, and in doing so, lead more pro-social, non-offending lifestyles following release from prison. However, there is yet to be any empirically based studies exploring the MFU in relation to cultural identity theory. An exploration of the MFU which is grounded by cultural identity theoretical framework, investigating the relationship between time spent in the MFU, Māori cultural identity, Māori wellbeing, pro-social behaviour, and anti-social attitudes, cognitions and behaviour, would provide crucial data on the current effectiveness of the MFU (Department of Corrections, 2009b).

The Current Study

Marie (2010) and Wikirriwhi (1998) highlighted that there remains a lack of empirical research regarding the Department of Corrections interventions aimed at reducing Māori offending. This is consistent with studies investigating the MFU (Department of Corrections, 2009b). The current study will address past research deficits through employing an empirical research process within a kaupapa Māori framework (De Groot, 1961). Through exploring existing research regarding Māori offending, Māori cultural identity theory was selected as the most appropriate theoretical framework for the current study's empirical questions and testable hypotheses to stem from.

The purpose of the current study is to explore cultural identity theory of Māori offending. This will investigate whether participation in the MFU resulted in change in Māori cultural identity, wellbeing, pro-social behaviour and anti-social attitudes, cognitions and behaviour. Additionally, the study will explore the relationship between the areas of change.

The current study will be conducted at Waikeria Prison's MFU, Te Aō Marama. The Department of Corrections stipulated that, prior to any exploration of the effectiveness of the

MFU, it must be ensured that the unit is in fact operating in accordance to its prescribed structure (Department of Corrections, 2009b). Te Aō Marama was said to be running in accordance to the MFU philosophies (Baker, 2012), and therefore, was the preferred environment to conduct the current research.

The present study may significantly add to the research pool, as at present there is a lack of empirical research exploring the effectiveness of Te Aō Marama, or any MFU. In addition, no study has investigated the relevance of Māori cultural identity theory. The study may generate similar investigation across the other four MFUs, and may encourage further enquiry of Te Aō Marama. Furthermore, the exploration of the relationship between participation in a Māori based therapeutic environment, and change in Māori cultural identity, wellbeing, pro-social behaviour and anti-social attitudes, cognitions and behaviour, may potentially provide information in the establishment of other therapeutic environments aimed at increasing Māori cultural identity.

Research Questions

1. **Does Te Aō Marama have an effect on attitudinal and behavioural change for offenders?**

   1.1 Offenders in Te Aō Marama will experience an increase in their Māori cultural identity
   1.2 Offenders in Te Aō Marama will experience an increase in their wellbeing.
   1.3 Offenders in Te Aō Marama will experience a decrease in anti-social attitudes and cognitions.
   1.4 Offenders in Te Aō Marama will experience an increase in programme attendance (pro-social behaviour).
   1.5 Offenders in Te Aō Marama will experience a decrease in incidents and misconducts committed (anti-social behaviour).

2. **Are there differences in change between offenders who are new to Te Aō Marama (0-6 months stay) compared to offenders who have spent greater periods of time in the unit (6-12 months, 12-24 months, and 24 + months stay)?**

   2.1 As offenders length of stay in Te Aō Marama increases, change across Māori cultural identity, wellbeing, anti-social attitudes and cognitions, programme attendance, and incidents and misconducts will also increase.

3. **What is the relationship between offender age, offender RoC*RoI score, and gang membership on offender change?**

   3.1 Offenders increase in Māori cultural identity, wellbeing, and programme attendance will increase with age. Offenders will experience a greater decrease in anti-social attitudes and cognitions, and incidents and misconducts with increase in age.
   3.2 Offenders increase in Māori cultural identity, wellbeing, and programme attendance will decrease with higher RoC*RoI scores. Offenders will experience an increase in anti-social attitudes and cognitions, and incidents and misconducts with increase in RoC*RoI score.
   3.3 Offenders increase in Māori cultural identity, wellbeing, and programme attendance will decrease with gang affiliation. Offenders will experience an increase in anti-social attitudes and cognitions, and incidents and misconducts with gang affiliation.

4. **What is the relationship between change in Māori cultural identity and offenders' scores across wellbeing, anti-social attitudes and cognitions, programme attendance and incident and misconduct score?**

   4.1 Offenders change in Māori cultural identity will relate to their levels of wellbeing, anti-social attitudes and cognitions, programme attendance and incidents and misconducts.

5. **What do offenders believe equated to any change they experienced when housed in Te Aō Marama?**

   5.1 Through participant interviews, offenders will report that an increase in their Māori cultural identity resulted in the change they experienced across wellbeing, anti-social attitudes and cognitions, programme attendance and incidents and misconducts.

Chapter 4: Method

The current study has two parts: (a) the primary investigation of whether participation in Te Aō Marama resulted in change in offenders' identity, wellbeing, anti-social attitudes and cognitions, and pro-social and anti-social behaviour; (b) an exploration into what participants believed caused any changes.

The initial investigation, (a), employed a repeated measures research design (or within-subjects design), applied in the naturalistic setting of Te Aō Marama. This component applied four measures to explore the relationship between Māori identity, wellbeing, and anti-social cognitions and attitudes (dependent variable) during the time spent in Te Aō Marama (independent variable). Change was measured within individuals over four data collection periods with six week intervals (November 2011- April 2012), and between individuals to account for the length of stay and variations in scores. Additionally, collateral information gathered from a Te Aō Marama staff member provided an additional perspective of the offenders' wellbeing, and collateral information from offender's prison files explored pro-social and anti-social behaviour before and during Te Aō Marama participation.

The latter investigation explored what it was about the Te Aō Marama experience that resulted in change in participants. This was carried out through the implementation of individual interviews generating participant feedback regarding their Te Aō Marama experience. The narrative material aimed to illustrate participants' perspectives regarding what they believed contributed to any change they experienced, alongside providing the oppourtunity for participants to discuss any thoughts they had regarding the unit, in an informal way. In this sense, the data obtained was not formally analysed, but rather provided as enrichment to the quatitative results.

Fundamental to any research is the appropriateness of the reporting method chosen and its ability to effectively obtain accurate participant data (Russell & Lawton, 2010). The

combining of quantitative measures with participant feedback, was consistent with Māori paradigms (Moewaka-Barnes, Tunks, Wa, & Dacey, 1998).

Research Design

      Repeated measures design (or within-subjects design). In a repeated measures design participants perform at each occurrence of the independent variable (Stangor, 2011). The nature of the design ensures that individual differences in participants are unlikely to distort the effect of the independent variable (Stangor, 2011). In comparison to independent group designs, repeated measures may enlist fewer participants, therefore providing practicality in studies in which participants are not easily sourced (Russell & Lawton, 2010).

      Russell and Lawton (2010) described potential disadvantages to repeated measures designs. They suggested that, because participants are exposed to the experimental setting more than once in a repeated measures design, their subsequent performances may be affected by order effects such as practice or fatigue. Additionally, they argued that extraneous variables, such as outside distraction or an altercation involving a participant occurring prior to data collection, might also distort the results.

      In the present study, order effects may have been minimised given the six week length of time between the administration of questionnaires. Furthermore, potential extraneous variable effects were addressed through ensuring data collection occurred in a quiet room away from potential distractions, and through asking correctional officers if any altercations or issues had occurred prior to participants being summoned to attend.

      Thayer (1987) also identified a potential dilemma of using repeated measure designs, suggesting that demand characteristics may occur due to participants noticing cues as to the aims of the study, and cooperating in providing confirmatory results. In the current study, it was possible that participants could have guessed the relationship between Te Aō Marama

participation and the desirable direction of scores across the dependent variables; however, the relationship between time spent in Te Aō Marama and change across the variables would appear difficult to guess. In this sense, participants would have to remember their own responses at each time frame, alongside other participant's responses when reflecting on their length of time spent in Te Aō Marama, to ensure participants with shorter lengths of stay had lower change scores.

Furthermore, Thayer (1987) asserted that with research involving multiple measurements, the testing seemed to become quite automatic, with subjects exhibiting little concern for the significance of each measurement. Thayer went on to argue that demand characteristics should be viewed in a more balanced manner, with the likelihood of their occurrence not automatically invalidating the research results. Moreover, Berkowitz and Donnerstein's (1982) research illustrated that a participant's awareness of a study's aims was not necessarily indicative of a participant providing responses reflective of the research hypothesis.

Naturalistic setting. Research designs are naturalistic to the extent that the research takes place in real-world settings, the phenomenon of interest unfolds 'naturally', and the researcher does not attempt to manipulate the phenomenon of interest (Patton, 1980).The current study took place in the therapeutic environment of Te Aō Marama, with participant change explored when participants were in this natural setting. In a true laboratory experiment the researcher creates different conditions of the independent variable and measures changes in the dependent variable, whereas natural designs can be used to investigate variables that could not practically or ethically be manipulated (Russell & Lawton, 2010). In order to have an adequate sample, participants could not be sourced prior to Te Aō Marama and then after it, as participants could be housed within the unit for

extended periods of time beyond the scope of the study. Therefore, a naturalistic experiment had practical advantages in obtaining participants.

Russell and Lawton (2010) identified both the strengths and weaknesses of a naturalistic research design. They suggested disadvantages to include limited control over extraneous variables, a reduction in certainty that the independent variable is causing changes in the dependent variable, and the assumption that it is generally more difficult to replicate naturalistic studies than those conducted in a controlled setting. However, in comparison to a laboratory experiment, where the research hypothesis may be more easily identified, demand characteristics may be less problematic. Furthermore, in a naturalistic design, the researcher uses real differences in the independent variable, therefore the situation is more real, behaviour is more representative, and the results produce higher ecological validity (Russell & Lawton, 2010).

Power Analysis

A power analysis was performed prior to conducting the research, to determine sample size necessary for detecting change in the GLM, and the chance of getting a positive result if there is in fact a difference (Berridge & Crouchley, 2011). Uncertainty in response of each scale was estimated and a Monte Carlo simulation was performed to find the average change in scale for various sample sizes to produce a power of 80% (Appendix H). For example, with 25 subjects the Pride In Delinquency (PID) questionnaire had an 80% chance of detecting a change of 5.5 points on the 0 to 200 scale over the period surveyed, the Criminal Sentiments Scale Modified (CSS-M) questionnaire had an 80% chance of detecting a change of 2.6 points on the 0 to 82 scale over the period surveyed, and the Hua Oranga (HO) Self-report (HOSR) and Hua Oranga Nominated Persons (HONP) scale had an 80% chance of detecting a change of 2.3 points on the -32 to 32 scale over the period surveyed.

Smaller levels of change were detected across all measures with an increase in sample size (see Appendix H).

Participants

The participants in this study were 60 offenders who were housed in Waikeria Prison's MFU; Te Aō Marama over November 2011- April 2012. Any offenders housed within Te Aō Marama over this period of time were eligible to participate, and there was no selection criterion.

Offenders. Offenders participating in the study were male offenders who had been housed in Te Aō Marama for one week right through to the maximum time frame of 24 months. An exception to the maximum time frame were offenders who had become Rūnanga, or 'leaders' of the MFU, through nomination by Te Aō Marama staff members and fellow offenders.

Offenders were selected to come into the unit through several different methods. Te Aō Marama Residential Manager; E. Baker (personal communication, April 30, 2012), reported the majority of Te Aō Marama participants were identified by Te Aō Marama staff systematically searching through the Integrated Offender Management System (IOMS). However, he suggested offenders may have also gained entry through sentence plan referral, referral from other prisons, recommendation from staff in other units, or they may have personally requested a placement. Baker stated that the majority of Te Aō Marama participants were already incarcerated in the main prison, however on rare occasions, may have entered Te Aō Marama straight after sentencing, through staff recommendation.

Te Aō Marama Principal Corrections Officer; E. Harihari (personal communication, April 30, 2012) stated that there were around two referrals made per week to Te Aō Marama.

He reported that, depending on unit capacity, the criteria for a potential candidate to gain Te Aō Marama, or any MFU entry, was a twelve- month minimum sentence, negative results in a drug test, and motivation to leave gang affiliations. Offenders must have also successfully completed an interview process, with the panel consisting of a Te Aō Marama staff member, a Te Aō Marama Rūnanga, and the potential candidate's sentence planner. Furthermore, once offenders were chosen to participate in Te Aō Marama, they must have refrained from incidents and misconducts (or rule violations) in order to remain in the unit.

Offender demographics. Offenders' age, ethnicity, iwi affiliation, risk of recidivism, gang affiliation, time spent in prison prior to Te Aō Marama on current sentence and time spent in Te Aō Marama on current sentence, are presented in Table 1.

Table 1

Offender Demographic Data (N=60)

Age	Mean *(SD)*	30.2 (12.19)
	Range	18 - 69
Ethnicity	NZ Māori	58
	NZ European (Māori descent)	1
Iwi Affiliation	Tainui	11
	Ngāti Hauā (Tainui)	3
	Ngāti Maniapoto (Tainui)	3
	Ngāti Mahanga Hourua (Tainui)	1
	Ngāi Te Rangi (Tauranga Moana)	2
	Ngāti Ranginui (Tauranga Moana)	1
	Ngā Potiki (Tauranga Moana)	1
	Ngāpuhi	11
	Tūhoe	9
	Te Arawa	5
	Tūwharetoa (Te Arawa)	2
	Ngāti Porou	6
	Ngāti Awa	1
	Ngāti Kahungunu	1
	Unknown	1
Risk of Recidivism	*Mean (SD)*	.50 (.22)
	Range	.06 - .89
Gang Affiliation	Mongrel Mob	5
	Black Power	9
	Nomads	1
	CRIPs	2
	Greasy Dogs	1
Prison time prior to MFU (months)	Mean *(SD)*	14.6 (18.0)
	Range	0.9 – 91.9
Time spent in MFU (months)	Mean *(SD)*	7.9 (8.5)
	Range	0.1 – 46.5

Risk of recidivism. The RoC*RoI is a second generation actuarial risk assessment

tool, developed from statistical information based on the case histories of 133,000 New

Zealand offenders, designed by Bakker, O'Malley, and Riley (1999). The RoC*RoI is

comprised of four construct's that each contain a number of predictor variables: Personal

characteristics: Gender, Age (continuous), Age at first offence, Frequency of convictions and

Number of court appearances and convictions (running total); Jail and time at large: Total

estimated time (years) spent in prison, Number of previous imprisonment sentences, Indicator

that punishment for most recent crime was imprisonment, Maximum sentence length handed

down to offender in past (years) and Time at large (length of offender's most recent time at

large); Seriousness of offending: Sum of seriousness ratings for all crimes (seriousness

defined by average length of sentence in days a person receives if convicted of a crime),

Weighted past seriousness measure (places greater weight on seriousness of most recent

offence), Maximum serious measures for the past time period and Mean seriousness

measures for the past time period; And Offence type: Offence category (10 possible) (e.g.,

violent, disorderly conduct, sex) and Number of convictions in crime category (Bakker,

O'Malley, & Riley, 1999).

Based on these predictor variables, the tool uses a mathematical formula to calculate a

probable estimate of an offenders' risk of re-imprisonment five years following release, and

can range from 0 (indicating a very low probability of recidivism) to 1 (indicating a very high

probability of recidivism), with a risk score of between .30 to .70 indicative of medium risk

(Bakker et al., 1999).   All offenders beginning their sentences are assessed with the

RoC*RoI, with the results used to guide decision-making regarding prioritising effective

correctional rehabilitation (Andrews & Bonta, 2010).

Research suggested that for optimum effectiveness interventions should be based on

the level of risk of re-offending, with high risk offenders receiving greater intervention and

low-risk offenders receiving minimum or no intervention (Andrews & Bonta, 2010).   The offenders RoC*RoI scores in the current study ranged from .06 to .89, indicating that some participants' risk levels fell below the requisite risk threshold for rehabilitative programmes (Table 1). However, The Waitangi Tribunal Report (2005) asserted that the MFU was made available to lower risk offenders, and generally targeted offenders with a medium risk of recidivism. Furthermore, Baker (personal communication, April 30, 2012) suggested that, if correctional staff perceived an offender as being likely to benefit from the MFU, they might be eligible for the programme, despite their low risk of recidivism.

Measures

Self-report measures. Change was measured within and between individuals through the following quantitative measures: The Multidimensional Model of Māori Identity and Cultural Engagement Revised (MMM-ICE RS31, Gavala, Hopner, & Gardner, 2011) which provides a rating of Māori cultural identity and cultural engagement in relation to participation in a programme/intervention, the Hua Oranga measure (HO, Kingi, 2002) which quantified the four domains of Te Whare Tapa Whā, providing a scale for the client, their whānau and a clinician to rate their perception of the client's wellbeing before and after intervention, the Criminal Sentiments Scale Modified (CSS-M, Andrews & Wormith, 1984) measuring anti-social attitudes and cognitions and predicting recidivism, and the Pride in Delinquency Scale (PID, Shields & Whitehall, 1991) measuring identification with criminal others and predicting anti-social behaviour (Appendicies N – Q).

The MMM-ICE RS31. The original Multidimensional Model of Māori Identity and Cultural Engagement (MMM-ICE) was a self-report questionnaire developed to measure six

dimensions of cultural identity and cultural engagement within Māori populations: (1) Group Membership Evaluation (GME), (2) Socio-Political Consciousness (SPC), (3) Cultural Efficacy and Active Identity Engagement (CEAIE), (4) Spirituality (S), (5) Interdependent Self-Concept (ISC), and (6) Authenticity Beliefs (AB, Houkamau & Sibley, 2010). The MMM-ICE has a 7-point Likert scale, with participants responding to items relating to the six subscales (1 = Strongly Disagree, to 7 = Strongly Agree). There is no overall total of Māori cultural identity; rather there are scores for the respective sub-scales.

The measure was designed through an extensive review of Māori cultural identity literature, and was pilot tested within Māori populations (Houkamau & Sibley, 2010). Within the construct, being Māori was viewed as anyone who self-identified as Māori and/or had an ancestor who was Māori. The measure has been suggested to be effective in modelling change in cultural identity after participation in a rehabilitative initiative, programme, or an intervention.

The MMM-ICE RS31 by Gavala and associates (2011) is a revised and shortened version of the MMM-ICE that was developed for use within a New Zealand Naval population (Appendix M). It consists of 31 questions which produce quantitative results for Māori cultural identity. The revised measure consists of the same six subscales represented in the original MMM-ICE, however the items covered within each subscale differ. As a result of consultation with naval staff, who suggested that particular items may be offensive to Māori personnel, were overly repetitive or were culturally inappropriate, the researchers removed 16 items from the original scale and merged other items together to form the MMM-ICE RS31 (Gavala et al., 2011).

Additional to the MMM-ICE RS31, Gavala and researchers (2011) developed a Cultural Understanding rating (CU), which asked participants to rate their level of cultural understanding prior to the programme/intervention, and to rate their level of cultural

understanding at the current time (Appendix M). The CU is a separate measure of Māori cultural identity, given after completion of the MMM-ICE RS31 questionnaire.

The MMM-ICE RS31 six subscales were tested for reliability with cronbach's alpha reliability coefficient. Cronbach's alpha is a common measure of internal consistency (reliability), most frequently used with questionnaires encompassing multiple Likert questions that form a scale, with the researcher attempting to determine whether the scale is reliable (Gliem & Gliem, 2003). Cronbach's alpha reliability coefficient requires single test administration in providing a unique estimate of the reliability for a given test (Gliem & Gliem, 2003). It is the average value of the reliability coefficients obtained for all possible combinations of items when split into two half-tests (Gliem & Gliem, 2003). Cronbach's alpha generally ranges between 0 and 1, with coefficients closer to 1 representing greater internal consistency. George and Mallery (2003) suggested the following ratings in respect to Cronbach's Alpha reliability ratings: > .9 = Excellent, > .8 = Good, > .7 = Acceptable, > .6 = Questionable, > .5 = Poor, and < .5 = Unacceptable. Gliem and Gliem (2003) suggested that, although an alpha of .7 is regarded as acceptable, an alpha of .8 is probably a reasonable goal.

In the current study, the MMM-ICE RS31 displayed cronbach's alpha scores ranging from unacceptable to questionable, with no subscales achieving acceptable reliability. The subscale results were as follows: *GME (a= 0.53), SPC (a= 0.60), CEAIE (a= 0.58) S (a= 0.64), ISC (a= 0.18) and AB (a= 0.57)*.

Wells and Wollack (2003) suggested that when reliability is poor, participants' scores consist largely of measurement error (consisting of examinee-specific factors, test-specific factors or scoring-specific factors), with an unreliable test offering no advantage over randomly assigning test scores to participants. Therefore, for results to reflect more than merely random error, it is paramount to use measures of adequate reliability.

Due to the current study's findings of inadequate MMM-ICE RS31 reliability, the researcher did not use the questionnaire for further analysis but retained the separate CU rating as a measure of Māori cultural identity prior to, and during, an offender's Te Aō Marama experience. Furthermore, participant interviews may have also provided information regarding offenders' participation in Te Aō Marama and their Māori cultural identity (see collateral information below).

The HO. The HO measure of Māori wellbeing (Appendix N, Kingi, 2002) was developed from Te Whare Tapa Whā framework (Table 2, Durie, 1985), and allowed the four elements of Te Whare Tapa Whā; Taha Wairua, Taha Hinengaro, Taha Tinana, and Taha Whānau, to be assessed before and after an intervention.

Table 2

Te Whare Tapa Whā Model (Adapted from Durie, 1996).

Focus	Taha Wairua: Spiritual	Taha Hinengaro: Mental	Taha Tinana: Physical	Taha Whānau: Extended Family
Key Aspects	The capacity for faith and wider communion	The capacity to communicate, to think, and to feel	The capacity for physical growth and development	The capacity to belong, to care, and to share
Themes	Health is related to unseen and unspoken energies	Mind and body are inseparable	Good physical health is necessary for optimal development	Individuals are part of wider social systems

The HO was primarily recommended as an appropriate outcome measure for determining the effectiveness of care and treatment in mental health settings for Māori (Durie & Kingi, 1997), however its applicability has since been suggested to potentially encompass a wide range of Māori services beyond the mental health sector (Levy, 2007). Wikiriwhi's (1998) research stipulated that Te Whare Tapa Whā may be an effective tool in addressing Māori offending.

The HO encompasses a triangulated approach, presenting the opportunity for views from three stakeholders to be explored; the service user themselves (client views), their whānau (whānau views), and the service staff members (clinical views). The client is provided with his/her own questionnaire; Hua Oranga Self-Report (HOSR, Appendix N), and the whānau and clinician also provided with their own questionnaires, which all explore each of the four wellbeing domains of Te Whare Tapa Whā.

In the present study, the whānau and clinical stakeholder positions were merged into a 'nominated person' stakeholder, due to an inability in accessing the offender's immediate whānau members. The nominated person was a Te Aō Marama staff member chosen by the offender due to 'knowing them well', who could provide suitable comments on the offender's wellbeing over his time in the unit, through completion of the Hua Oranga Nominated Person measure (HONR, Appendix N).

The merging of stakeholders was viewed as appropriate in addressing both the clinical and whānau aspects of the measure. The clinical aspect of the measure, which aims to acquire an offender's wellbeing from the perspective of a service delivery professional, was achieved through the offender nominating a Te Aō Marama staff member. The whānau aspect of the measure, which aims to acquire the perspective of an individual who has a close relationship with the offender, was achieved as offenders nominated staff members who they believed 'knew them well'. This may encompass the attributes representative of kaupapa-based whānau (Ratima et al., 1996). Kaupapa-based whānau extends beyond genealogy, with the term expressing group members shared purpose, commitment, values, and obligations towards one another (Metge, 1995).

The HO four subscales; Taha Wairua, Taha Hinengaro, Taha Tinana, and Taha Whānau, consisted of four items which were scored in regards to the degree of change offenders experienced as a result of Te Aō Marama participation. This ranged from +2 to -2:

Much More, More, No Change, Less, Much Less. Each of the respondents (client and nominated person) completed the respective questionnaire by circling the most appropriate response for each item across each subscale. The HO has a highest overall score of 32 and lowest overall score of -32, with a high score indicating a more positive outcome, and a low or negative score suggesting that the outcome was less satisfactory.

The HOSR and HONPmeasures both displayed acceptable reliability. The HOSR displayed 'good' cronbach's alpha reliability ratings: *Taha Wairua (a= 0.80), Taha Hinengaro (a= 0.86), Taha Tinana (a= 0.85), Taha Whānau (a= 0.83), Hua Oranga total (a= 0.87).* The cronbach's alpha reliability ratings for the HONP scores fell within the 'good' to 'excellent' range: *Taha Wairua (a= 0.83), Taha Hinengaro (a= 0.86), Taha Tinana (a= 0.93), Taha Whānau (a= 0.90), Hua Oranga total (a= 0.81).* These results were consistent with reliability ratings found in past research (McClintock, Mellsop, & Kingi, 2011; McClintock, Mellsop, & Kingi, 2010) confirming the HO to be a reliable measure of Māori wellbeing.

The CSS-M. Andrews and Wormith's (1984) CSS-M (Appendix O), is a modified version of the original Criminal Sentiments Scale (CSS, Gendreau, Grant, Leipciger, & Collins, 1979). The CSS-M is commonly used as a measure of criminal thinking styles and attitudes (Morgan, Fisher, & Wolff, 2010). It is a 41-item self-report questionnaire consisting of three subscales; Attitude toward the Law, Courts, and Police, (ALCP, 25 items); exploring participants respect for the law and the criminal justice system, Tolerance for Law Violations (TLV, 10 items); evaluating participants acceptance of criminal behaviour, and the third sub-scale, Identification with Criminal Others (ICO, 6 items); identifying participants perceptions of law violators (Simourd & Van De Ven, 1999).

The questionnaire asks participants whether they agree, disagree, or are undecided with each item. Acceptance of anti-social statements (or rejection of a pro-social statements) produces 2 points, rejection of an anti-social statement (or acceptance of a pro-social one) produces 0 points, and undecided responses are scored as 1, with higher sub-scale and overall scores indicative of anti-social attitudes (Andrews & Bonta, 2010).

Several studies (see Andrews & Wormith, 1984; Andrews, Wormith, & Kiessling, 1985; Roy & Wormith, 1985; Shields & Simourd, 1991; Simourd, 1997; Simourd & Van de Ven, 1999) have established the validity and reliability of the original CSS and the modified version, with higher cronbach's alpha coefficient produced on the subscales comprising of a greater number of items. Yessine and Kroner's (2004) internal consistency results of the CSS-M subscales indicated the ALCP to have good internal consistency ($\alpha = .88$), the TLV to display adequate internal validity ($\alpha = .75$), and the ICO to show unacceptable internal consistency ($\alpha = .49$). Mills (2000) also found lower internal consistency in the ICO subscale in comparison to the ALCP and TLV subscales, and equated the finding to be a result of the ICO consisting of fewer subscale items.

The current study's cronbach's alpha coefficient scores were consistent with the results found in past studies. Cronbach's alpha for the ALCP subscale demonstrated good internal consistency *(a= 0.89),* the TLV subscale demonstrated acceptable internal consistency *(a= 0.76),* the ICO subscale demonstrated unacceptable internal consistency *(a= 0.40),* and the CSS-M total demonstrated excellent internal consistency *(a= 0.90).*

Although the cronbach's alpha for the ICO subscale suggested unacceptable reliability, the subscale was still retained in the current study. This was justified through exploration of past research utilising the CSS-M, which also found lower reliability in the ICO in comparison to the other CSS-M subscales, but retained the subscale due to the ICO comprising of fewer items, automatically reducing its reliability (Mills, 2000; Yessine &

Kroner, 2004). Moreover, the overall CSS-M total score showed excellent reliability (unlike the MMMICE which was removed from the current study due to no subscales achieving acceptable reliability). However, it is paramount that caution be practised in the discussion and interpretation of the ICO results, given the low reliability of the subscale.

The PID. Shield and Whitehall's (1991) PID scale (Appendix P), measuring identification with criminal others and predicting anti-social behaviour, is a self-report instrument that measures an individual's degree of comfort (pride vs. shame) for engaging in certain criminal behaviours, and was developed as a complement to the CSS-M (Yessine & Kroner, 2004). The concise scale lists 10 criminal behaviours, with each behaviour then rated using a 20-point scale ranging from -10 (very ashamed) to +10 (very proud), and a score of zero indicating an undecided response. Scores for each item are summed and then added to a constant of 100 to ensure that all total scores are positive. Higher scores reflect greater anti-social attitudes.

Past research has demonstrated that the PID has acceptable psychometric properties (see Shields and Whitehall, 1991; Simourd, 1997; Yessine & Kroner, 2004). In the current study, the internal consistency of the scale was good ($\alpha = .88$), reflective of past studies.

The CSS-M, the PID, and recidivism. Research has suggested both the CSS-M and the PID correlate with recidivism. Yessine and Kroner's (2004) study examined the effectiveness of a Counter-Point intervention programme in altering intermediate targets of change in offenders, and in-turn, reducing future recidivism. It was expected that post-programme reductions in anti-social attitudes were going to be observed, and that positive treatment-related change on this specific construct was going to be linked with reduced rates of recidivism. Results suggested that after intervention, offenders displayed reductions

82

across both the CSS-M and the PID, and in recidivism. Yessine and Kroner argued that these results suggested that the attitudinal dimensions, reflected in the CSS-M and the PID, have particular relevance in the prediction of criminal behaviour.

Andrews and Wormith's (1984) study found that offenders on probation who had an increased CSS-M score at a six-month re-test period also had increased recidivism rates. Conversely, offenders with decreased scores at re-test had lower rates of recidivism. Consistent with this, Simourd and Van de Ven's (1999) and Andrews and Bonta's (2010) research, both suggested that the PID scale was significantly related to criminal behaviour and was predictive of recidivism. These studies indicate how offenders' thought patterns may be predictive of future criminal involvement (Morgan et al., 2010).

Collateral information.

Nominated persons. Nominated persons at Te Aō Marama were eleven Department of Corrections employees who worked in various roles within Te Aō Marama during the research period. A nominated person was selected by each offender to complete the HO measure. The participants could nominate up to five potential persons, in a ranked order, whom they felt knew them well and would be suitable to comment on their experiences within the unit. One nominated person was selected from each offender's list, with priority given to those highest ranked. If the same staff member was nominated by several participants, then the next highest ranked nominated person was chosen.

Once the nominated persons agreed to participate, they filled out the relevant Hua Oranga questionnaire for each of their participants at the four data time points. The collaboration of the participants' self-report alongside the nominated persons' perspective may have provided a more holistic impression of Māori wellbeing than self-report alone.

File data. Alongside the questionnaires, programme attendance and incident and misconduct rates were also used in the study, as a measure of Te Aō Marama participation and change across pro-social and anti-social behaviour.

Programme attendance. Offenders within New Zealand prisons are provided with the opportunity to attend intervention programmes. These include cognitive skills programmes, cultural programmes, emotion management programmes, violence prevention programmes, substance abuse programmes, sex offender programmes, and family violence prevention programmes.

Maynard and colleagues (1999) asserted that participation in correctional programmes may represent pro-social behavior. Because offenders in the current study spent an average of 14.6 months in prison prior to entering Te Aō Marama (Table 1), they may have chosen to participate in intervention programmes before Te Aō Marama entry. Furthermore, offenders may have chosen to attend programmes when housed in Te Aō Marama. The difference between programmes attended when housed in outside units compared to the number of programmes attended when housed in Te Aō Marama, may provide valuable information in regards to whether Te Aō Marama participation increases participant pro-social behaviour.

Furthermore, empirical research which explored Māori offending and cultural identity, suggested pro-social behaviour to be correlated with level of Māori cultural identity (Marie et al., 2009). Therefore the relationship between programme attendance and Māori cultural identity will also be explored.

Yessine and Kroner (2004) defined programme participation as the actual sum of the number of successfully completed core programmes offered by the Correctional Department. In the current study, the number of outside programmes offenders successfully completed prior to and during Te Aō Marama was gathered from participant files, as a measure of pro-

social behaviour. Programme attendance rates were recorded for all participants from when they first entered the prison on their current sentence, but were not in Te Aō Marama, and then recorded after the final data collection point, when offenders were housed in Te Aō Marama.

McFarlane-Nathan (1999) asserted that in order for a research project to effectively identify what outcomes are in fact results from participation in a Māori initiative, one must endeavour to capture all processes operating for Māori. Programme attendance was used as a measure of pro-social behaviour, but was also identified as an extraneous variable, which could potentially be contributing to any participant change found.   Previous research stipulated that treatment is a cumulative process, and as such, that recidivism is reduced with each prior episode of treatment (Merrill, Alterman, Cacciola, & Rutherford, 1999). Therefore, the potential impact of prior programme completion on the success of the initiative being measured must be controlled for (Yessine & Kroner, 2004). In the current study it was recognised that in order to truly be measuring client change as a result of Te Aō Marama participation, it would be essential to determine whether attendance in any outside programme was contributing to participant change. This was explored through participant interviews.

Incidents and misconducts. Andrews and Bonta (2010) identified history of anti-social behaviour as an important risk factor predictive of criminal recidivism. This risk factor, measuring past involvement in anti-social activities, includes prior offences and rule violations (Andrews & Bonta, 2010). In the current study rule violations whilst incarcerated were used as a measure of anti-social behaviour within the prison. These included both 'incidents' and 'misconducts' recorded by prison staff on the offender's electronic file. Incidents differ from misconducts in that they are considered a lesser rule violation, requiring

documentation but not amounting to punitive action in which misconducts can result in (Collie & Polaschek, 2003). The number of incidents and misconducts committed were recorded for all participants from when they first entered prison on their current sentence, prior to entering Te Aō Marama, and then recorded after the final data collection point, when offenders were housed in Te Aō Marama.

One of the requirements for offenders housed in Te Aō Marama was to refrain from rule violations. Therefore, it would be expected that when in the unit, participants' incident and misconduct ratings would be low. However, not all participants in the current study refrained from anti-social behaviour, resulting in their dismissal from the unit. Although excluded from the unit, the researcher was able to record the incidents and misconducts from these offenders through their prison files.

Many of the outside units in which offenders were housed prior to Te Aō Marama entry also required offenders to refrain from incidents and misconducts. Therefore, a lower incident and misconduct rate when housed in Te Aō Marama cannot be gauged as a reflection of the 'no incident and misconduct' criterion alone; rather, participation in the unit may be influential in producing change in incident and misconduct scores. This was explored through participant interviews.

Participant interviews. In line with the current naturalistic research design, Patton (1980) asserted that in real-world settings, participant interviews are an effective tool for data gathering, with open-ended questions conducted in places and under conditions that are comfortable and familiar to participants, producing rich information (Patton, 1980). Recent research was also consistent with this perspective, with Russell and Lawton (2010) stating that, through individual interviews, participant feedback could identify important constructs, and provide rich information preserving the detail of the data.

Several studies supported the prospect of combining quantitative methodology with participant feedback in effectively exploring identity. Empirical research conducted by Bowker (2001) studied identity in online communities. The study consisted of 400 participants and used both a quantitative survey alongside participant feedback in identity exploration. Additionally, Gavala and colleagues (2011) used quantitative methodology with participant feedback in their empirical study which investigated Māori cultural identity in the Royal New Zealand Navy.

Phinney (1989) argued that interviews should be conducted with participants individually, by a researcher of the same ethnicity as the interviewee, and that interview questions regarding cultural identity should include open-ended follow-up questions, to adequately clarify participant responses to the question. Stemming with this past research, the current study's application of individual interviews in an open-ended format, may have assisted in measuring whether changes offenders experienced in Te Aō Marama were due to a change in their Māori cultural identity.

It was paramount that there were no leading questions, minimizing the potential for investigator bias, and reducing the likelihood of participants responding in a socially desirable way (Russell & Lawton, 2010). This was reflected by the interview questions refraining from directly asking about Māori cultural identity, but rather providing a foreground for participants to discuss any changes they experienced within the unit. Additionally, interviews asked participants exactly what it was that led to any change they had experienced. Participants were also given the opportunity to express their views regarding pros and cons of the unit, providing useful information for all stakeholders. The interview questions are provided in Appendix A.

Procedure

Approval for this study was granted by the Massey University Human Ethics Committee (MUHECN 11/056) and the Department of Corrections (see Appendix L).

Kaupapa Māori methodological process. Kaupapa Māori research requires the methodological processes to have meaning for Māori (Wenn, n.d), and should incorporate indigenous practices (Smith, 1998). The current study was informed by an indigenous methodological process, in adhering to Hakiaha's (1998) Māori research process guidelines. These guidelines suggested that, in conducting research involving Māori, it was critical to *Akoako* (consult). This is often referred to as Hui, and allows differing stakeholders' perspectives to be presented. In regards to the current study, the researcher engaged in consultation with various Māori stakeholders; Kaumātua, academic cultural advisors, and Department of Corrections staff, who provided support and advice on all aspects of the research, throughout its duration. This consultation ensured research procedures were not likely to be insensitive, inhibit participation or cause offence. On-going consultation ensured appropriate Māori processes were perpetuated throughout the research procedure

Hakiaha (1998) also suggested it was important to *Aarita/Pangia* (touch/ be tactile). He stated that Māori are tactile, originating from the mythology of Ranginui and Papatūānuku. Therefore, when in attendance at Hui, one should be honoured to participate in the practice of hongi. The researcher engaged in hongi with all Te Aō Marama participants and staff members, present at the pōwhiri (formal welcome), which took place prior to introducing the research project. *Waiata* (singing) was also considered an important aspect of Maridom, allowing singers to vent their feelings and present evidence of genealogy (Hakiaha, 1998). Hakiaha suggested that waita was the icing on the cake. The researcher engaged in waiata at the Te Aō Marama pōwhiri.

Lastly, *Munakore* (non-confidentiality) was considered fundamental, in that researchers do not withhold any information about themselves, in order to be seen in their totality, to enable links of whānauangatanga (family connection) to be made, and in developing participant-researcher rapport (Hakiaha, 1998). Following the pōwhiri, the researcher engaged in a mihimihi (introduction), and recited her pepeha (speech based on whakapapa/genealogy). The mihimihi provided potential research participants with an understating of the researcher, the research project, and why the researcher was interested in a study of this nature, whilst the recitation of lineage or ancestry allowed Te Aō Marama participants and staff members to make genealogical ties to the researcher, both assisting in the building of relationships.

Following the mihimihi, there was a sharing of kai (food) and the research project was discussed in-depth. During this discussion any questions or concerns were addressed. There was also significant discussion regarding the benefits of this research for reducing Māori recidivism.

Participant selection. All offenders housed within Te Aō Marama at any time over the research period (November 2011- April 2012), were invited to participate in the research. Te Aō Marama offenders and staff members were met at an induction process occurring prior to initial data collection (Figure 1). At this point, information about the research was provided and any questions answered.

Prior to initial data collection, groups of participants were provided with an information sheet outlining the purpose and procedures of the research, as well as the confidentiality of their disclosures (Appendix B). Any questions or concerns regarding participation in the study were addressed. Participants were then given the opportunity to sign a separate attachment, acknowledging their informed consent to participate (Appendix

C). Although there was the potential that participants' consent to partake in the study was influenced by peer pressure due to the group format, it was made explicit that participants could withdraw their consent at any time during the study. A pre-paid envelope enclosed with the researcher's Massey University address was also provided, to give participants the opportunity to ask any questions regarding the study which may later arise, or which they might feel more comfortable asking anonymously, without having to incur the costs of a toll call.

Participants were then given a nominated person selection sheet (Appendix D) and instructed to write down up to five prison staff who they felt 'knew them well', and would be able to comment on their Te Aō Marama experience and wellbeing. One nominated person was selected from each offender's list, with priority given to those highest ranked, and who had not already been assigned by a large number of participants (<10). Nominated persons were then provided with an information sheet (Appendix E), consent form (Appendix F), and a pre-paid, Massey University addressed envelope. Those nominated persons willing to participate were instructed to send their consent form, alongside any questions, in the pre-paid envelope provided.

Data collection. Each data collection took place in an appropriate interview room assigned by the Department of Corrections. Small groups of Te Aō Marama participants (<11), and the researcher, were present in the room. A Correctional Officer remained close to the interview room, adhering to Correctional protocol.

The measures were applied four times, at six week intervals over a six-month period (November 2011-April 2012). The multiple time points for data gathering accounted for 'drop outs', and also provided information regarding time spent in Te Aō Marama and change. Data collection periods took place over three to four days, dependent on how long

each participant group took to fill out the measures, and the availability of staff to conduct data collection on particular days.

Prior to questionnaire administration the researcher made it clear that respondents were free to ask for clarification of specific items that were unclear to them. The researcher then read the questionnaires aloud, with offenders marking the best suited response. This accounted for any reading comprehension difficulties (see ethical considerations below). The measures took approximately thirty minutes to complete for each participant group, and the HO measure, around five minutes for the nominated persons to complete in their own time. Offenders who left Te Aō Marama before the last data collection period, and offenders who joined Te Aō Marama after the initial data collection period, filled out the measures at any of the four data gathering points in which they were present.

After offenders completed their final set of measures, they participated in the individual interviews. This allowed them to provide feedback regarding their Te Aō Marama experience. Questions were asked aloud and were hand recorded, because a recording device could possibly influence participants' responses (Hannan, 2007). The interviews occurred in an interview room and took around ten minutes per participant.

Recording of participant demographics, programme attendance and incidents and misconducts occurred after the final data gathering point (April 2012). Gathering this data after participants had completed questionnaires and interviews, ensured that the researcher was not biased in her interactions with offenders, and that the participants' responses were not influenced by their knowledge that the researcher knew their history.

Data analysis. Data analyses were conducted through a Generalised Linear Model (GLM). The GLM is a mixed model Analysis of Variance (ANOVA); a combination of regression analysis to calculate patterns of change within and across participants over each time point; to provide trends over time (Madsen & Thyregod, 2010).

The GLM was preferred to a one way repeated measures ANOVA, as the ANOVA picks up difference between groups, but does not pick up trends (Pallant, 2005), whereas the GLM finds differences between groups, but through regression is also able to show trends between these groups (Berridge & Crouchley, 2011).

For any given test, participants have a basic initial score when they start and which changes by a certain amount for each six week period they are in the unit. So for each particular test, the data for each subject was a series of times they had been in Te Aō Marama and the matching test score. It was expected that the length of time spent in Te Aō Marama would correlate with scores across the measures. The GLM produces differences between the scores that can not be explained by sampling uncertainty, as well as a pattern in the change; a rise or fall over time (Berridge & Crouchley, 2011).

The GLM was able to remove subject natural variability in responses, so that change due to Te Aō Marama participation could be detected across groups (Dobson, 1990). Across all measures, participants started at their own level, and over time spent in Te Aō Marama this natural level slowly changed. However, the natural variability between subjects masks any differences that Te Aō Marama made between groups. The GLM was able to remove the

between-subject variability, by subtracting participants' natural level from their result, so that all participants were effectively at the same level, and therefore change resulting from Te Aō Marama participation could be detected (Dobson, 1990).
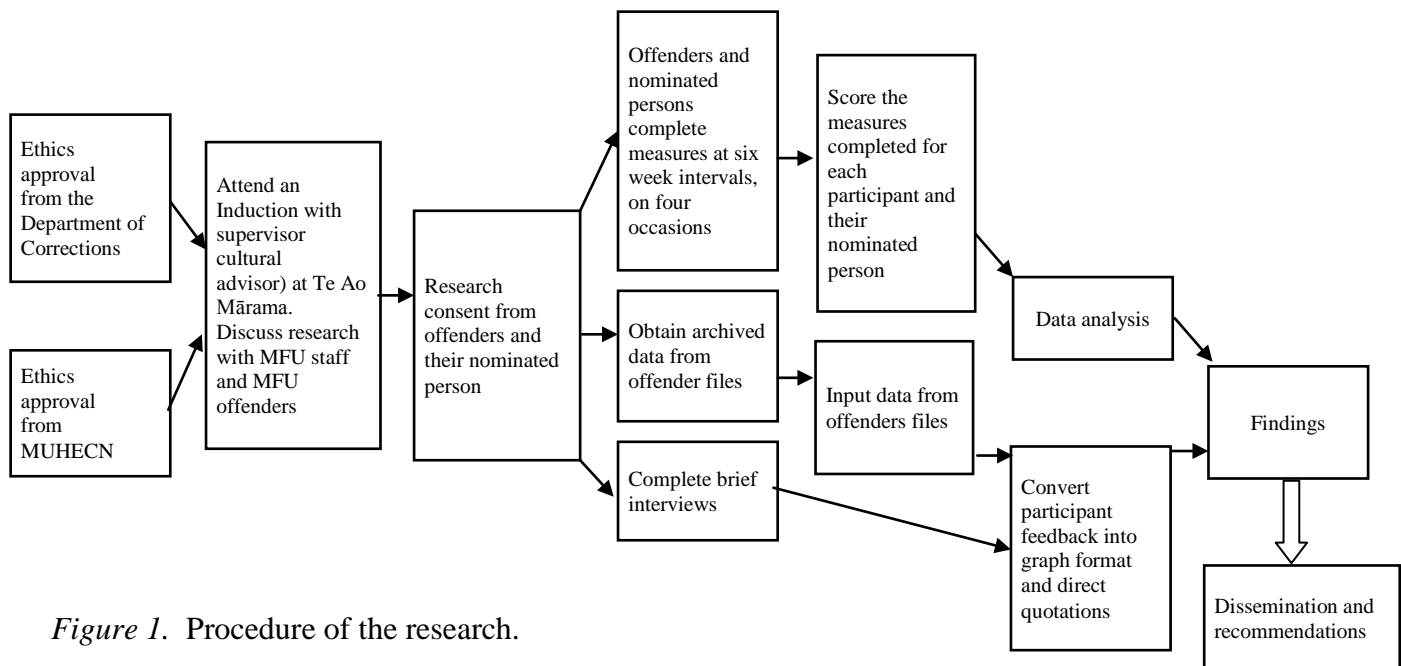
Figure 1. Procedure of the research.

Ethical considerations. All psychological research raises ethical issues, which must be recognised and resolved before research begins (Russell & Lawton, 2010). Participation in the current study may have potentially elicited some ethical concerns regarding consent, participant wellbeing, cultural issues, and dissemination of research results, which were addressed prior to research commencement.

The Code of Ethics for Psychologists working in Aotearoa/New Zealand (Board, 2002) stated that, for consent to be informed, it must ensure participants know what they are agreeing to, and this requires they understand the consent form. Furthermore, when providing participants with written questionnaires, it is essential they are able to read and understand the questions in order to provide accurate responses (Faden & Beauchamp, 1986). New Zealand research conducted by Rucklidge, McLean and Bateup (2013) suggested that

over 90% of incarcerated youth in their study had learning difficulties, with reading comprehension levels indicating a severe level of difficulty. Moreover, adult offenders share similar problems in their reading comprehension (Social Exclusion Unit, 2002).

This ethical concern was addressed in the current study through ensuring the researcher read through the information sheet, consent forms, and questionnaires, and periodically checked in with offenders to confirm their understanding. However, reading the information and consent forms aloud may have potentially resulted in offenders feeling pressured to participate (Faden & Beauchamp, 1986). Therefore, at each data collection period it was made explicit that offenders could withdraw their consent to participate in the study at any period. Furthermore, reading the questionnaires aloud may have influenced offenders to respond in a socially desirable manner (Hochstim, 1967). In attempting to account for this, the researcher indicated the necessity for participants to provide honest responses, ensured participants of their anonymity in the research, and allowed for enough distance between participants seating to ensure the researcher and other participants were unable to view responding.

Voluntary participation is an important component of informed consent (Shahnazarian, Hagemann, Aburto, & Rose, 2013). The voluntary nature of consent may be compromised if offenders perceive that noncompliance, for example by declining an invitation to participate in the study, would result in negative consequences. In the current study, this was mitigated by not providing staff members with names of those offenders who declined to participate in the study. When offenders were required to fill measures, their names were orally given to the duty corrections officer who immediately summoned them to the interview room. This occurred in groups of around ten, over several days, once every six weeks, making it difficult for the guard to identify who had declined to participate. Additionally, non-participants remained anonymous to the Principal Correctional Officer and

Residential Manager who were likely to have the greatest influence on participation, given their senior positions within Te Aō Marama. Information that could identify participants was securely stored and deleted upon the completion of the data entry.

Although the risks are minimal, offenders in the present research may have experienced some discomfort when completing questionnaires and answering interview questions. It was therefore made explicit (both verbally and in writing), that if participants did not want to answer certain questions, they did not have to. Massey University (2013) provided ethical guidelines for the conduction of research, teaching and evaluations, which stated that participants should be informed that they can finish the study at any point, and be allowed to withdraw their data. Therefore, participants were told that if they do not want to continue with the research, they did not have to, and if requested, they could have their data removed from the study. Furthermore, consultation was sought from supervisors, Māori stakeholders and Department of Corrections staff, to ensure that the research procedures were not likely to be insensitive or cause offence. On-going consultation ensured appropriate Māori processes were maintained throughout the research procedure.

It was of vital importance to consult with Department of Corrections staff in regards to their protocol, when implementing kaupapa Māori processes, for example, regarding the sharing of kai in the process of establishing rapport and whānauangatanga (Tipene-Matua, Phillips, Cram, Parsons, & Taupo, 2009), and the practice of hongi with offenders during the pōwhiri (Hakiaha, 1998). The researcher's lack of ability to conduct the interviews in Te Reo Māori may have also presented as a cultural issue. However, consultation with the Residential Manager at Te Aō Marama suggested that the majority of participants housed within Te Aō Marama were not fluent in Te Reo Māori, and interviews should be conducted in English.

In regards to the dissemination of research results, the Code of Ethical Conduct for Research, Teaching and Evaluations involving Human Participants (Massey University, 2013) stated an obligation for researchers to share research findings with participants in an appropriate form. A summary of the research findings was presented by the researcher to Te Aō Marama offenders and staff, both in written format (Appendix G) and in an oral presentation conducted at Te Aō Marama (17/10/2013). Participants no longer housed within Te Aō Marama at the time of the presentation were sent a copy of the results summary to the addresses they provided on the initial consent form.

The Department of Corrections ethical requirements for the conduct of research with Correctional populations stated that the Department must be sent a copy of any research publications/presentations, prior to their release. The writer ensured this process was maintained when presenting the current research at the International Indigenous Research Symposium in Auckland 2012, when presenting at the New Zealand Psychological Society Annual Conference in Auckland 2013, when presenting at the Ngāti Whakaue Education Board of Trustees meeting in Rotorua 2013, when presenting at Te Aō Marama in 2013, when presenting at Te Taarere aa Taawhaki Seminar Series in Waikato-Tainui 2014, and when presenting at 13th Annual Hawaii International Conference on Arts & Humanities 2015. The Department of Corrections was also sent a copy of the paper "*Exploring Client Change in Waikeria Prison's Māori Focus Unit (MFU): Te Aō Marama* " prior to publication in *Psychology Aotearoa* (Chalmers, Williams & Gavala, 2012), and a copy of the summary of research results (Appendix G).

Chapter 5: Results

Data analysis was conducted using Data Desk 6.0.1 (Windows, 1996). Preliminary analyses were conducted to screen for missing data and outliers (Appendix I), and to test for the violation of normality (Appendix K). The GLM analysis accounted for any missing data. When outliers were found through inspection of the GLM result plots, the outlier was removed from the analysis; this made no difference to the conclusions (Appendix J).

Following this, trends were explored with descriptive statistics. The number of participants was variable, due to participants leaving and entering the study, and missing data. The bivariate table presented correlations between variables in the study (Table 5). Convergent validity between subscales of similar construct (Tables 6 and 7), were tested to explore whether they were poorly correlated (measuring different constructs), adequately correlated (measuring different aspects of the same construct), or very highly correlated (redundant, Cohen, 1988).

Descriptive statistics and the GLM were then employed in answering research questions one and two (Madsen & Thyregod, 2010). When appropriate, the GLM was substituted for the repeated measures (t-test), or the non-normal equivalent (Wilcoxon test). A GLM stepwise was employed for research questions three and four, and was computed manually due to data consisting of both continuous and categorical variables (Madsen & Thyregod, 2010). Finally, research question five was addressed through percentages and graphs, supplemented by direct quotations.

Descriptive Statistics

The mean, standard deviation and range for each subscale, along with the number of respondents at each of the four time points, are reported in Table 3 and Table 4. Skew and

kurtosis values, and normal probability plot of residuals (Appendix K) indicated that the data were not unduly skewed or in violation of the assumption of normality.

The HOSR and HONP subscale mean scores could range between -8 to 8, with -8 being poor wellbeing and 8 being excellent wellbeing (Kingi, 2002). The HOSR and HONP total scores could range between -32 to 32, with -32 to -16 indicating 'poor' well being, -16 to 0 indicating 'unsatisfactory' wellbeing, 0 indicating 'no change', 0-16 indicating 'good' wellbeing and 16 to 32 indicating 'excellent' wellbeing (Kingi, 2002). Table 3 suggested that participants self-reported Wairua, Hinengaro, Tinana and Whānau levels all increased over time spent in the unit. In the Hinengaroa subscale, there was a slight decrease between time 1 to time 2, which did not affect the overall trend (see later GLM results). The HOSR total score, mirrored the subscale score trend, with overall well being scores all in the 'excellent' range, and all increasing over time spent in the unit.

The HONP Wairua mean score appeared to increase over each of the four time points, with the exception of time point two, which decreased (0.61). The Hinengaro, Tinana and Whānau mean scores did not increase at each time point as reflected in the HOSR trends, with no pattern in mean scores identified across time. This was also reflected in the HONP total score, which fell in the 'excellent' range, but did not increase over each time point. This was later explored in the GLM analysis section to identify if any patterns in scores over each time point existed.

The CSS-M subscale ALCP, had scores that could range from 0 to 50, the TLV subscale had scores that could range from 0 to 20, and the ICO subscale had scores that could range from 0 to 12. The CSS-M total score could range from 0 to 82. The descriptive statistics (Table 3) for the ALCP and the ICO decreased from time point one to time point four; however, there did not appear to be a trend in mean scores across the four time periods, which was further explored through the GLM analysis. The TLV subscale mean scores

showed a decrease across each of the time points, suggesting that tolerance for law violations decreased with time spent in the unit. The CSS-M total reflected the TLV subscale, showed a decrease in score across the four time points, with the exception of time point two to three, which showed a slight increase (0.57). The CSS-M total mean scores fell between 36.85 to 40.54, with standard deviations of around 13.

The PID produced mean scores ranging from 0 to 200, with higher scores reflective of greater criminal attitudes. The descriptive statistics in Table 3 showed that participant's scores on the PID decreased across the first three time points, but then increased at time point four, to a level less than time point one, but more than that at time point two. When exploring this result, the range in scores and standard deviation at this time period both appear to be in normal proximity to the other time points. Therefore, it is hypothesized that the increase in score may be a reflection of participants becoming more familiar and comfortable with the researcher over time, and subsequently, social desirability decreasing over time (Rossiter, 2009). However, the GLM analysis (see hypothesis 1.3) suggested that this increase in mean score did not affect the overall trend in PID scores across time spent in Te Aō Marama. The PID mean scores in the current study ranged from 79.67 to 59.78, with standard deviations of around 40.

The CU rating, used as a measure of Māori cultural identity both before and after participation in Te Aō Marama, had scores that could range from 1 to 5 (Table 4). The programme attendance rating before participating in Te Aō Marama had scores that could range from 0 to 14, and the programme attendance rating after participating in Te Aō Marama had scores that could range from 0 to 9. The incidents and misconducts rating before participating in Te Aō Marama had scores that could range from 0 to 15, and the incidents and misconducts rating after participating in Te Aō Marama had scores that could range from 0 to 11. The descriptive statistics (Table 4) suggested that offenders' cultural understanding

increased after participation in Te Aō Marama. Offenders' programme attendance also increased after spending time in Te Aō Marama, while offenders' number of incidents and misconducts decreased after Te Aō Marama participation. These finding were further explored through the repeated measures analysis (t-test, Figure 2), or the non-normal equivalent (Wilcoxon test, Figures 8 and 9).

Table 3

Descriptive Statistics for the Hua Oranga Self Report, Hua Oranga Nominated Person, Criminal Sentiments Scale Modified, and the Pride in Delinquency Scale at Four Time Periods Spent in Te Aō Marama

Time	*M(SD)*				Range				Skew	Kurtosis
	1	2	3	4	1	2	3	4		
Hua Oranga-Self-report (HOSR)	*N*=40	*N*=40	*N*=39	*N*=39						
Taha Wairua	4.65 (1.9)	4.99(2.3)	5.28(2.3)	6.21 (2.1)	0-8	0-8	0-8	1-8	0.10	0.12
Taha Hinengaro	5.71 (2.3)	5.68(2.4)	5.87(2.2)	6.41(1.9)	0-8	0-8	0-8	2-8	-0.98	0.37
Taha Tinana	5.00(2.7)	5.20(2.5)	5.77(2.3)	6.07(2.1)	-4-8	0-8	0-8	-1-8	-1.22	2.12
Taha Whānau	4.95(2.7)	5.53(2.3)	5.67(2.5)	6.10(2.2)	-2-8	0-8	0-8	1-8	-0.76	0.05
Self-report Total	20.31(8.2)	21.39(8.3)	22.59(7.9)	24.79(6.8)	2-32	2-32	0-32	4-32	-0.53	-0.22
Hua Oranga-Nominated Person (HONP)	*N*=37	*N*=36	*N*=27	*N*=34						
Taha Wairua	5.00(1.7)	4.39(2.4)	5.15(2.4)	5.79(1.6)	2-8	0-8	1-8	3-8	0.55	-0.74
Taha Hinengaro	5.24(2.0)	3.86(2.4)	4.48(1.9)	5.33(1.7)	1-8	-1-8	0-8	3-8	0.04	-1.05
Taha Tinana	5.62(2.3)	4.00(3.1)	5.78(2.2)	5.44(2.7)	-1-8	-8-8	0-8	0-8	-0.99	0.64
Taha Whānau	5.70(1.8)	3.94(3.2)	3.59(2.7)	5.06(2.0)	3-8	-8-8	0-8	2-8	-0.01	-1.52
Nominated Person Total	21.57(5.7)	16.19(9.4)	19.00(6.7)	21.63(6.6)	11-32	-13-32	7-32	9-32	-0.11	-1.16
Criminal Sentiments Scale-Modified (CSS-M)	*N*=40	*N*=40	*N*=*	*N*=39						
ALCP	24.42(9.9)	22.52(9.3)	22.76(9.7)	23.07(8.4)	5-44	6-47	5-48	8-46	-0.26	-0.60
TLV	9.78(3.7)	9.15(4.4)	9.05(4.0)	8.59(4.8)	3-17	2-18	0-17	0-19	0.32	-0.47
ICO	6.34(2.1)	5.18(1.8)	5.65(2.1)	5.61(2.3)	1-11	2-9	2-9	1-11	0.26	0.22
CSS-M Total	40.54(12.9)	36.85(13.4)	37.42(13.9)	37.27(13.3)	15-63	13-71	12-73	15-72	-0.15	-0.76
Pride in Delinquency (PID)	*N*=40	*N*=39	*N*=39	*N*=39						
PID Total	79.67(39.1)	62.39(38.3)	59.78(40.4)	68.20(41.6)	0-158	0-140	0-173	0-153	-0.39	-0.61

Note. ALCP is Attitudes Towards Law, Courts, and Police TLV is Tolerance for Law Violations, ICO is Identification with Criminal Others, CSS-M Total is Criminal Sentiments Scale Total score, PID total is Pride in Delinquency scale total score. Range of scores on the Hua Oranga self report and nominated person is -8 to 8 for each subscale, -32 to 32 for totals, ALCP is between 0 to 50, TLV is between 0 to 20, ICO is between 0 to 12, the CSS-M total is between 0 to 82, and the PID total ranges between 0 to 200. Time 1 was 05/12/ 2011, Time 2 was 17/01/2012, time 3 was 27/02/2012, and time 4 was 9/04/2012.

Table 4

Descriptive Statistics for the Cultural Understanding Rating, the Programme Attendance Rating and the Incidents and Misconducts Rating Before and After Joining Te Aō Marama (N=43)

Time	M(SD)		Range	
	Before	After	Before	After
Cultural Understanding (CU)	2.28(1.2)	3.88(0.9)	1-5	1-5
Programme Attendance	0.85(3)	2.72(2.3)	0-14	0-9
Incidents and Misconducts	0.90(2.4)	0.31(1.8)	0-15	0-11

Note. Before ratings for the CU indicate participants predicted ratings of their CU prior to Te Aō Marama entry. Before ratings for Programme Attendance and Incidents and Misconducts indicate number of programmes offenders participated in, and number of incidents and misconducts they committed, prior to entering the MFU, gathered from their prison files. After ratings for the CU, Programme Attendance and Incidents and Misconducts were gathered at the last data collection period: 9/04/2012.

Bivariate Analysis

Pearson product-moment correlation coefficients were employed across the total score for the two wellbeing measures (HOSR and HONP), across the total score for both the anti-social attitude and cognition measures (CSS-M and PID), across programme attendance before and after difference score, incident and misconduct rating before and after difference score, and CU before and after difference score, and across the demographic variables age and RoC*RoI (Table 5). Correlations could not be computed with the variables Group (representative of how long the participant had been in the unit at time 1) and Gang membership, as these constructs consisted of categorical data. Group was further explored in the analysis of groups (research question 2), and Gang membership was further explored in the GLM stepwise analysis of variables (research question 3). In a positive or negative direction, 0.10- 0.29 is a small/weak correlation, 0.30 -0.49 medium/moderate and 0.50 – 1.0 large/strong correlation (Cohen, 1988).

Table 5

Pearson Correlation Coefficients and Significance Across the Total Scores for Each of the Measures, Programme Attendance, Incidents and Misconducts, Cultural Understanding, Age and RoC*RoI (N=40)

Measure	1	2	3	4	5	6	7	8	9
1. HOSR Total	---	-.02	-.06	-.14	.05	-.08	*.41	.10	-.06
2. HONP Total		---	-.07	-.03	-.07	-.09	-.04	-.22	-.16
3. CSS-M Total			---	**.55	.15	-.07	-.06	-.25	.24
4. PID				---	.11	-.02	-.16	**-.54	**.41
5. Programme Attendance Diff					---	-.26	.16	-.15	.11
6. Incidents and Misconducts Diff						---	.09	.17	-.01
7. Cultural Understanding Diff							---	*-.42	-.02
8. Age								---	---
9. RoC*RoI									---

p<0.05 (two tailed), **p<0.01(two tailed)

Note: The correlation between Age and RoC*RoI is not provided given that age is a factor within the RoC*RoI measure and therefore, a correlation between the two constructs would be expected. Wellbeing measures: HOSR total is Hua Oranga Self Report total, HONP total is Hua Oranga Nominated Person Total. Anti-social cognition measures: CSS-M total is Criminal Sentiments Scale Modified total, PID total is Pride In Delinquency total. Programme Attendance Diff, Misconducts Diff, and Cultural Understanding Diff are the before and after Te Aō Marama difference scores, and RoC*RoI is risk of re-conviction and risk of re-imprisonment.

Preliminary analyses were performed, and there were no violations of the assumption of normality, linearity or outliers. Significant correlations falling in the moderate to strong range will be outlined below.

Person product-moment correlation coefficients (Table 5) suggested a moderate positive correlation between RoC*RoI and PID suggesting that participants with a high RoC*RoI tended to have high PID scores (r=0.41, p=0.01). This finding would be expected, considering anti-social attitudes and cognitions have been shown to predict recidivism (Simourd & Van de Ven, 1999) and the RoC*RoI is a static measure used to assist in the prediction of re-offending (Bakker et al., 1999).

Person product-moment correlation coefficients (Table 5) also suggested a moderate positive correlation between CU difference score and HOSR total (r= 0.41, p= <0.05). This may suggest that participants who experienced a high level of change in their cultural understanding after participating in Te Aō Marama also experienced a high increase in their self-reported wellbeing. This finding was consistent with Māori cultural literature, which indicated a relationship between Māori cultural understanding and wellbeing (Cooper, 2012; Durie, 2001; Kruger et al., 2004; Moeke-Pickering, 1996; Wenn, 2007).

A moderate negative correlation was found between CU difference score and age (r=-0.42, p=<0.05). Therefore, as participants age their change in Māori cultural understanding decreases. Further, as participants age, their pride in delinquency decreases, therefore older participants tended to have lower PID scores (r= -0.54, p<0.01). Literature supports the prospect of age being negatively related to criminality, with crime propensity declining with age (Hirschi & Gottfredson, 1983: Gottfredson & Hirschi, 1990; Tittle & Grasmick, 1997: Laub & Sampson, 2003)

Finally, the two anti-social attitude and cognition measure totals displayed a strong positive correlation (r= 0.55, p= <0.01), with participants who displayed high pride in

delinquency also displaying high criminal sentiments. This finding will be further explored in the convergent validity between measures section below. No other variables were found to be significantly correlated.

Convergent Validity between Measures

The relationship between the subscales and total scores of the anti-social attitude and cognition measures, and the relationship between the subscales and total scores of the wellbeing measures were examined using Pearson product-moment correlation coefficients (Cohen, 1988). Preliminary analyses were performed, and there were no violations of the assumption of normality, linearity or outliers. Tables 6 illustrates the results for the CSS-M and the PID (N=39), and Table 7 illustrates the results for the HOSR and HONP (N=31).

Anti-social attitude and cognition measures. A product-moment correlation considered by Cohen (1988) to be large, demonstrated strong convergent validity between the CSS-M total and the PID (r= 0.55, p= <0.01, Table 5). It was predicted that these anti-social attitude and cognition measures would have a significant correlation, falling in the strong correlation range, as a low or insignificant correlation may have suggested they were measuring different constructs, yet an extremely high correlation may have suggested that they were measuring the same aspect of anti-social attitudes and cognitions, and therefore they would be redundant. The strong correlation found suggested that the measures could be used to complement one another, a finding consistent with Yessine and Kroner's (2004) study.

Significant correlations between the CSS-M subscales and the PID were also found (Table 6), with a moderate correlation between the ALCP and the PID, a high correlation

between the TLV and the PID, and a weak correlation between the ICO and the PID, consistent with Mills' (2000) study.

When investigating the relationship within the CSS-M subscales, the ALCP and the TLV displayed high correlations with each other, and with the CSS-M total, a similar finding to Visu-Petra, Borlean, Chendran, and Buş (2008), whereas the ICO subscale displayed weak to medium correlations with the ALCP, TLV and CSS-M total (Table 6). Morgan, Fisher, Duan, Mandracchia, and Murray (2010), also found the ICO to have differing results to the other CSS-M subscales. This will be further explored in the discussion section.

Table 6

Pearson Correlation Coefficients and Significance for the Anti-Social Attitude and Cognition Scales; CSS-M and the PID, Subscales and Total Scores (N=39)

Measure Subscale	ALCP	TLV	ICO	CSS-M Total	PID
ALCP	---	**.62	**.32	**.60	**.46
TLV		---	**.43	**.66	**.53
ICO			---	**.39	**.38
CSS-M Total				---	**.55
PID Total					---

* p < 0.05 (two tailed), **p<0.01 (two tailed)

Note. The ALCP (attitudes towards the law, courts, and police), the TLV (tolerance for Law Violations), and the ICO (identification with Criminal Others) are all subscales of the CSS-M (criminal sentiments scale modified).

Self-report and nominated person wellbeing measures. Product-moment correlation coefficients between the HOSR and the HONP, suggested very poor convergence between the two stakeholders total scores and all subscale scores, with no significant correlations found (Table 7). McClintock and others (2010) presented similar findings to the current study, with limited significant correlations found between the differing stakeholder's subscales. The lack of correlation between stakeholders suggested that the participant and the nominated person may carry significantly different perspectives of the participant's wellbeing.

When exploring the relationship within the subscales of each stakeholder, the HOSR and HONP both had high correlations between their own subscales (with the exception of Hinengaro NP with Tinana NP which is moderate; Table 7). Both measures had high cronbach's alpha across their subscales suggesting internal consistency of each stakeholder's perspective, and the validity of the HO measure.

HO founders Durie and Kingi (1997) suggested that the scores from each stakeholder should be combined to produce a final outcome score. However, as each stakeholder carries an individual perspective of participant wellbeing, the current study chose not to incorporate the participant's and nominated person's responses, but rather explore both responses separately. This allowed for the differences between stakeholders perspectives of wellbeing to be further explored (see GLM results Figures 3-7) and also allows for the exploration of the HOSR measure in relation to the other self-report measures used in this study (Smith & Trinder, 2001).

Table 7

Pearson Correlation Coefficients and Significance for the Hua Oranga Self-Report (SR) and Nominated Persons (NP) Subscales and Total Scores (N=31)

Measure Subscale	1	2	3	4	5	6	7	8	9	10
1. Wairua SR	---	**.68	**.59	**.59	**.71	-.08	-.08	-.09	-.15	-.13
2. Hinengaro SR		---	**.62	**.72	**.79	.02	.01	-.00	.09	.04
3. Tinana SR			---	**.60	**.68	.01	-.06	.07	-.03	.00
4. Whānau SR				---	**.73	.04	-.05	.01	.03	.01
5. SR Total					---	-.00	-.05	.00	-.02	-.02
6. Wairua NP						---	**.60	**.51	**.52	**.65
7. Hinengaro NP							---	**.40	**.60	**.63
8. Tinana NP								---	**.55	**.58
9. Whānau NP									---	**.68
10. NP Total										---

* p < 0.05 (two tailed), **p<0.01 (two tailed).

Note. SR is the self-report scale and NP is the nominated person scale.

Research Questions

1. **Does Te Aō Marama have an effect on attitudinal and behavioural change for offenders?**

   Hypothesis 1.1. Offenders in Te Aō Marama will experience an increase in their Māori cultural identity. Due to the poor reliability of the MMM-ICE RS31 questionnaire, the separate CU rating was retained as a measure of Māori cultural identiy.

   Participants were asked to rate their level of cultural understanding prior to joining Te Aō Marama (CU before), and then to rate their level of cultural understanding at the current time; when housed in Te Aō Marama (CU after). Descriptive statistics were presented in Table 4. The paired t test (or the repeated measures anova) was used to evaluate CU before and CU after ratings, as it allows for the analysis of matched pairs, with normal data (Palant, 2005). Appraisal of cultural understanding (before and after) is shown below.
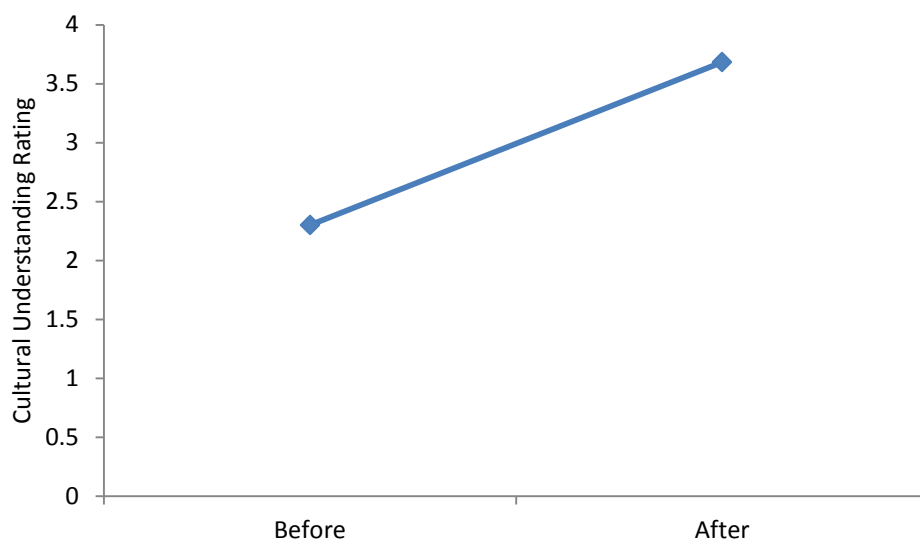
Figure 2. Participants' self ratings of cultural understanding before and after joining the Te Aō Marama.

   Participants indicated that their cultural understanding had significantly increased since joining Te Aō Marama ($t,(59) = 10.1$, $p<.0001$). Increases in cultural understanding

found after joining Te Aō Marama suggested that the unit has had some positive influence on participants' level of cultural understanding.

Hypothesis 1.2. Offenders in Te Aō Marama will experience an increase in their wellbeing. This will be evidenced by participants' scores on the HOSR and HONP subscales; Wairua, Hinengaro, Tinana and Whānau.

Wairua (Spiritual Wellbeing). The GLM results suggested that participants' self-reported Wairua scores increased significantly over time spent in Te Aō Marama; $F(1,98)=21.50$, $p<0.01$ (Figure 3). Participants' Wairua rating increased by 0.57 at each six-week time point. To estimate how much participants scores may change over a one year period, the calculation of 52/6 would provide the number of how many of the 6 week change periods an offender would experience over one year (52 weeks). This calculation results in 8.67. When this number is multiplied by 0.57, which is the 6 week level of change for Wairua, the total would provide the estimated amount an offender's Wairua would change over one year (based on the level of change they experienced over the 6 week period). From this data, it is estimated that participants' self-reported Wairua rating may increase by 4.94 on average over one year spent in the unit (8.67x0.57=4.94), suggesting that as participants time spent in Te Aō Marama increased, their self-reported spiritual wellbeing also increased.

The GLM results for the nominated persons Wairua also showed an increase in score over time spent in Te Aō Marama, but not at a significant level; $F(1,77)=3.50$, $p =0.07$. (Figure 3). Nominated persons' Wairua rating increased by 0.32 at each six-week time point. From this data, it is estimated that nominated persons Wairua ratings may increase by 2.77 on average over one year spent in the unit (8.67x0.32=2.77), suggesting that as participants' time spent in Te Aō Marama increased, their nominated person's perception of their spiritual wellbeing also increased.

Figure 3. The GLM results for the HOSR and HONP Wairua subscale.

Hinengaro (psychological/emotional wellbeing). The GLM results suggested that participants' self-reported Hinengaro scores increased significantly over time spent in Te Aō Marama: $F(1,98)=4.72$, $p =0.03$ (Figure 4). Participants' Hinengaro rating increased by 0.27 at each six-week time point. From this data, it is estimated that participants' Hinengaro rating may increase by 2.34 on average, over one year spent in the unit ($8.67\times0.27=2.34$), suggesting that as participants' time spent in Te Aō Marama increased, their self-reported psychological/emotional wellbeing increased.

The GLM results suggested that nominated persons' Hinengaro scores decreased over time spent in Te Aō Marama, but not at a significant level: $F(1,77)=0.62$, $p =0.43$ (Figure 4). Nominated persons' Hinengaro rating decreased by 0.12 at each six-week time point. From this data, it is estimated that NP2 ratings may decrease by 1.04 on average over one year spent in the unit ($8.67\times0.12=1.04$), suggesting that as participants' time spent in Te Aō Marama increased, their nominated person's perception of their psychological/emotional wellbeing decreased.
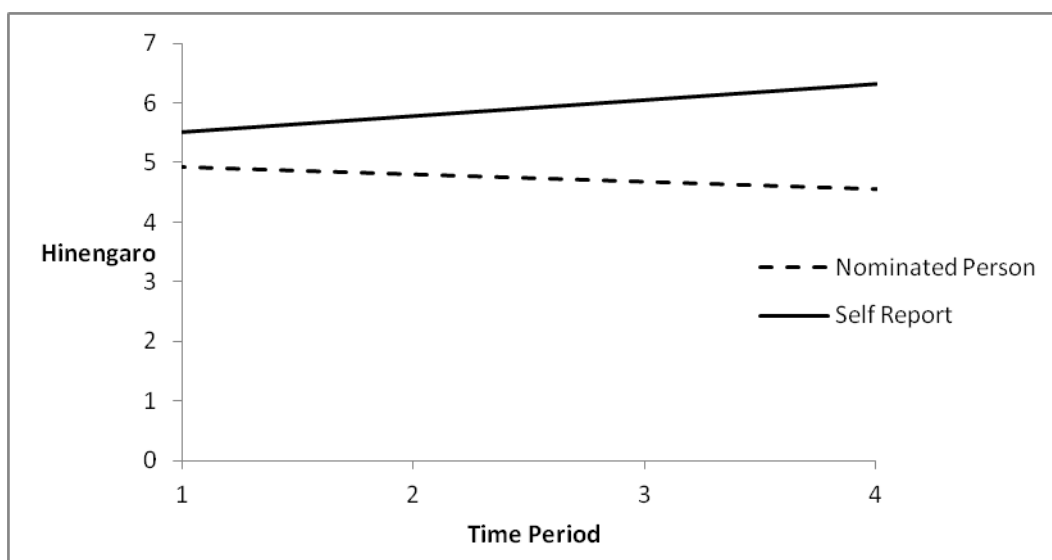
Figure 4. The GLM results for the HOSR and HONP Hinengaro subscale.

Tinana (physical wellbeing). The GLM results suggested that participants' self-reported Tinana scores increased significantly over time spent in Te Aō Marama: $F(1,98)=5.34$, p $=0.023$ (Figure 5). Participants' Tinana rating increased by 0.32 at each six-week time point. From this data, it is estimated that participants' Tinana rating may increase by 2.77, on average, over one year spent in the unit ($8.67 \times 0.32 = 2.77$), suggesting that, as participants' time spent in Te Aō Marama increased, their self-reported physical wellbeing also increased.

The GLM results suggested that nominated person's Tinana scores increased over time spent in Te Aō Marama, but not at a significant level: $F(1,77)=.90$, p $=0.35$ (Figure 5). Nominated person's Tinana rating increased by 0.16 at each six-week time point. From this data, it is estimated that NP3 ratings may increase by 1.39 on average over one year spent in the unit ($8.67 \times 0.16 = 1.39$), suggesting that as participants' time spent in Te Aō Marama increased, their nominated person's perception of their physical wellbeing increased.
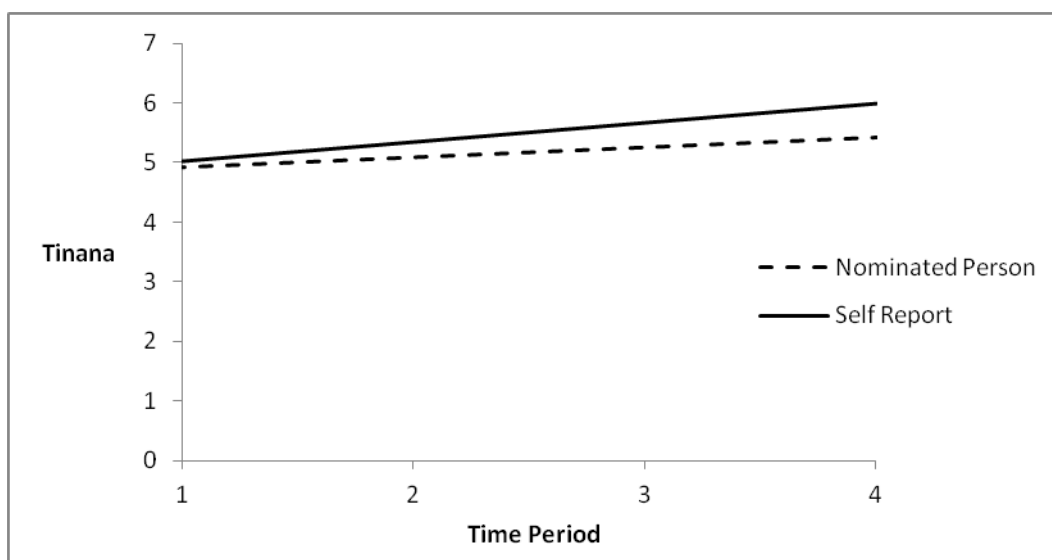
Figure 5. The GLM results for the HOSR and HONP Tinana subscale.

Whānau (family wellbeing). The GLM results suggested that participants' self-reported Whānau scores increased over time spent in Te Aō Marama, but not at a significant level: $F(1,98)=2.96$, p $=0.0887$ (Figure 6). Participants' Whānau rating increased by 0.18 at each six-week time point. From this data, it is estimated that participants' Whānau rating may increase by 1.56, on average, over one year spent in the unit ($8.67\text{x}0.18=1.56$), suggesting that as participants' time spent in Te Aō Marama increased, their self-reported family wellbeing also increased.

The GLM results suggested that nominated person's Whānau scores decreased over time spent in Te Aō Marama, but not at a significant level: $F(1,77)=2.27$, p $=0.14$ (Figure 6). Nominated person's Whānau rating decreased by 0.29 at each six-week time point. From this data, it is estimated that nominated person's ratings may decrease by 2.51 on average over one year spent in the unit ($8.67\text{x}-0.29=-2.51$). This suggests that, as participants' time spent in Te Aō Marama increased, their nominated person's perception of their family wellbeing decreased.
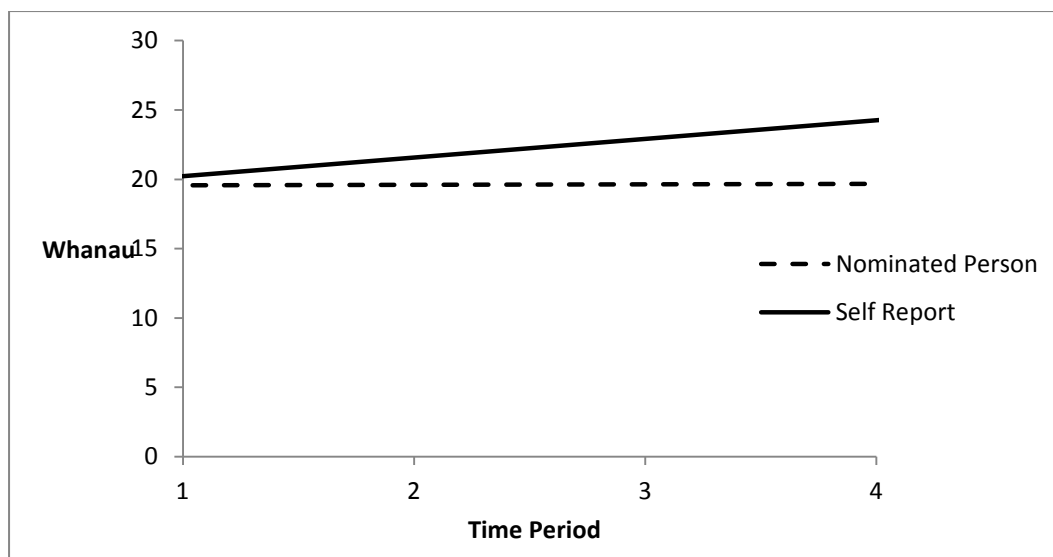
Figure 6. The GLM results for the HOSR and HONP Whānau subscale.

HO total (overall Māori wellbeing). The GLM results suggested that participants'
HOSR total scores increased significantly over time spent in Te Aō Marama: $F(1,98)=13.49$,
$p =0.0004$ (Figure 7). The HOSR total rating increased by 1.35 at each six-week time point.
From this data, it is estimated that the HOSR total may increase by 11.70, on average, over
one year spent in the unit ($8.67 \times 1.35=11.70$), suggesting that, as participants' time spent in
Te Aō Marama increased, their self-reported overall Māori wellbeing also increased.

The GLM results suggested that HONP total scores increases over time spent in Te
Aō Marama, but not at a significant level: $F(1,77)=0.02$, $p =0.90$ (Figure 7). The HONP
total rating increased by 0.06 at each six-week time point. From this data, it is estimated that
the HONP total may increase by 0.52 on average over one year spent in the unit
($8.67 \times 0.06=0.52$), suggesting that, as participants' time spent in Te Aō Marama increased,
their nominated person's perception of their overall Māori wellbeing also increased.
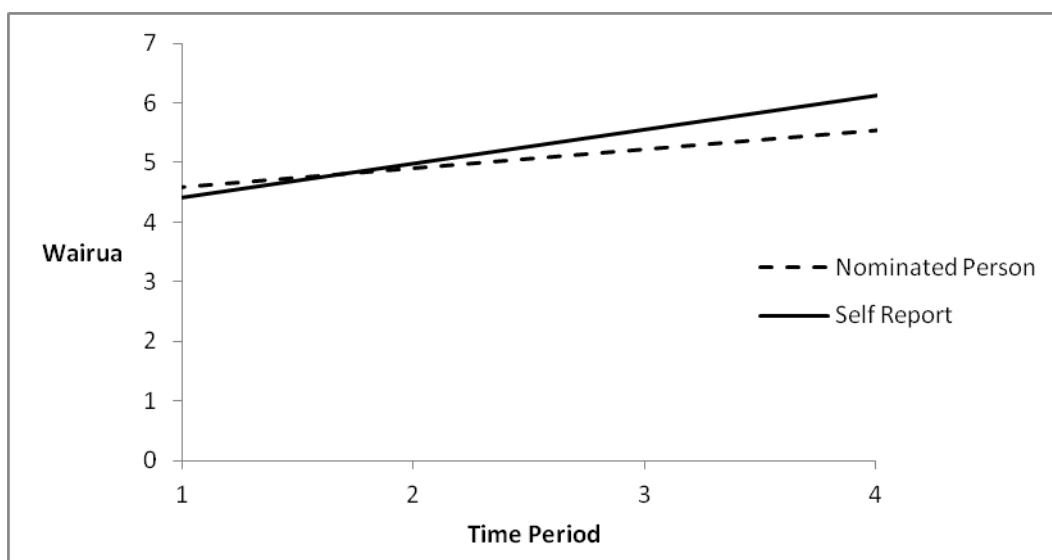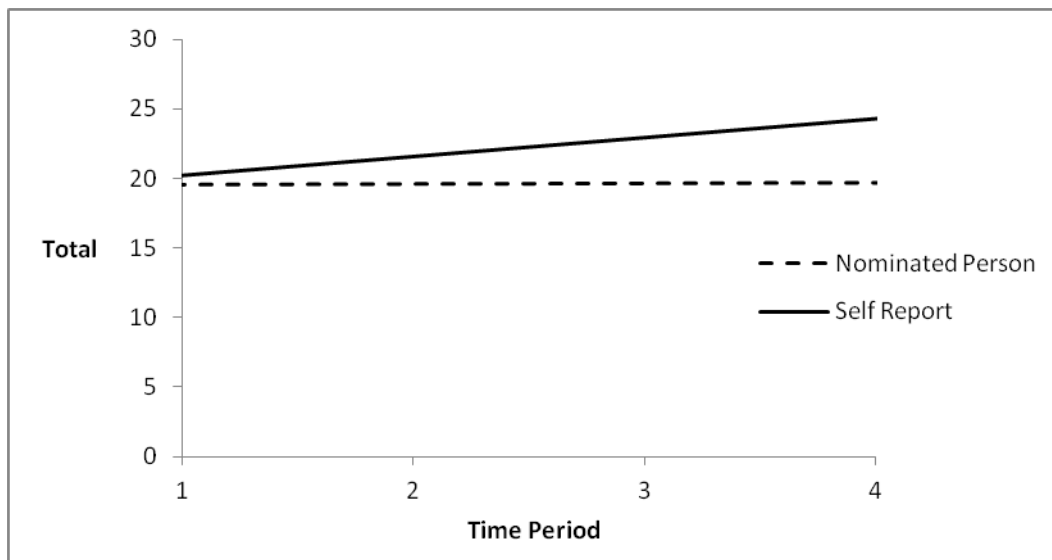
Figure 7. The GLM results for the HOSR and HONP total score.

These HO results are consistent with hypothesis 1.2, as offenders experienced a significant increase across Wairua, Hinengaro, Tinana and overall wellbeing, with the exception of whānau which increased but not at a significant level. The HONP results were not consistent with the HOSR, with Wairua, Tinana and overall wellbeing increasing, but not at a significant level, and Hinengaro and Whānau decreasing, but not at a significant level. These results supported the previous correlation coefficient findings, which found very poor convergence between the two stakeholders, suggesting the participant and nominated person may hold different perceptions of the participant's wellbeing.

Hypothesis 1.3. Offenders in Te Aō Marama will experience a decrease in anti-social attitudes and cognitions. This will be evidenced by participants scores across the ALCP, TLV, ICO, CSS-M total and in the PID, over time spent in Te Aō Marama.

ALCP. The GLM results suggested that ALCP scores significantly decreased over time spent in Te Aō Marama: $F(1,98)=6.22$, p $=0.01$. Participants' ALCP rating decreased by 0.93 at each six-week time point. From this data, it is estimated that ALCP ratings may decrease by 8.06 on average over one year spent in the unit (8.67x-0.93=-8.06), suggesting that, as participants' time spent in Te Aō Marama increases, their attitudes towards the law, the court, and the police decreases.

TLV. The GLM results suggested that TLV scores significantly decreased over time spent in Te Aō Marama: $F(1,97)=4.95$, p $=0.03$. Participants' TLV rating decreased by 0.41 at each six-week time point. From this data, it is estimated that TLV ratings may decrease by 3.55 on average over one year spent in the unit (8.67x-0.41=-3.55), suggesting that, as participants' time spent in Te Aō Marama increases, their tolerance for law violations decreases.

ICO. The GLM results suggested that ICO scores decreased over time spent in Te Aō Marama, but not at a significant level: $F(1,97)=0.84$ p$=0.36$. Participants' TLV rating decreased by 0.12 at each six-week time point. From this data, it is estimated that TLV ratings may decrease by 1.04 on average over one year spent in the unit (8.67x-0.12=-1.04), suggesting that, as participants' time spent in Te Aō Marama increases, their identification with criminal others decreases.

Overall CSS-M. The GLM results suggested that CSS-M scores significantly decreased over time spent in Te Aō Marama: $F(1,97)=8.0$, p$=0.006$. Participants' CSS-M rating decreased by 1.44 at each six-week time point. From this data, it is estimated that CSS-M ratings may decrease by 12.48 on average over one year spent in the unit (8.67x-1.44=-12.48), suggesting that, as participants' time spent in Te Aō Marama increases, their criminal sentiments decreases.

PID. The GLM results suggested that participants PID scores decreased significantly over time spent in Te Aō Marama: $F(1,97)=5.9$, p <0.05. Participants' PID rating decreased by 4.2 at each six-week time point. From this data, it is estimated that participants' PID may decrease by 36.41 over one year spent in the unit ($8.67x-4.2=-36.41$) suggesting that, as participants' time spent in Te Aō Marama increases, their pride in delinquency decreases.

These results were consistent with the descriptive statistics (Table 3) for the TLV, which suggested a decrease in mean score at each time point, and the descriptive statistics for the ICO, which suggested a decrease from time point one to time point four, but not a decrease over all time points (reflective of the GLM insignificant decrease over time in the unit). However, the GLM results differed from the descriptives for the ALCP, CSS-M total, and the PID, with Table 3 suggesting no consistent decrease in mean score at each time point for these scales, but the GLM findings showing a significant decrease over time. The GLM removed between subject variability and identified the trend in participant change across time spent in the unit that the descriptives alone were unable to discover (Berridge & Crouchley, 2011).

Hypothesis 1.4. Offenders in Te Aō Marama will experience an increase in programme attendance (pro-social behaviour).

Participants' programme attendance before joining Te Aō Marama (before), and then while in Te Aō Marama (after) was recorded from their prison files. Descriptive statistics were presented in Table 4. The data was non-normal due to the number of zeros. Some degree of non-normality is expected when measuring psychological constructs (Pallant, 2005), however this degree of non-normality suggested parametric tests were unsuitable. The Wilcoxon test, the non-parametric equivalent of the repeated measures (Green & Salkind, 2008), was used to evaluate programme attendance before MFU and after MFU entry, as it

allowed for the analysis of matched pairs with non-normal data (Green& Salkind, 2008).
Ratings of programme attendance (before and after) are shown in Figure 8.
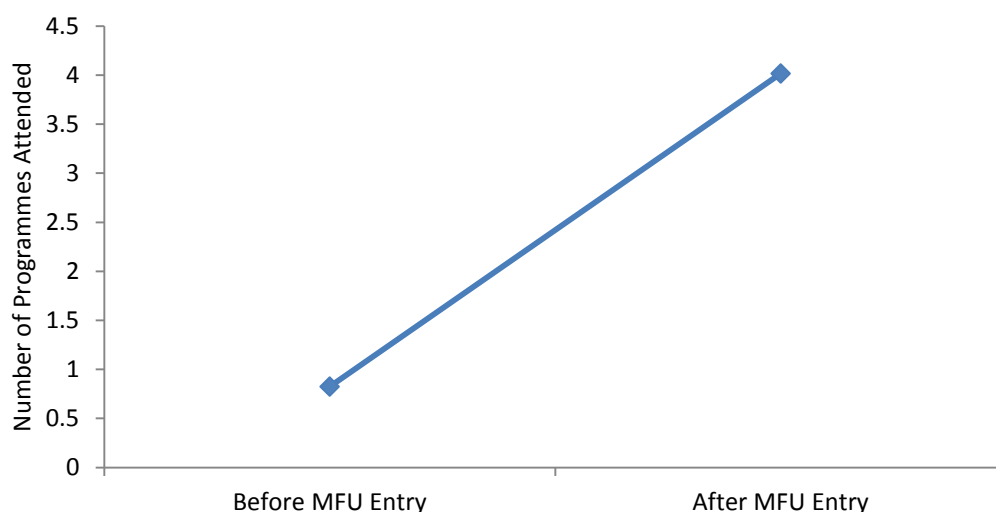
Figure 8. Participants' attendance in prison programmes before and after joining Te Aō Marama.

Participants' file information suggested that programme attendance had significantly increased since joining Te Aō Marama, with an average of 0.8 programmes attended when in the general prison population, and an average of 4.0 when in Te Aō Marama. A significant increase in programme attendance was found (Wilcoxon test, n=45 Z=4.39 p<0.001). Increases in programme attendance found after joining Te Aō Marama suggests that the unit has had some positive influence on participants engaging in programmes.

Hypothesis 1.5. Offenders in Te Aō Marama will experience a decrease in incidents and misconducts committed (anti-social behaviour).

Participants' anti-social behaviour was rated by recording incidents and misconducts committed from participants' prison files before joining Te Aō Marama (before), and then while in Te Aō Marama (after). Descriptive statistics were presented in Table 4. The

Wilcoxon test was used to evaluate incidents and misconducts committed before MFU and after MFU, as it allows for the analysis of matched pairs with non-normal data (Green & Salkind, 2008). The participants were assessed on two occasions (before MFU entry and after MFU entry). The usual matched pairs t test is invalid because the data is non-normal (Pallant, 2005). Ratings of incidents and misconducts (before and after) are shown in Figure 9.
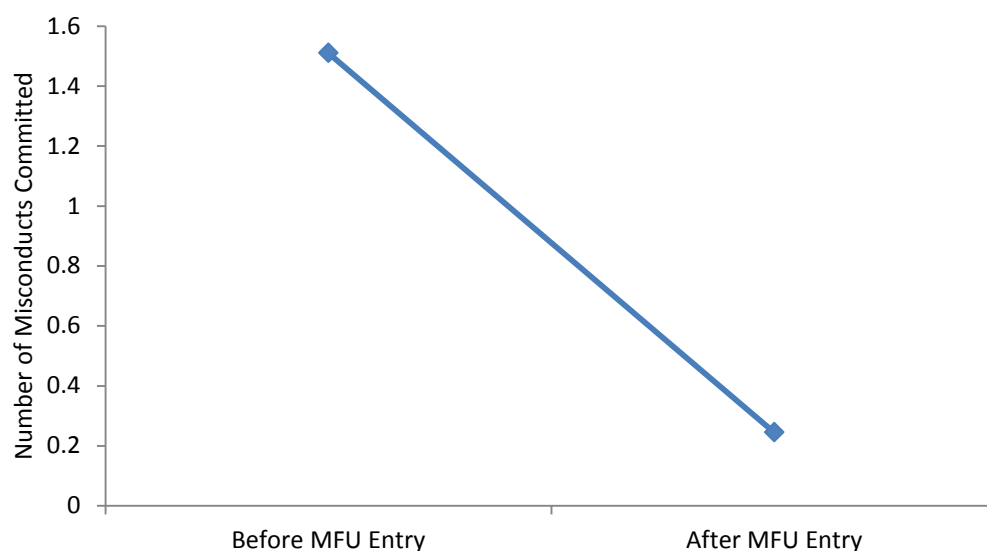
Figure 9. Participants incident and misconduct rate before and after joining Te Aō Marama.

Participants' file information suggested that incidents and misconducts had decreased significantly since joining Te Aō Marama, with an average of 1.5 incidents and misconducts committed when in the general prison population, and an average of 0.2 when in Te Aō Marama. A significant decrease in incidents and misconducts was found (Wilcoxon test, n=45 Z=2.16 p=0.001). Decreases in incidents and misconducts found after joining Te Aō Marama suggest that the unit has had some positive influence on decreasing anti-social behaviour.

2. Are there differences in change between offenders who are new to Te Aō Marama (0-6 months stay) compared to offenders who have spent greater periods of time in the unit (6-12 months, 12-24 months, and 24 + months stay)?

Hypothesis 2.1. As offenders length of stay in Te Aō Marama increases, change across Māori cultural identity, wellbeing, anti-social attitudes and cognitions, programme attendance, and incidents and misconducts will also increase.

Participants were divided into four groups according to time spent in the unit. Group A consisted of participants who had been in the unit for 0-6 months at the time of their first data entry, Group B consisted of participants who had been in the unit for 6-12 months at the time of their first data entry, Group C consisted of participants who had been in the unit for 12-24 months at the time of their first data entry, and Group D consisted of participants who had been in the unit for 24 months or longer at the time of their first data entry. Given the small number of participants in each group, analysis of the CU rating, programme attendance and incident and misconduct scores could not be generated. Change across participant groups' wellbeing (HOSR and HONP) and anti-social attitudes and cognitions (CSS-M and PID) over the study period, were explored through descriptive statistics and the GLM analysis.

Preliminary analysis suggested the data was not unduly skewed or in violation of the assumption of normality. Descriptive statistics across each group (Table 8), suggested that participants who had been in the unit for the longest period of time at their first data collection (Group D), had the highest mean scores for self-reported Wairua, Hinengaro, Tinana, Whānau and Hua Oranga total, suggesting offenders who had been in the unit for the longest period of time had the highest levels of wellbeing. However, participants who had been in the unit for 12-24 months (Group C) reported the lowest level of overall wellbeing. For nominated persons' wellbeing, Group C and Group D had higher levels across the subscales than Group A and Group B, suggesting that nominated persons perceived higher

levels of wellbeing in offenders who had been in the unit for longer periods of time. Group C had higher levels of wellbeing given to them by their nominated person than what they rated themselves.

On the anti-social cognition measures, Group C had the lowest mean score for the ALCP and the CSS-M total, and Group D had the lowest score for ICO and PID. Surprisingly, Group C had the highest rating of PID, a finding inconsistent with their scores across the other anti-social attitudes and cognitions measure. On the TLV subscale Group B produced the lowest mean score. However, this was the only subscale in which Group C or Group D did not have the lowest mean rating. These descriptives suggest that participants who had been in the unit for longer periods of time had lower levels of anti-social attitudes and cognitions. These descriptive statistics were further explored through the GLM analysis.

A GLM analysis was performed to examine whether being in a particular group (representative of time in the unit), affected the change in scores across each subscale (results column in Table 8). For each scale, the average change over the survey time was calculated for each subject. If Te Aō Marama was most effective in the early stages of entry, or if there was a significant drop-off in Te Aō Marama effectiveness with time, then we might expect to find significant differences between the average change for each group.

For each sub-scale in turn, group was entered and tested for significance. The GLM compared all four groups (Group A, Group B, Group C, and Group D) with each other simultaneously and produced one p value for each subscale. A significant p value would suggest that there was only a small probability that differences between groups would be as large as this purely by chance.

The results (Table 8) suggested that the group was never a significant factor on any subscale, indicating no significant difference on level of change experienced over the study

period, by those that had been in the unit for various periods of time. These results will be further explored in the discussion section.

Table 8

Descriptive Statistic Averages of the Four Time Points, Across all Measures, for Group A (0-6 months), Group B (6-12 months), Group C (12-24 months, and Group D (24 + months) Spent in Te Ao Marama, (N=39)

	Group A (*N*=18)	Group B (*N*=7)	Group C (*N*=8)	Group D (*N*=6)	GLM Results
Hua Oranga-Self-report	*M(SD)*	*M(SD)*	*M(SD)*	*M(SD)*	
Taha Wairua	5.25(2.1)	5.60(2.1)	4.40(2.3)	6.95(1.6)	$F(3,27) = 0.61$, p= 0.61
Taha Hinengaro	5.94(2.0)	6.53(1.6)	5.41(2.6)	7.21(1.2)	$F(3,27) = 0.56$, p= 0.65
Taha Tinana	5.81(2.0)	5.64(2.8)	4.54(2.6)	6.47(2.2)	$F(3,27) = 0.14$, p= 0.93
Taha Whānau	5.46(2.3)	5.96(2.2)	5.07(2.8)	7.05(1.5)	$F(3,27) = 1.01$, p= 0.41
Self-report Total	22.46(7.2)	23.73(7.5)	19.42(8.6)	27.68(5.4)	$F(3,27) = 0.60$, p= 0.62
Hua Oranga-Nominated Person					
Taha Wairua	4.85(2.3)	4.61(1.6)	5.38(1.9)	6.18(1.7)	$F(3,24) = 2.13$, p= 0.12
Taha Hinengaro	4.51(2.0)	4.33(1.7)	5.29(1.8)	5.12(2.7)	$F(3,24) = 0.75$, p=0.54
Taha Tinana	5.27(2.4)	4.89(2.3)	4.86(2.5)	5.35(4.1)	$F(3,24) = 0.88$, p= 0.47
Taha Whānau	4.54(2.3)	4.94(2.4)	5.24(2.1)	3.35(4.0)	$F(3,24) = 0.20$, p= 0.90
Nominated Person Total	19.18(7.4)	18.78(6.9)	20.76(6.8)	20.00(10.5)	$F(3,24) = 1.23$, p= 0.32
Criminal Sentiments Scale					
ALCP	24.79(9.5)	23.96(9.2)	19.52(8.9)	22.23(5.3)	$F(3,27) = 0.36$, p= 0.78
TLV	9.69(4.7)	8.00(2.8)	8.42(4.2)	8.53(3.6)	$F(3,27) = 0.36$, p= 0.78
ICO	5.46(2.2)	5.96(1.8)	6.04(2.4)	5.37(1.2)	$F(3,27) = 0.96$, p= 0.43
CSS-M Total	39.94(13.3)	37.91(12.3)	33.97(13.5)	36.13(8.4)	$F(3,27) = 0.32$, p= 0.81
Pride in Delinquency Total	67.27(40.5)	66.20(42.0)	74.22(50.6)	54.12(32.4)	$F(3,26) = 1.31$, p= 0.29

Note. ALCP is Attitudes Towards Law, Courts, and Police TLV is Tolerance for Law Violations, ICO is Identification with Criminal Others, CSS-M Total is Criminal Sentiments Scale Total score, PID total is Pride in Delinquency scale total score. GLM Results indicate whether there are significantly different change patterns between groups(p<0.05). Range for the Hua Oranga Self report subscale scores are: group A 0-8, group B -4 to 8, group C -1 to 8, group D 0 to 8. Range for the Hua Oranga self Report total are: group A and group B 2 to 32, group C 4-32 and group D 16-32. Range for the Hua Oranga Nominated Person subscale scores are: group A, group B and group C 0 to 8, and group D -8 to 8. Range for the Hua Oranga Nominated Person total are: group A 4 to 32, group B 4 to 27, group C 9-32 and group D -13-31. Range for the ALCP are: group A 8 to 48, group B 6 to 38, group C 5-35 and group D 14-30, range for the TLV are: group A 0 to 19, group B 2 to 12, group C 3-18 and group D 2-13, range for the ICO are: group A 1 to 11, group B 3 to 10, group C 2 to 11 and group D 2 to 7. Range for the CSS-M Total are: group A 14 to 73, group B 13 to 56, group C 12-58 and group D 20-47. Range for the PID Total are: group A 0 to 158, group B 0 to 128, group C 0-173 and group D 3-122.

3. What is the relationship between offender age, offender RoC*RoI score and gang membership on offender change?

Hypothesis 3.1. Offenders increase in Māori cultural identity, wellbeing, and programme attendance will increase with age. Offenders will experience a greater decrease in anti-social attitudes and cognitions, and incidents and misconducts with increase in age.

Hypothesis 3.2. Offenders increase in Māori cultural identity, wellbeing, and programme attendance will decrease with higher RoC*RoI scores. Offenders will experience an increase in anti-social attitudes and cognitions, and incidents and misconducts with increase in RoC*RoI score.

Hypothesis 3.3. Offenders increase in Māori cultural identity, wellbeing, and programme attendance will decrease with gang affiliation. Offenders will experience an increase in anti-social attitudes and cognitions, and incidents and misconducts with gang affiliation.

Age, RoC*RoI, and gang membership, were explored to investigate whether they had an effect on participants' change across the subscales. Multiple regression could not be employed, as data contained both continuous and categorical predictors (gang membership), therefore a GLM stepwise analysis was conducted manually. Change across Te Aō Marama participants' cultural understanding (CU), wellbeing (HOSR and HONP), anti-social attitudes and cognitions (CSS-M and PID), and programme attendance and incident and misconduct scores were investigated to determine whether participants' demographic variables influenced the degree of change experienced.

Sample size (40) had sufficient power to detect trends over time, and was adequate to perform this analysis as the data was representative of the population and was normal (see Appendix K). For each subscale in turn, each of the three variables was entered separately and tested for significance. If a significant variable was found, then each of the other

variables was entered in order to find the pair of variables with the highest explanatory power. This was repeated until no new variable could be found that was significant. The results indicated that eight response variables had p values less than 0.05.

Increasing age tended to have larger TLV slopes (p=0.04), therefore older participants had more Tolerance for Law Violations than younger participants. Increasing age also tended to have smaller nominated person slopes; Hinengaro (p=0.01), Tinana (p=0.01), and Whānau (p=0.04), therefore the nominated person's perceptions of participant wellbeing decreased the older the participant was.

Increasing age tended to produce lower programme attendance change scores (the difference between number of programmes attended when in the general prison population compared to the number of programmes attended when in Te Aō Marama, p=0.002). This may suggest that as offenders age, they become less likely to participate in prison programmes, compared to their younger counterparts. Therefore, Te Aō Marama participation is more likely to have a positive impact on increasing programme attendance with younger offenders. Moreover, Increasing RoC*RoI score tended to have smaller programme attendance change scores (p=0.001), therefore participants with a higher risk of re-offending were less likely to engage in programmes in Te Aō Marama compared to participants with a lower risk of re-offending.

A further significant result suggested that increasing RoC*RoI score tended to have smaller ICO slope (p=0.03), therefore participants with a high risk of re-offending had less identification with criminal others than participants with a low risk of re-offending. However, this finding may be a reflection of the psychometric properties of the ICO subscale (Ashford, Wong, & Sternbach, 2008). Finally, the predictor Gang Membership tended to give higher self-reported Whānau slopes (p=0.02), therefore gang members seemed to have

stronger whānau wellbeing on average. These findings will be further explored in the discussion section. No further factors added stepwise were significant.

4. **What is the relationship between change in Māori cultural identity and offenders' scores across wellbeing, anti-social attitudes and cognitions, programme attendance and incident and misconduct score?**

Hypothesis 4.1. Offenders' change in Māori cultural identity will relate to their levels of wellbeing, anti-social attitudes and cognitions, programme attendance and incidents and misconducts.

Due to the psychometric issues of the MMM-ICE RS31, the current study used the CUrating as a measure of Māori cultural identity. CU change score; which provided the level of change between pre Te Aō Marama self-reported cultural understanding and self-reported cultural understanding when housed in Te Aō Marama, was explored through a GLM stepwise analysis to investigate whether it had an effect on participants' scores across the measures.

Increasing change in CU tended to give higher self-reported Wairua scores (p=0.005), therefore, as the level of cultural understanding increased so did participants' self-reported Wairua average level. Increasing change in CU tended to give higher self-reported Tinana scores (p=0.01), therefore, as the level of cultural understanding increased, so did participants' self-reported Tinana average level. Increasing change in CU tended to give higher self-reported Whānau scores (p=0.02), therefore, as the level of cultural understanding increased, so did participants' self-reported Whānau average level. Finally, increasing change in CU tended to give higher self-reported total wellbeing scores (p=0.008), therefore as the level of cultural understanding increased so did HOSR overall wellbeing average level

These findings indicated that the average level of wellbeing participants experienced across the HOSR subscales, excluding Hinengaroa, were associated with participants' change in cultural understanding. Therefore, participants who experienced greater levels of change in CU also had higher levels of wellbeing. These findings were consistent with the bivariate analysis which found a positive correlation between change in cultural understanding (CUdiff

score) and HOSR (Table 5). No further factors added stepwise (anti-social attitudes and cognitions, programme attendance or incidents and misconducts) were significant.

Further analysis investigated whether CU mediated the degree of change offenders experienced (Baron & Kenny, 1986). It was difficult to establish whether CU mediated the change found across both the wellbeing measures and the anti-social attitude and cognition measures, given these measures investigated change at four data-time points, while the CU investigated the difference in CU before and after Te Aō Marama participation. Therefore, regression analysis was explored through groups which allowed for exploration of change in CU over time (Table 8).

Regression analysis suggested that CU did not mediate change across any of the measures. Therefore, although increased change in CU was found to be associated with higher average HOSR levels, change in CU was not associated with changes in HOSR over time. Further, change in CU was not associated with changes across anti-social attitudes and cognitions, programme attendance or incidents and misconducts. However, results may be limited given the small sample numbers within the four groups (Table 8). Therefore, participant feedback may assist in understanding the relationship between Māori cultural identity and offender change.

5. What do offenders believe equated to any change they experienced when housed in Te Aō Marama?

From the 60 participants in the study, 45 provided feedback on their experiences in Te Aō Marama. The 15 who did not participate, left the MFU prior to being interviewed. The interview questions will be outlined below, and participants' responses will be provided in a quantitative format (percentages and graphs), supplemented by direct quotations, in which participants will be given pseudonyms.

Question 1: Has being part of Te Aō Marama changed you in any way? The results indicated that most respondents felt participation in Te Aō Marama had significantly changed them (Figure 10).
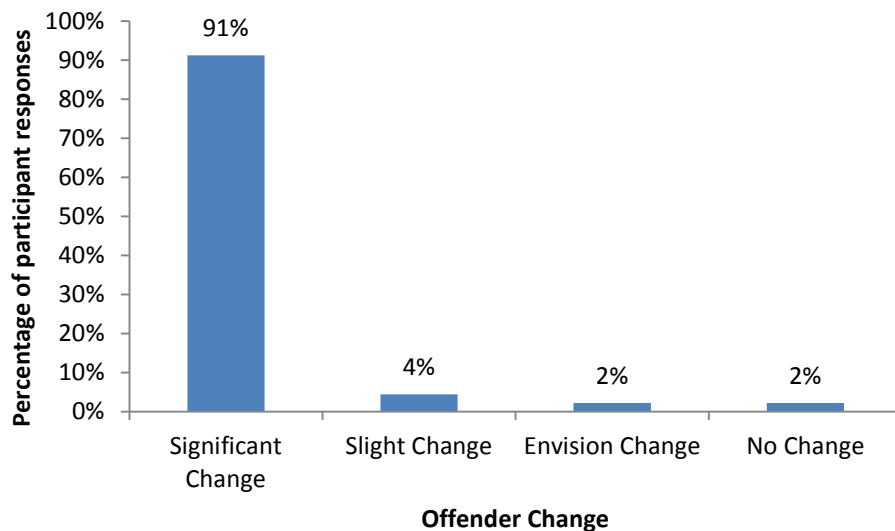
Figure 10. Offender self-reported change as a result of Te Ao Mārama participation.

Question 1.1: What exactly has made the difference for you? Participants then went on to describe what they felt equated to the change they experienced. Responses suggested that change was a result of five different constructs; Te Aō Marama environment, Māori cultural identity, wellbeing, cognition, and behaviour (Figure 11).
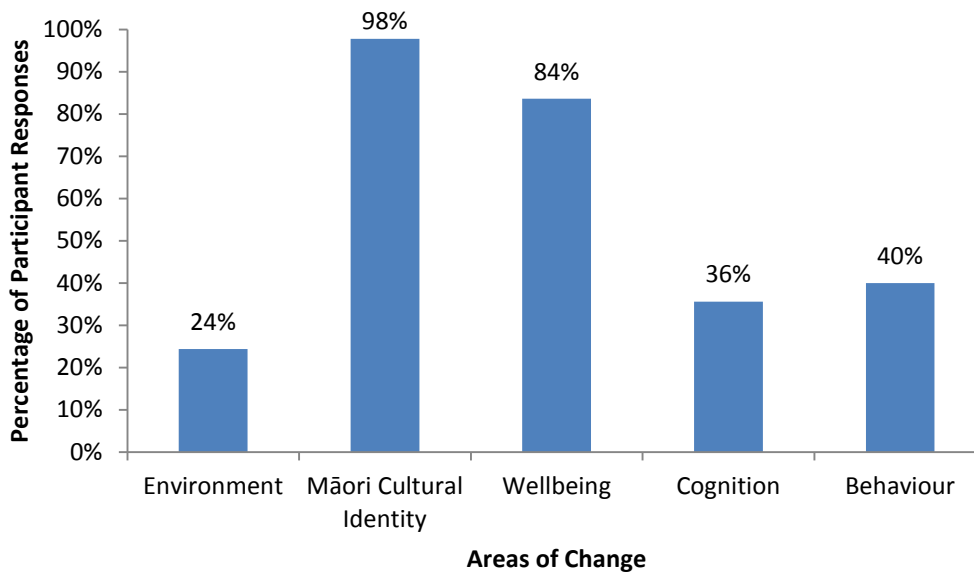
Figure 11. Offender-reported constructs that contributed to change experienced.

Te Aō Marama environment. Participant 53 stated "The tikanga of Te Aō Marama is supportive...[you get] encouragement and strength from guys in here, even if there is a dislike, we still get along". This was convergent with Participant 4 who stated "[the]... whānau environment helps you get through...[I] don't want to fight now...[there is]...less tension and pressure in this unit...you know, to be tough".

These responses suggested that the atmosphere of Te Aō Marama enabled change, as participants felt supported and encouraged, in a 'whānau environment', where they felt less pressure to maintain a 'staunch' exterior, and could then focus on change within.

Māori cultural identity. Most participants reported that change experienced was a result of an increase in Māori cultural identity obtained through increasing knowledge of history, culture, tikanga, whakapapa, language, and art.

Participant 37 stated "*learning about...tikanga, whaikōrero, my history, was out of my comfort zone and something I'd never done before but it taught me about my culture, my identity...[and] I reckon it facilitated the change*". Participants 29 stated "*it was an increase in Māori identity that produced change within...my identity as a strong, positive Māori tane was strengthened through all the learning available in here*".

These responses suggested that participation in daily cultural practices within Te Aō Marama provided an increase in knowledge of Māori culture, and a strengthening of Māori cultural identity, which subsequently facilitated further internal change.

Furthermore, participants reflected that through increasing their Māori cultural identity they developed a new understanding of what it meant to be Māori, and identified that offending did not fit within this worldview.

Participant 49 reported "*I learnt about ancestors and whakapapa and their morals, what it means to be Māori...I am now knowledgeable of Māori protocols...if I follow these properly I can't offend*". Additionally, Participant 14 reported that "*Māori to me meant being bad...I don't see it like that now...Māori means being strong*". This was consistent with Participant 30 who stated "*offending doesn't fit with being a true Māori...you can't live in a Māori world and a crime world*".

Wellbeing. A large percentage of participants further reported that an increase in their wellbeing had contributed to change they had experienced (Figure 11). For example, Participant 50 stated "...because of Te Aō Marama I found my inner true self...my Te Whare Tapa Whā was out of whack before". Participant 9 stated "Learning tikanga made me realise

there was something missing in me, I wasn't the completed whare in the tapa whā model. Now I feel good". Furthermore, Participant 12 reported that "Te Aō Marama changed me as a person, I have strong Māori identity now...that's made me balanced...you know, Te Whare Tapa Whā...something I never had before".

These responses reflected a relationship between Māori cultural identity and wellbeing, with participants suggesting that when they increased their Māori cultural identity through participation in Te Aō Marama, their wellbeing was subsequently strengthened. Furthermore, participant responses reflected familiarity of Te Whare Tapa Whā construct, potentially suggesting identification of the framework within the unit.

Consistent with Te Whare Tapa Whā wellbeing framework, responses reflected four areas of change; Wairua, Hinengaro, Tinana, and Whānau (Figure 12).
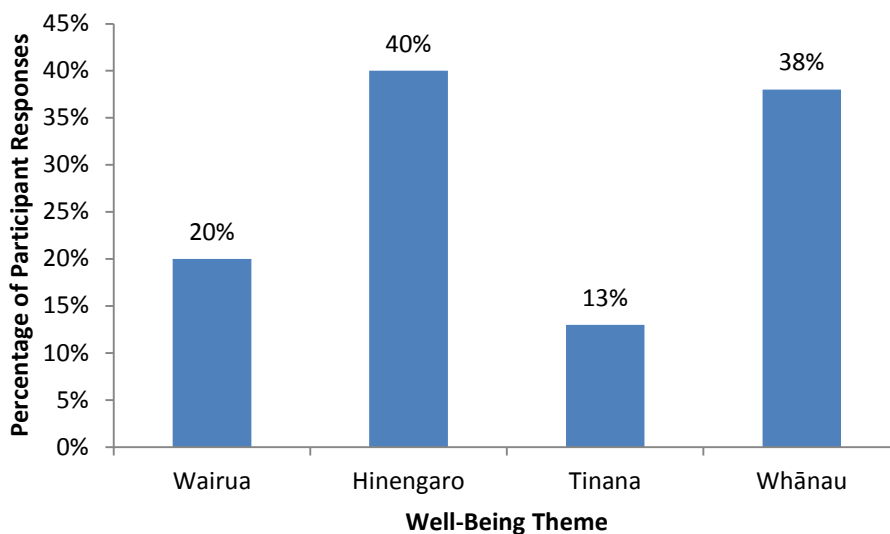
Figure 12. Areas of change within the wellbeing construct.

Wairua. Participant 3 suggested that "by being in the MFU I have been able to learn karakia...and [I] say them all the time now...That's why I changed I reckon". This reflected the importance of Māori prayer in contributing to internal change.

Hinengaro. Participant 48 described that he was a more caring person now, stating "...[I] used to be cold hearted but have learnt about emotions". Similar to this, Participant 41 stated "...[I have a] sense of belonging now I understand my feelings better". Furthermore, Participant 14 identified the link between Hinengaro and offending stating "If I can control my emotions I can reduce my offending". These responses reflected that Te Aō Marama provided learning about emotion, understanding of emotion experienced, and emotional control, which participants suggested could assist in reducing their likelihood of re-offending.

Tinana. Participant 40 stated "You get to figure out a routine to be active in here...there are groups of us who do exercise...we can do exercise through Māori activity too, like Taiaha". Furthermore Participant 16 stated "I guess this helped me change cause I never used to do any physical exercise, couldn't burn off any steam...only through the bottle".

Responses indicated that participants equated the change they experienced as a result of physical activity, and were able to link their engagement in exercise both to increasing Māori cultural identity and as an emotion regulation strategy.

Whānau. Participant 2 stated "...connecting with my whānau filled the void of the gang...I feel more like part of my whānau, I don't need to be in gang now". This reflected that by increasing Whānau wellbeing, participants no longer sought gang association. Furthermore, participants suggested that their Te Aō Marama experience had equipped them with a greater appreciation, a stronger bond, and a better interaction with whānau, and had motivated them to change in an attempt to make their whānau proud.

Cognition. Participant 18, who suggested that the change he experienced in Te Aō Marama resulted from change in cognition (Figure 10), stated "...my thinking changed...I'm more open minded, mature...I learnt it's not weak to ask for help". Furthermore, Participant 11 reflected "I can now understand my thoughts better".

This suggested both change in understanding and interpretation of cognition, alongside cognitive restructuring.

Behaviour. Participants who suggested that the change they experienced in Te Aō Marama resulted from behaviour change (Figure 10), reflected both a decrease in anti-social behaviour and an increase in pro-social behaviour.

Participant 33 stated *"[I am]...no longer in the gang...don't have to put up that front...yeah cause the gang life ended because the Māori life started".* Consistent with this, Participant 14 reported *"...I had enough of gang life, watching my back, got sick of it...didn't want to be looked at as an enemy...*[I am now able to] *deal with problems, you know like resolve issues without fighting...you know I act way different now. I guess cause I'm stronger within now".* Additional to this, Participant 22 stated that *"because of Te Aō Marama...learning a different way, I'm off the crack so I don't do all that stupid shit".*

In terms of change in pro-social behaviour, Participant 13 stated "*I communicate properly now...I used to isolate myself now I'm more open and get involved*". Additionally, Participant 1 reflected *"...I pursue my goals now...I'm doing creative writing*", and lastly Participant 25 stated "I *speak Te Reo...not fluent you know...but makes me proud...I'll speak on the Marae and that when I'm out*".

These responses suggested participants' change in their behaviour may have been linked to change they experienced in their Māori cultural identity and wellbeing.

Question 2: Do you think your time in Te Aō Marama will influence your behaviour once you are released? The results indicated that most respondents felt participation in Te Aō Marama would influence their behaviour when released (Figure 13).

The small percentage of participants who reported that Te Aō Marama participation may indirectly influence their future behaviour, suggested this to be due to personal change experienced when housed in Te Aō Marama, not directly caused by Te Aō Marama participation.
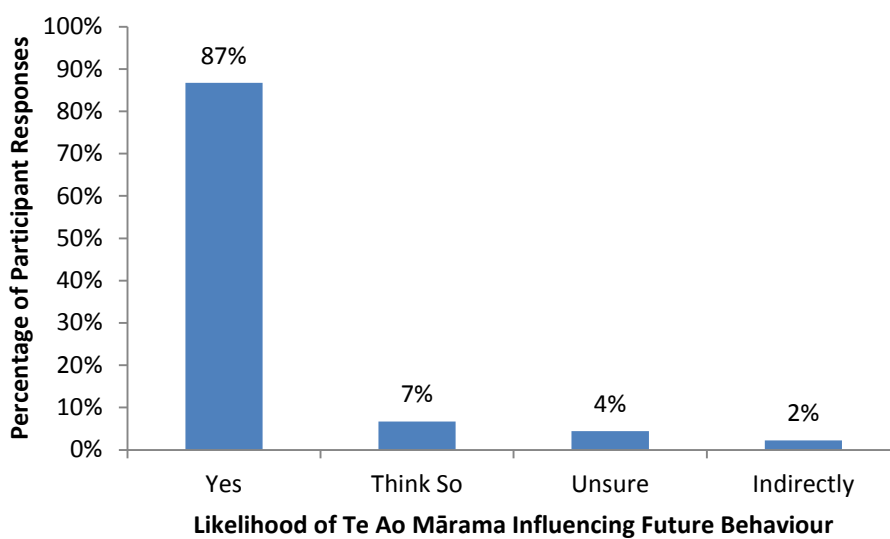
Figure 13. Self-reported prediction of behaviour change from Te Ao Mārama participation.

Question 2.1: If so, how will your time in Te Aō Marama influence your behaviour? Participants then went on to describe how their Te Aō Marama experience may influence their behaviour when released. Similar to the latter responses presented in Figure 11, participants suggested that change was a result of five different constructs; cognition, Māori cultural identity, wellbeing, future and skills (Figure 14).
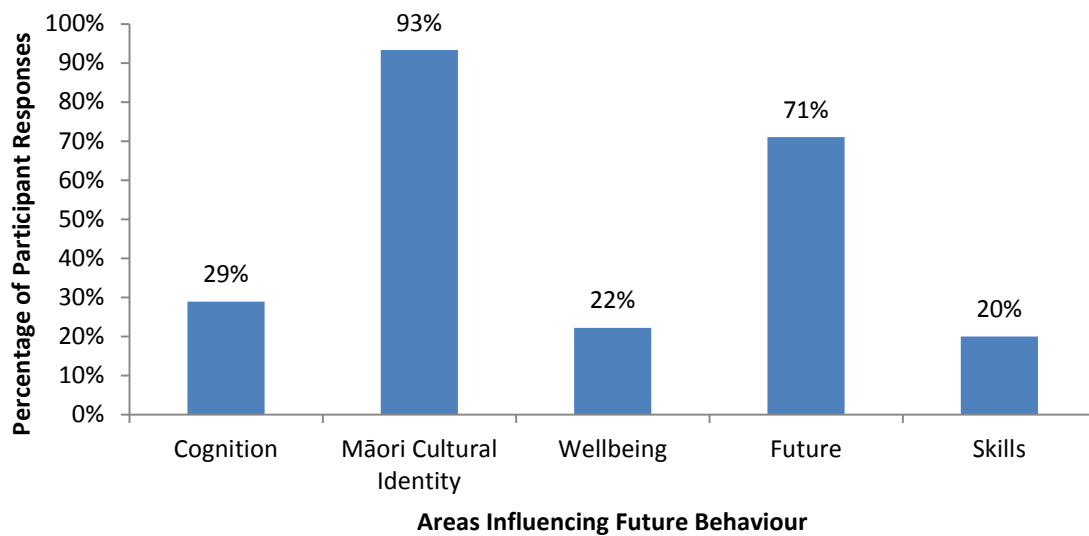
Figure 14. Self-reported constructs contributing to predicted behaviour change.

Cognition. Participant 4 stated "I'm a lot more positive in my thinking...My attitude's changed...so it'll help me push away the negative stuff". Furthermore, Participant 27 stated "I reckon Te Aō Marama made me aware of how my actions affect my whānau, my tribe and my people...so I'll be able to think about that before I act".

These responses illustrated participants' ability to link a change in cognition with attitudinal change. Additionally, these results may suggest cognition change due to accountability, with participants who experienced an increase in their Māori cultural identity, likely to consider the consequences of their actions on their cultural relationships.

Māori cultural identity. Consistent with previous results, most participants reported that an increase in their Māori cultural identity would contribute to behaviour change when released. Participant 60 stated "I have a place at my Marae now so don't have to go searching for an identity causing trouble...I can step up and make my whānau proud, be a more productive member of the Māori community". Furthermore, Participant 29 stated "Because I'm more positive about who I am, a Māori tane, I will be able to build better relationships with my tamariki and wahine. Hopefully my change may help stop the whānau line of coming to jail." Finally Participant 30 stated "I know the reo and tikanga, you know the protocol, which is what I learnt in here. I think knowing this will stop me from doing stupid shit, cause I understand".

These responses reflected that participants who experienced an increase in their Māori cultural identity believed changes stemming from this, such as stronger whānau relationships and greater participation in the Māori community, would persist in the community.

Wellbeing. Participant 4 stated that "Te Aō Marama allowed me to heal myself, I feel better and now my behaviour's changed...I've gained a new way of being". Participant 32 stated "I guess I am happy now, and my behaviour outside will also be happy. You know, I did crime when I was pretty messed up inside".

These responses suggested that participants believed that through gaining a secure wellbeing, they no longer would engage in anti-social behaviour.

Future. Over half of participants suggested that their experience in Te Aō Marama would influence their behaviour when released as it motivated them to be deterred from a negative existence of imprisonment, whilst inspiring them towards a brighter future.

Participant 33 reflected the desire to decrease anti-social pursuits when released stating "*I don't wana bang no more...[I want to] stay drug free...not hanging out with same old trouble mates...I'm gona change my actions, I don't wana come back...its prison, you can't do fuck all!*" Furthermore, Participant 51 stated "*I don't want to be 'the offender'...just another statistic*".

These responses suggested participants would behave differently when released, to ensure they do not re-face the consequences of imprisonment. These consequences included both the restrictions that imprisonment imposed, alongside the criminal identity offenders obtained when engaging in anti-social behaviour. Other participants reflected the desire to change their offending lifestyles to obtain a brighter future.

Participant 60 stated "*Being in the MFU allowed me to think about the things I want to do in my future and the things I don't want to do...I want to be less violent...care more about others because I want to*". Furthermore, several participants reported the future ambition of up-skilling their education and Māori tikanga. Participant 36 stated "*I want to go back to school...I want to teach...Māori*". Convergent with this, Participant 37 stated "*Te Aō Marama is like a stepping stone for outside learning...I'm going to get involved with Māori things outside...tā moko, reo, wānanga, marae, tikanga kapa haka and performing*". Additionally, Participant 24 stated he now has plans to "*make money legally*", Participant 54 stated he will "*pursue music when he is released*", and Participant 40 stated he will now "*aim for a career as a sportsman, because of the encouragement provided in the MFU*".

These responses reflected participants' belief that their behaviour will change as Te Aō Marama inspired them to obtain a future less reflective of anti-sociality; such as violence,

anti-social associates and drugs, and more inclusive of pro-social pursuits; such as education, Māori tikanga, employment and positive recreation.

Skills obtained. Participants' responses also suggested that Te Aō Marama experience may influence their behaviour when released, due to the skill set it provided (Figure 14).

Participant 41 stated "*I will carry on with things learnt in here...learnt about my emotions-hinengaro, ways to make it more positive, no opportunity to learn these things in the environment I grew up in*". Additionally, Participant 14 reported that "*At the MTP you learn how to act in 'hot' situation...[I'll] take these skills with me on the outside. I'll be way better than what I was like before I came in here*".

These responses suggested that participants believed their obtaining of skills, predominantly provided through the Māori Therapeutic Programme (MTP) they participated in while housed in Te Aō Marama, would continue to assist them when leaving the prison.

Question 3: Do you think you will be more or less likely to commit crime when released as a result of Te Aō Marama participation? The results indicated that most respondents believed that participation in Te Aō Marama reduced their likelihood of re-offending when released (Figure 15). A small number of participants reported that they were unsure of whether their Te Aō Marama experience would reduce or increase their likelihood of re-offending.
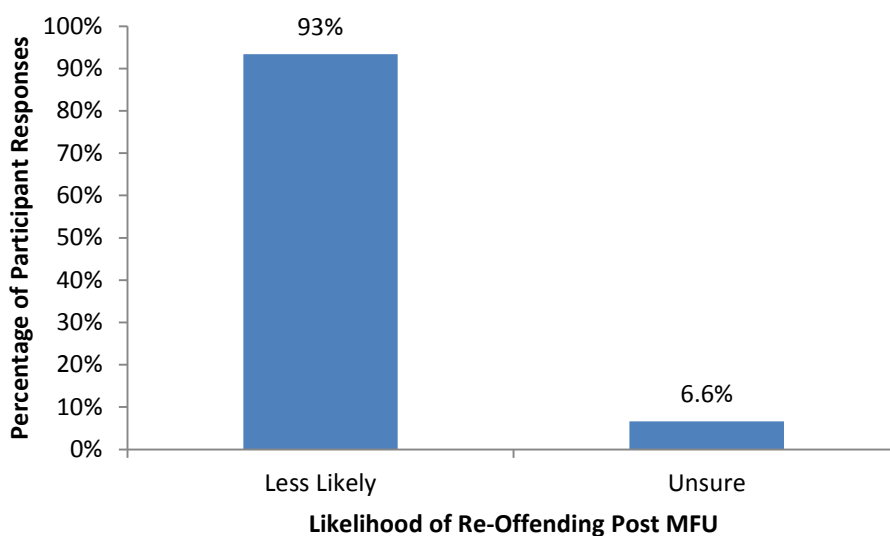
Figure 15. Participant responses as to whether they will be more or less likely to offend post MFU.

Question 3.1: Why do you think your Te Aō Marama participation will affect your likelihood of re-offending on release? Participants then went on to describe why they were unsure or why they felt they may be less likely to re-offend when released. Participant 59, who reported being unsure, stated "*I don't know whether it will be the MFU that will make me less likely to re-offend or my own changes, so I don't know*". Additionally, Participant 44 stated "*I really hope so, but can't say for sure cause you never know what might happen when I get out...what happens if I get hit-up by gang members I used to roll with. You know?*"

These responses suggested that participants who were unsure whether their likelihood of re-offending would change as a result of Te Aō Marama participation, both perceived it difficult to know whether it will be their MFU experience that contributes to a reduction in re-offending, and whether one can accurately predict future behaviour in the natural environment, when housed in an artificial environment.

Participants who reported they would be less likely to re-offend due to their Te Aō Marama experience suggested this may be due to four different constructs; positive change, Māori cultural identity, whānau support and consequences (Figure 16).
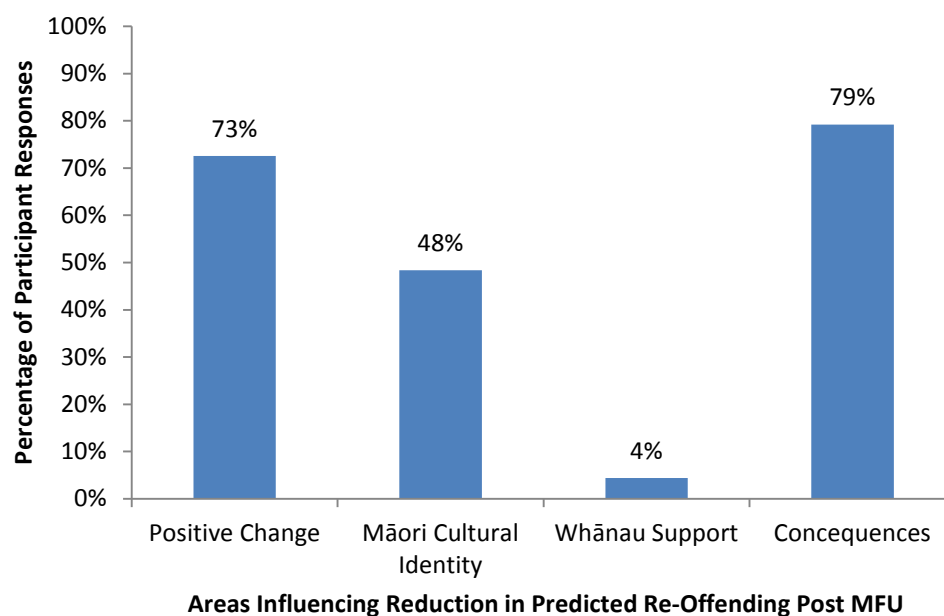
Figure 16. Participant responses of areas contributing to predicted decline in re-offending post release.

Positive change. Participant 18 identified how both his thinking and behaviour changed. He stated "...my thinking changed heaps, from negative to positive...I guess I think more too...things that happened in the past, I understand them better now, the way I acted, why I acted. I'd be able to act different now, now that I'm more aware".

Convergent with this, Participant 11 reported "*Now I am looking for different alternatives to offending, being in here helped me learn from my mistakes. You know like*

high risk situations, I know what mine are now...I'll change my environment...seclude myself from my mates on the outside...be more busy doing proactive things. I want to keep learning too...learn fluent Te reo...I want to get a job".

These responses suggested that participants predicted the changes they obtained when housed in Te Aō Marama, such as positive thinking, understanding of behaviour, learning from past experiences, identification of high risk situations, and learning Te Reo, would be maintained and further developed in the community. The responses also reflected that participants believed these positive changes would reduce their likelihood of re-offending on exit.

Māori cultural identity. Participant 9 reported that "Being in this unit changes you, you become inspired, if I was in another unit, I would not have healed my wellbeing, and built up a positive identity...I would still be angry and would have carried on offending".

Consistent with this response, Participant 48 stated "*I think and feel different now; were I once would fight I now would talk. I guess because...I believe in myself, this was a part of learning my cultural identity...I want to show society that Māori can change from learning about our cultural identity. You know, I have understanding and peace of mind now, I understand myself better, so I don't need to offend*".

Participant 49 identified the direct link between strengthening his identity and future offending. He stated "*Tikanga stops me from doing crime*".

Participants who reported that an increase in Māori identity reduced their likelihood of re-offending reflected this to be due to healing within and an understanding and belief in the self. Responses also suggested a desire for society to recognise the importance for Māori to obtain a secure cultural identity in reducing re-offending. Furthermore, participants indicated that, through holding a secure Māori cultural identity, they adopt Māori tikanga, and are less likely to offend due to offending being in conflict with a Māori worldview.

Whānau Support. In regards to whānau support, Participant 2 stated "I have re-built relationships with whānau I hadn't spoken to for years...they're there for me now...Before I got locked up I had nothing to do with them...was on a rampage...That was all I needed".

The small number of participants who reported that whānau support may reduce their likelihood of re-offending when released suggested this to be due to Te Aō Marama facilitating their re-connection with whānau. Responses indicated that participants believed their past offending was a consequence of a lack of whānau support, with their likelihood of re-offending when leaving the MFU now reduced due to the development of whānau relationships.

Consequences. A large proportion of participants reported that being in Te Aō Marama allowed them to think about the consequences to their offending,which, they believed, might reduce their likelihood of re-offending when released (Figure 16).

This was reflected in the response from Participant 51 who stated: "*I don't want to do crime again, there's no purpose in it for me anymore. I can see the consequences, you know, coming back inside. I don't want to come back, been inside too many times...I've realized how I wasted my life*".

Furthermore, Pparticipant 27 reported "*I now think about whānau and how my actions can affect more than myself; I don't want whānau to go through pain again...I want to be role model to kids and whānau*".

Responses suggested a realisation of their life path, a desire be more than an offender, alongside an understanding of how their behaviour affected more than just themselves. These responses reflected participants' use of consequential thinking in recalling their past experiences of personal and interpersonal negative consequences as preventing them from re-offending.

Question 4: When in Te Aō Marama what stops you from committing incidents/misconducts? The results indicated four different constructs as preventing offenders committing incidents and misconducts when in the MFU; environment, Māori cultural identity, consequences and future (Figure 17).
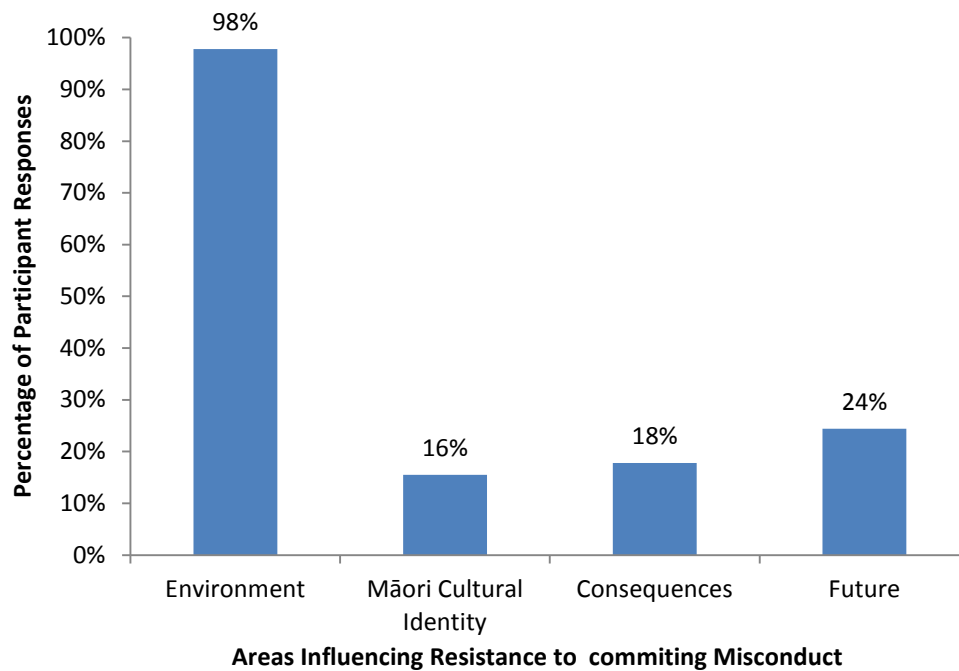
Figure 17. Areas preventing participants from committing incidents and misconducts in Te Ao Mārama.

Environment. Almost all participants reported refraining from committing incidents and misconducts when in Te Aō Marama due to the unit's environment. Participant 53 stated " In other units you're more on your own...this unit you're less likely to misconduct because of what we learn and all experiencing enlightenment together, a whānau...In here it's one big whānau and one big love, it's support...You're in a family, don't want to lose that". Furthermore, Participant 4 reflected how the whānau environment replaced the need to be in a gang. He stated "You don't have to be involved in gangs, you're not in a gang here, you're

in a whānau...so no longer need support from a gang...I can see now that I used to be a loner even though I was in a gang".

Similar to this, participants commented on the safe and less hostile atmosphere of Te Aō Marama compared to other units. Participant 22 stated "*Our conviction doesn't matter, you know, we are safe. There's no power struggles like in other units. Like in the other units [inmates] staunch you out, you have to watch your back. I don't have to watch my back. Most of these prisoners are like counsellors. They're like mature people. They don't fuck around with looking staunch and being the man. They already are the man cause they're wise...about Māori stuff...There's regular fights in other units, so you're inclined to fight as well...fights get resolved before getting physical here. If anything happens it is dealt with in karakia circle before it escalates...Can feel harmony here rather than hostility...the unit has a different aura*".

Other participants commented on the staff within Te Aō Marama as a contributing environmental factor refraining them from committing incidents and misconducts. Participant 56 stated "*the staff support you more equal than mainstream...you know, in here you get a warning, it's not just about you're the prisoner and they're the guard...they want to support. You don't get as fucked off at the screws*".

These responses reflected that the Te Aō Marama environment reduced participants' likelihood of committing incidents or misconducts due to providing an inclusive, whānau-orientated atmosphere, where it was less hostile than other units and was less gang orientated, reducing altercations. Furthermore, participants reported they were unlikely to commit incidents or misconduct due to the potential of losing the respect from their fellow inmates, and therefore being rejected from the whānau environment. Lastly, participants reflected that the staff in Te Aō Marama created a less punitive and more supportive environment, which in turn created less hostility and incidents or misconducts.

Māori cultural identity. Several participants reported that an increase in their Māori cultural identity stopped them from committing incidents or misconducts in Te Aō Marama.

Participant 9 stated "*through knowledge confidence grows alongside development of identity. With growth in identity and confidence mana grows and Māori wellbeing becomes secure...You then begin to think differently in situations you would have offended in, in the past*". Furthermore, other participants reflected the inconsistencies of holding a Māori identity and committing crime. Participant 49 stated "*learning tikanga helps you believe in tapu, and that makes you less likely to offend*".

These responses indicated that, through an increase in Māori cultural identity, self-confidence increases, and one develops a different way of thinking. Furthermore, as previously suggested in question 3.1, responses indicated the conflict with holding a Māori worldview and offending.

In comparison to previous responses (Questions 1.1, 2.1, and 3.1), there were significantly fewer participants who reported that their Māori cultural identity was the contributing factor to them refraining from committing incidents or misconduct. Particularly, responses to question 3.1, which asked participants why they predicted they would be less likely to re-offend on release, suggested just under half of participants reported it was due to an increase in Māori cultural identity. Further, question 2.1, which asked participants what they believed was a contributing factor to predicted behaviour change on release, suggested almost all participants reported it was due to an increase in Māori cultural identity. However, these results may reflect the difference between committing incidents or misconduct and offending. Given that incidents and misconduct occurs in the prison environment, the immediacy of consequences may increase in comparison to the consequences of offending in the community. Furthermore, given the structured versus unstructured nature of the prison environment in comparison to the community environment, incident and misconducts ratings

may be more influenced by the Te Aō Marama environment than change in offenders' Māori cultural identity (see Figure 17).

Consequences. Several participants reflected that the prospect of negative consequences stopped them from committing incidents and misconducts. Participant 16 stated "I don't want to get sent out...and I don't want to lose my privileges".

These responses suggested participants refrained from committing incidents and misconduct due to potential personal consequences.

Future. Around one quarter of participants reported that they abstained from committing incidents and misconduct due to their future plans. Participant 60 stated "I don't want to do misconducts because I think about the future. I want to set a good role model for guys in here and I want to be a role model in the community and to my whānau when I'm out".

These responses reflected participants' desire to obtain a positive future post MFU, alongside their desire to be seen as a positive role model to fellow inmates and their whānau.

Question 5: What did you like most about Te Aō Marama? The results indicated

five different areas most liked about Te Aō Marama; Environment, learning, kai, tinana, and

staff (Figure 18).
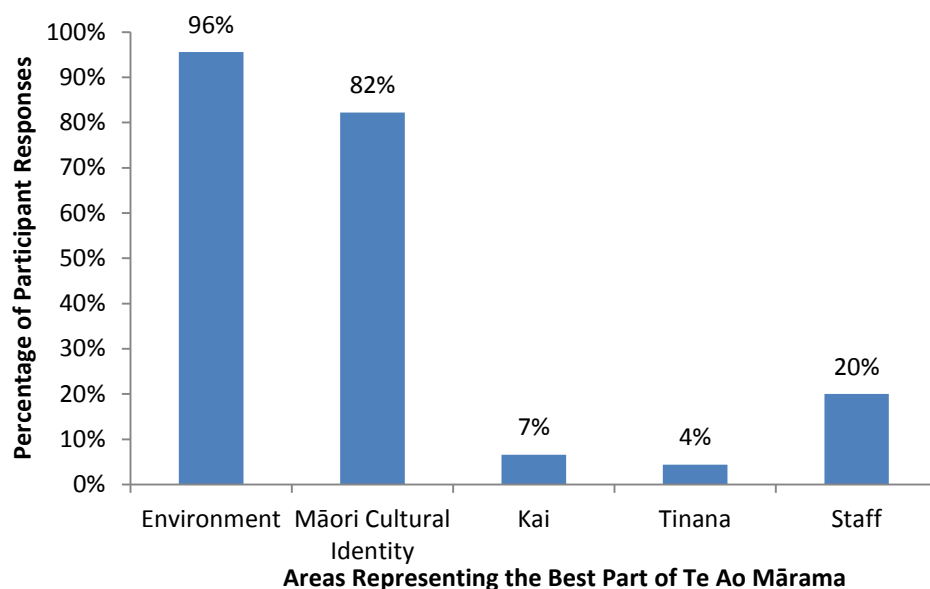
Figure 18. Participant responses regarding what they felt was the best part of Te Ao
Mārama.

Environment. A significant majority of participants reported that Te Aō Marama

environment was the best part of the MFU. Responses were consistent with question four,

with participants reporting the environmental factors of a whānau atmosphere, a reduction in

hostility and a feeling of safety compared to other mainstream units, as the best part of Te Aō

Marama. Additional to this, participants reflected that the freedom provided within Te Aō

Marama was the most enjoyable part of the unit. Participant 5 stated "It's up to you to

participate, like it's not so much staff run. In here you have the freedom you don't get in the

main yard. If you want you can learn and teach in here, you know it's up to you…we have

more responsibility".

148

Additionally, a large majority of participants stated that it was the type of offender housed within the MFU that they most enjoyed about being in the unit. Participant 4 stated *"people in the MFU want to be here and make change, so you are inspired by others. It's good to be in an environment where everyone wants to change, it's uplifting"*.

These responses reflected that Te Aō Marama provided not only a learning environment, but also the opportunity for offenders to become teachers or Rūnanga within the unit. Furthermore, stemming from the whānau atmosphere construct, participants suggested the best part of the MFU was that offenders shared a desire to change, which assisted in motivating others to also change.

Māori cultural identity. Participants' responses reflected that a large number of offenders perceived learning about, and subsequently increasing their Māori cultural identity as the best part of the MFU.

Participant 25 stated *"the best part of Te Aō Marama was learning tikanga, kapa haka, mau rākau, haka, whakapakari, te reo, and whaikorerō"*. In addition, Participant 17 stated *"Learning where I'm from and about Māori, made me feel good. You know what I mean, like Te whare tapa whā was in balance. The learning also changed me. I used to be a hard gang member, now have changed into a better person"*. Consistent with this Participant 3 stated *"Learning Māori heritage was the best. I knew nothing…Good to learn about Māori stuff, my culture, my identity, am complete. Back to my roots; Taha Māori!"* Moreover, Participant 36 linked the learning obtained in the MFU with his future, stating *"I want to learn heaps on the outside now I know what people are saying, I understand"*.

These responses reflected that participants enjoyed specific areas of learning, and were able to expand on how the learning had resulted in a positive change in wellbeing and behaviour. Furthermore, participants could envision continuing to develop their knowledge on release, due to an understanding of te reo obtained in Te Aō Marama.

Kai. A small number of participants reported that the kai provided in Te Aō Marama was the best part of the unit.

Tinana. A small number of participants reported that tinana was the best part of Te Aō Marama. This included playing sports together in group, and participating in a daily exercise routine.

Staff. Several participants reported that staff were the best part of Te Aō Marama. Participant 22 stated "*Staff are understanding, supportive and give good feedback...[they are] not too quick to judge, [and] empathise...*" Participant 5 stated "*Rūnanga and kaumatua are approachable and easy to speak to. I can relate to teachers that are inmates*". Stemming with this, Participant 28 stated "*It's good having fellow Rūnanga teach as they don't leave [the] unit and so we can ask questions at any time*".

These responses reflected that offenders viewed Te Aō Marama staff, consisting of corrections officers, Male Māori elders and Rūnanga (inmates who had taken on a leadership role), all as the best part of Te Aō Marama. Particularly, staff were viewed as understanding and available.

Question 6: Could there be any improvements to Te Aō Marama? The results

indicated that many participants felt that there were no improvements needed. Participants

who did report potential improvements had responses that fell within four different

categories; Continuation programme, outside contribution, courses and MFU entry (Figure

19).
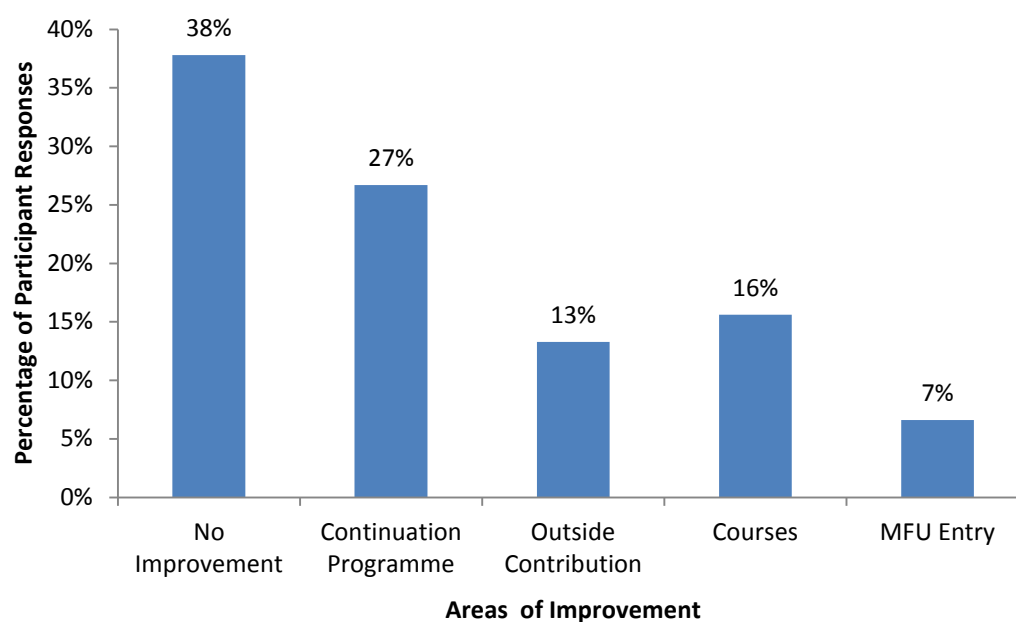
Figure 19. Participant responses regarding what they felt could improve Te Ao Mārama.

Continuation programme. Participants who reported that Te Aō Marama could be

improved with the development of a continuation programme discussed the concept as

something that could run outside the MFU, to help with community reintegration. Participant

44 stated "[we] need a programme to carry on from this on the outside. A follow up.

Currently there is nothing out there and we can fall back into a cycle". This was consistent

with Participant 55 who stated "More interaction for integration for going back into

community… [we need] outside agencies for support".

Several participants expanded on this idea and proposed that a continuation programme may be best run through a marae. Participant 9 stated "*Having a reintegration programme when on the outside, like maybe at several marae around New Zealand where we can continue to learn and strengthen our identity as a group would be good*". Participant 54 also reflected the Marae-based continuation programme as an improvement to Te Aō Marama, and linked the lack of existing programmes on the outside as a risk factor to gang affiliation. He stated "*When we step into the outside we need hands of help rather than a pull back into a gang. When there's no continuation of learning when outside...no support, we just go back to old ways. [The continuation programme] should be part of parole conditions and in a Marae environment...sacred*".

Participant 44 discussed the concept and the reality of having the continuation programme at the inmate's own marae. He stated "*[there are] no services outside for support, proby officers just tick boxes. [There are] no courses on the outside. [There] should be a marae-based organisation on the outside that we can go to for stepping stones to enhance the learning provided here. Programmes might not be suitable at every inmate's own marae as [they may have] no connection or destroyed [their] relationship with whānau. If the Department of Corrections and iwi, set up a few marae around New Zealand...could facilitate learning and the [continuation of] Māori identity and wellbeing growth, then, when ready, inmates could connect with their own marae*".

These responses reflected offenders' desire for further community support when leaving Te Aō Marama. It was identified that cycles of offending behaviour may resurface when no longer housed within the MFU environment, and that a continuation programme might mitigate this. Furthermore, offenders commented on how the continuation programme may look, suggesting that it could be part of an offenders post-release conditions, and that it could take place on a marae.

Outside contribution. Several participants reported that Te Aō Marama could be improved with more contribution from outside agencies.

Participant 1 stated "*We should have more outside teachers come in... like tutors, rather than most our teachers being from within the unit. It will be more influential*". Additionally, Participant 49 stated "*We could have iwi members come in and teach about other Iwi...It would be good to get more info for other tribes, not just Tainui. Need more info from where we come from...better understand ourselves*".

These responses suggested that offenders sought for further learning from people outside Te Aō Marama. Particularly, participants felt they would benefit from learning more about their own iwi, rather than predominately Tainui iwi in which Te Aō Marama is located. This may potentially help facilitate an increase in their Māori cultural identity.

Courses. Participants reported that Te Aō Marama may also be improved with the development of more programmes.

Participant 36 stated "*we need more parenting courses and more te reo programmes*". Furthermore, Participant 3 reflected "*I believe we need more lessons regarding taha wairua- we only have karakia in morning and night. I am a minister and we do not have much*".

This suggested offenders' desire to participate in more Māori and general courses, and also potentially reflected the differing levels of understanding that participants within Te Aō Marama hold.

MFU entry. A small number of participants reported that Te Aō Marama could be improved by changing the process and likelihood of being placed in a MFU.

Participant 49 stated "*You should be able to come straight into Te Aō Marama and not have to go through other units. Waiting lists limit the vacancy of when you can get into MFU. If there were more units across the prison that are MFUs, all Māori inmates could be in one straight away*". In addition, Participant 13 stated "*If Department Of Corrections wants

to really reduce recidivism, there should be multiple MFUs in each prison...it will help with getting onto one quicker".

These responses suggested that participants perceived Te Aō Marama could be improved by changing the process of becoming accepted onto the unit, reflecting a process rather than content issue. They reported that Māori inmates should be housed in a MFU on prison entry, and that this may be feasible through increasing the number of MFUs.

Question 7: Do you have anything else to say about your experience in Te Aō Marama? Participants gave rich feedback when presented the opportunity to provide free narrative regarding their Te Aō Marama experience.

Participant 32 stated Te Aō Marama "*Changed my life and helped me open my eyes. I know who I am now...It lifted my mana...and I've made heaps of changes...to my inner being. I'm confident and proud*".

Participant 53 reported he "*Felt the Wairua when first arrived...Up the top (the main unit) I'd bash people up, in here it's my wider whānau, Its unacceptable to do stupid shit in here, you'll get looked down upon by others, it's that kind of environment. A real positive, peaceful environment*".

Participant 30 reflected that he "*Didn't know my roots beforehand. This place took me back. I feel happy and lighter on my feet. If you don't know about your Māori roots, [it's a] good place to come and heal-be better on the outside...humbling to learn where you are from*".

Participant 14 stated he would be "*Leaving gang now. A real man knows his whānau...not his gang. I had an all-over attitude change. I went from gang man Jake the Muss to Mozart. It could only occur in a nurturing and facilitative environment that allowed me to explore who I really was*".

Participant 17 stated he "*Was in other unit for seven months and changed for the worse, was in here two months and changed for the good...Others units you don't truly learn Māori or tūpuna...I am healthier today; physically, spiritually, mentally and with whānau, than I have been in the last 20 years*".

Participant 2 reported that "*The MFU opens you up to experience something you didn't take on, but may have known about, and manifest this experience in ways that are positive*".

Participant 9 described that "*Young fellas need this. I recommend for young Māori going down the wrong path. If in jail, this is the place...Brings you back to identity and who you really are. Young people out there searching, they're not complete...Healing process starts in these units*".

Participant 4 stated "*I've been in prison most of my adult life. I really didn't give a shit about being Māori when inside, but [was more] worried about being a staunch gang member. In Te Aō Marama it's not about being a staunch prisoner, but [about] learning to be a staunch Māori. I'm not going to come back in when I get out. Te Aō Marama changed my life*".

Chapter 6: Discussion

This chapter reviews the major findings and discusses these in reference to the literature. It will address the results from the bivariate analysis and the first four research questions, with the findings from participant feedback (research question five), interweaved throughout. The strengths, limitations and considerations of the current study are highlighted, and recommendations are made for future research. The chapter concludes with an account of the key findings and their potential implications.

Research has suggested a secure Māori cultural identity may promote wellbeing and pro-social behaviour, and may decrease anti-social attitudes, cognitions and behaviour, mitigating negative disparities (Barlow, 1991; Durie, 2005; Harper, 1998; Hoe Nuku Roa, 1996; Marie et al., 2008a; Thomas, 1986; Walker, 1989). Furthermore, cultural identity theory of Māori offending argued that increasing Māori cultural identity may reduce offender anti-sociality, subsequently reducing the dissproportionate offending rates (Coebergh et al., 2001; Maxwell & Morris, 1999; Maxwell et al., 2004; Maynard et al., 1999; McFarlane-Nathan, 1999; Pratt, 1999; Tauri, 1999; Te Puni Kōkiri, 2000; Wikiriwhi, 1998). In consideration of this perspective, the Department of Corrections (2009a) established the MFU (MFU).

Limited studies inform the relationship between MFU participation, Māori cultural identity and offender change. As such, an investigation of Māori cultural identity and offender change within Waikeria Prison's MFU, Te Aō Marama was conducted.

Findings for the Current Study

  Relationship between the constructs. Bivariate analysis suggested change in Māori cultural identity was lower for older participants than it was for their younger counterparts. This finding was inconsistent with Phinney's (1992) study, which explored the use of a questionnaire as a measure of identity across high school and college students of differing cultures. Results of Phinney's study suggested higher correlations on identity components in the older age group of participants, and concluded that cultural identity may be consolidated with age.

  Given participants in Phinney's (1992) study ranged in age from 14 to 19 years (M, 16.5), findings should not have been generalised to an older adult population. Further, consolidation of cultural identity may indicate that older participants may have strengthened their cultural identity to a level requiring less change than younger individuals still developing their cultural identity. In this sense, the current study's finding may reflect that older individuals have obtained a more secure cultural identity than their younger counterparts, and are therefore experiencing lower levels of change in the construct, over time spent in Te Aō Marama.

  The current study's findings are convergent with cultural identity formation literature, suggesting cultural identity development to be particularly salient during adolescence and young adulthood (Arnett, 2002; Erickson, 1968; Nguyen & Williams, 1989; Phinney, Ong, & Madden, 2002). Portes (1997) found that adolescents experienced more identity change when exposed to a new culture than adults did, and suggested this to be known as dissonant acculturation. Dissonant acculturation may have attributed to the results in the current research, with younger participants exposed to Māori culture, tikanga and kawa in Te Aō Marama, being more likely to experience change in identity than older participants.

The current study's findings may also reflect the recency of the cultural identity phenomenon (Greg, 2004), with the concept of cultural identity more widely discussed in present times than in the past. Therefore, younger cohorts may have been more exposed, and subsequently more habituated, to the idea of developing their Māori cultural identity than their older counterparts.

Unfortunately there is a lack of research investigating the relationship between Māori cultural identity and age. Houkamau and Sibley (2010) argued that it would be extremely valuable for future research to explore possible differences in Māori cultural identity for different age groups.

Further results of the bivariate analysis suggested participants who had a higher likelihood of re-offending and re-imprisonment, as measured through the RoC*RoI, had higher levels of PID. Research has indicated the PID to be effective at predicting re-offending (Andrews & Bonta, 2010; Simourd & Van de Ven, 1999; Yessine & Kroner, 2004). Therefore, the correlation between a high PID score and a high RoC*RoI score may reinforce the PID's ability to predict the likelihood of re-offending.

There were no significant correlations found between the CSS-M and the RoC*RoI, which, given that the CSS-M is also a measure of anti-social attitudes and cognitions, would have been expected. Further, Yessine and Kroner (2004) reported a significant correlation between the CSS-M subscale ALCP and re-offending. However, consistent with the current study, both Simourd (2006) and Simourd and van de Ven (1999) reported no significant correlations between CSS-M results and recidivism criteria.

It was surprising to find no significant correlations between the anti-social attitudes and cognitions measures and incidents and misconducts, given anti-social attitudes and cognitions have been found to be a strong domain in the prediction of prison incidents and misconducts (Gendreau, Goggin, & Law, 1997). However, lack of significant correlation

between these constructs may not suggest non-existence of relationships (Ott, 1993), rather it may suggest that the limited sample size in the study may have been unable to determine if these relationships did exist. Moreover, Simourd (1997) suggested that anti-social cognitions are linked to deviant behaviour in an indirect way.

Further bivariate findings suggested that as participants age, their PID decreased. It was predicted that the PID would decrease with age, given desistance literature evidenced crime propensity to decline with age (Gottfredson & Hirschi, 1990; Hirschi & Gottfredson, 1983; Laub & Sampson 2001; Laub & Sampson, 2003; Maruna, 2001; Tittle & Grasmick, 1997; Wilson & Herrnstein 1985).

Research questions. Research questions for the current study centred on investigating attitudinal and behavioural change of Te Aō Marama participants, whether time spent in Te Aō Marama influenced the degree of change experienced, the relationship between change and participant age, RoC*RoI score and gang membership, and the exploration of whether change in Māori cultural identity related to participants' attitudinal and behavioural change.

Does Te Aō Marama have an effect on attitudinal and behavioural change for offenders?

Māori cultural identity. The current study attempted to explore Māori cultural identity through the MMM-ICE RS31 questionnaire. However, the inadequate reliability findings of the MMM-ICE RS31 led to the questionnaire's removal. Rather, the separate CU rating was retained as a measure of Māori cultural identity.

Participants' scores on the CU rating before and after joining Te Aō Marama suggested that their cultural understanding had significantly increased since participating in the unit. This may indicate that being housed in Te Aō Marama provides offenders with an understanding of their Māori culture, assisting in the development of their Māori cultural

identity. This supports the original MFU philosophy; to increase offenders' Māori cultural understanding and identity through providing an intervention and therapeutic programme rich in tikanga Māori principles (Byers, 2002; Department of Corrections, 2002; Department of Corrections, 2009b).

The findings are consistent with Nakhid and Shorter's (2013) and Byers's (2002) studies, which indicated that MFU participants found the cultural environment provided them with a sense of cultural understanding and pride they previously did not have. Additionally, Kupenga-Wanoa's (2004) study suggested that, through the inclusion of tikanga Māori, MFU offenders were provided with the tools to develop a secure cultural understanding and a sense of pride in being Māori (Kupenga-Wanoa, 2004). However, Nakhid and Shorter's study was based on limited participant numbers, and Byers and Kupenga-Wanoa's papers' did not use empirical research methodology (Marie, 2010).

The finding in the current study provided evidence that participation in Te Aō Marama had some positive influence on participant's level of cultural understanding; however, it is not possible to suggest this as evidence of an increase in Māori cultural identity, given the potential differences between the two constructs. For example, it is possible that an offender may have a greater understanding of their culture, but that this may not equate to a stronger identity with that culture. Huriwai, Robertson, Armstrong, Kingi and Huata (2001) stated that knowledge of cultural norms, beliefs and practices may not equate with tribal affiliation or identification as Māori. Moreover, Robson and Reid (2001) reported that some individuals may acknowledge Māori cultural understanding but not identify as Māori, while others may identify as Māori in some situations but not in others. Additionally, the Alcohol Advisory Council of New Zealand (1998) reported that, although many Māori are not brought up in a traditional environment and are not actively involved in the Māori

community, they may not see themselves as less Māori than their heavily involved counterparts.

It is important to consider the distinction between cultural understanding and cultural identity in the context of the current study, as the CU rating may have failed to measure important elements of Māori cultural identity. Therefore offenders who appeared to experience little change in cultural understanding may have experienced a significant increase in other aspects of Māori cultural identity.

Research has emphasised the difficulty in measuring cultural identity (Broughton, 1994; Durie, 1998; Huriwai et al., 2001; Smith 1999). Baxter (1998) argued that within each culture both commonality and diversity exists. Given these differences, Thomas (1986) reported the impossibility of creating a scale that accurately measures the multiple qualities that demonstrate cultural knowledge and competence and define cultural identity. Durie (1995b) argued that the vast variety of cultural and social features amongst Māori present considerable challenges in attempting to understand, conceptualise and define Māori cultural identity, contributing to the lack of existing reliable and valid measures of the construct. Given the difficulty in accurately assessing Māori cultural identity, the study's construct validity may have been compromised (Howell et al., 2005).

The current study attempted to address the limitation in the measurement of Māori cultural identity, through the inclusion of participant feedback. Interviews provided participants with the opportunity to express what they felt led to the changes they experienced in Te Aō Marama. While the interview questions refrained from directly asking about Māori cultural identity, participants predominately reported it was an increase in this construct that contributed to the changes they experienced. Because participants initiated the discussion of this, they were not confined to the researcher's definition of Māori cultural identity, but rather provided the freedom of individual variation in the conceptualisation of the concept. The

participants' feedback therefore reflected the CU results, potentially reinforcing the use of the CU as a measure of Māori cultural identity.

Māori wellbeing. Participants' scores across the HOSR indicated that offenders experienced a significant increase across Wairua, Hinengaro, Tinana, and overall wellbeing, and an insignificant increase in Whānau, over time spent in Te Aō Marama.

Consistent with these findings, participant feedback, regarding what contributed to the changes they experienced, suggested 20% of offenders felt an increase in their Wairua contributed to internal change, 40% of offenders reflected that Te Aō Marama provided learning about Hinengaro, assisting in their understanding of emotion and emotional control, 13% of offenders indicated replacing anti-social behaviour with Tinana as an emotion regulation strategy, and 38% of offenders reflected that, by increasing Whānau wellbeing, they no longer sought gang association. Furthermore, participants suggested that their Te Aō Marama experience had equipped them with a greater appreciation, a stronger bond, and a better interaction with whānau, and had motivated them to change in an attempt to make their whānau proud.

Although the GLM results suggested that Whānau increased at an insignificant level, the feedback suggested that even a small increase in this construct had a significant effect on attitudinal and behavioural change. This may reflect the importance of whānau in the Māori world (Mark & Lyons, 2010; Metge, 2001; Moeke-Pickering, 1996).

Additional to self-report, the current research measured offenders' wellbeing through a nominated persons' perception of the construct (the HONP). Findings suggested incongruence between offenders' perceptions of change in their wellbeing and nominated persons' perceptions of the offenders change in wellbeing over time spent in Te Aō Marama. Although these results indicated discrepancy between self-report and nominated persons'

report, the acceptable reliability and internal consistency of the HOSR and HONP measures indicated differences in perception rather than psychometric issues.

Similar findings were demonstrated in Mellsop and Kingi's (2010) *Hua Oranga Report* for *Te Rau Matatini*, which indicated weak correlations between the differing stakeholders' perspectives across the subscales. Additionally, research has continually indicated low levels of convergence on consumer versus clinician measures (see Clark & Friedman, 1983; Monti, Corriveau, & Currna, 1982; Piersma & Boes, 1995; Sullivan & Grubea, 1991).

The inconsistency found between self-reported and nominated persons' reported wellbeing, may, on face value, reflect presence of social desirability, with offenders responses influenced by their need to answer questions in a desirable way (Fisher, 1993). However, on analysis of the descriptive statistics, it was found that nominated persons' mean scores across the wellbeing subscales were not significantly lower than the participants' self-report, and in some instances were higher. So, although the nominated persons' results suggested that wellbeing did not increase over each time point as participants' self-report suggested, it did suggest that nominated persons' scored high ratings of participant wellbeing.

In contrast to social desirability, Sandvik, Diener and Seidlitz (1993) argued that differences in self-report versus nominated persons' report may point to differences in the process of the two types of assessment. In the present study, process issues may have arisen regarding stakeholder agreement as to what degree of change was necessary to reflect a change in score: what one person considered adequate change to increase a score in wellbeing, may not have been considered adequate change to increase a score in wellbeing to another (Meiser-Stedman, Smith, Glucksman, Yule, & Dalgleish, 2007).

The judgments of dimensions required in the HO scale; "much more", "more", "no change" "less", "much less", may also contribute to a lack of convergence between self-

report and nominated persons' report, as the anchor points for such judgments are not clearly specified (Harvey, Barry, Fitzgerald, Evans, & Bennett, 2007).

Additionally, the discrepancy between self-report and nominated persons' report may reflect the amount of time the nominated person had spent with the offender prior to completing the measure, whether the same nominated person completed the measure for the participant at each data collection time point (as it is suspected that due to shift work, some nominated persons may have passed on their measure to other Te Aō Marama staff to fill on behalf of them), whether any incidents occurred between data collection periods, and the amount of effort the nominated person exuded in understanding the offender's unique individual circumstances (Bennett, 2009; Mellsop & Kingi, 2010; Meiser-Stedman et al., 2007).

Norman (2010) suggested that correlations should not always be expected when employing different assessment methods when measuring the same construct, as measures of the same construct assessed in different measurement domains are not expected to produce a high correlation. Because the self and others ratings represent entirely separate methods, a lack of convergence may rather suggest that different stakeholders approach the assessment process from different perspectives, experiences and knowledge bases, therefore bringing a "multidimensional" aspect to the assessment process (Campbell & Fiske, 1959; Meiser-Stedman et al., 2007).

The discrepancy between self-report and nominated persons' report would not have affected the current research findings, given the study did not merge the HOSR and HONP results, but rather allowed for the differentiation between stakeholders perspectives. Further, wellbeing was the only measurement that used nominated persons' perceptions of offender change.

Anti-social attitudes and cognitions. Results suggested that, over time spent in Te Aō Marama, offenders experienced a significant decrease in ALCP, TLV, CSS-M total, and PID. Offenders ICO also decreased over time spent in the unit, but not at a significant level. These findings indicated that participating in Te Aō Marama reduces offenders' anti-social attitudes and cognitions.

There were no large-scale aggregate data samples comparing CSS-M or PID results over multiple time points from which to compare the current findings (Simourd, 2006). However, in exploring the descriptive statistics, two studies based on Canadian offenders found participants had CSS-M total scores falling in the medium range (Simourd, 2006; Simourd & Van de Ven, 1999). When comparing these results to the current study, it suggested that Te Aō Marama participants reported higher ratings of criminal sentiments than their Canadian counterparts. Furthermore, North American research exploring offenders' PID results pre- and post-programme suggested lower overall scores than the PID results of offenders in the current study (Nice, 2002; Van Voorhis et al., 2001; Yessine & Kroner, 2004). Therefore participants in Te Aō Marama reported higher levels of pride in delinquency than their Canadian and American counterparts.

The high levels of self-reported criminal sentiments and pride in delinquency found in the current study may indicate that participants in Te Aō Marama actually held stronger anti-social attitudes and cognitions than Canadian and American offenders. However, the researcher was unable to find any studies exploring the differences in anti-social attitude and cognition levels across Māori offenders and offenders from differing cultures so could not substantiate evidence of this. This was consistent with other researchers' inability to locate studies exploring cultural differences in attitudes and criminal thinking styles (Coebergh et al., 2001; Maynard et al., 1999).

Another potential rationale for the higher levels of anti-sociality reported by offenders in the current study compared to Canadian and American offenders, may be that Te Aō Marama participants reported honest ratings of anti-sociality. This may be due to the level of rapport the researcher obtained with participants (Logan, Claar, & Scharff, 2008), resultant from the kaupapa Māori research process adopted (Milne, 2005).

Participant feedback was consistent with the findings across the CSS-M and PID measures; with over 35% of offenders reporting that the change they experienced in Te Aō Marama resulted from a change in their thinking (Question 1.1), and 29% of offenders reporting a change in their thinking and attitude to likely influence their future behaviour (Question 2.1).

Behavioural change. Results indicated that participants experienced a significant increase in programme attendance, and a significant decline in incidents and misconducts committed, while in Te Aō Marama. These findings suggested that Te Aō Marama had some positive influence on increasing pro-social behaviour and decreasing anti-social behaviour. This was consistent with participant feedback, with 40% of participants reporting that changes they had experienced in Te Aō Marama were a result of behavioural change. These results were supported by the literature, with researchers arguing that interventions strengthening Māori cultural identity through enhancing cultural values and beliefs, could promote positive behaviour (Durie, 2005; Hoskins, 2007; Maynard et al., 1999), and decrease anti-social behaviour (Harper, 1998; Lawson-Te Aho, 1998).

Overall, the findings for this research question suggested that Te Aō Marama had a significant effect on attitudinal and behavioural change for participants. These findings were convergent with participant feedback, with 91% of respondents indicating that Te Aō Marama had significantly changed them.

Are there differences in change between offenders who are new to Te Aō Marama (0-6 months stay) compared to offenders who have spent greater periods of time in the unit (6-12 months, 12-24 months, and 24 + months stay)? Descriptive statistics suggested that participants who had been in the unit for longer periods of time had higher mean scores across the HO self-report and nominated persons' subscales, and lower average scores on the anti-social attitude and cognition measures. This suggested that, on average, offenders who had been in the unit for the longest period of time had the highest levels of wellbeing and the lowest levels of anti-social attitudes and cognitions**.**

One exception was offenders who had been in the unit for a 12-24 month period. Descriptive statistics suggested that these participants displayed the lowest levels of HOSR and the highest ratings of PID (Table 8). This may reflect that Te Aō Marama participation had a detrimental effect on wellbeing and anti-social attitudes and cognitions after a 12-month period. However, nominated persons rated these participants with the highest overall wellbeing, and offenders' scores across the other anti-social attitudes and cognitions measure (the CSS-M), suggested these participants had the lowest overall criminal sentiments. Furthermore, results suggested that participants who had been in the unit for 24 months or longer had the highest levels of HOSR and the lowest levels of PID. Therefore, offenders may experience an increase in HOSR and a decrease in PID over 0-6 months and 6-12 months spent in Te Aō Marama, a decrease in HOSR and an increase in PID at the 12-24 months period, and then a return to an increase in HOSR and a decrease in PID after 24 months, to the overall highest and lowest levels of self-reported wellbeing and pride in delinquency respectively. Therefore, this may indicate that it would be detrimental for offenders to leave Te Aō Marama at the 12-24 month period and optimal for participants to remain in Te Aō Marama for 24 months or longer.

Further analysis explored whether being in the unit for a longer period of time produced a greater level of change over the six-month data collection period. The GLM results suggested no significant difference on level of change experienced for various periods of time spent in the unit (Table 8). Therefore, on average, a participant who had been in the unit for over two years at time one, did not experience more change over the study period than a participant who had been in the unit for two days at time one (did not change at a faster or slower rate). However, participants who had been in the unit for over two years, would have been exposed to more change over time, therefore had higher mean scores in wellbeing and lower mean scores in anti-social cognitions, than did newer participants. These findings suggested that, as duration of time spent in Te Aō Marama increased, participant change increased continuously, with no certain amount of time in the unit producing higher levels of change.

Literature indicated that therapeutic programmes may produce positive outcomes dependent on programme duration (Corrective Services New South Wales, 2013; Orlinsky, Ronnestad, & Willutzki, 2004). However, Howard, Kopta, Krause, and Orlinsky (1986) suggested that time spent in therapy did not lead to better outcomes, and Kopta Howard, Lowry, and Beutler (1994) argued that most change typically occurs earlier in therapy, with diminishing returns beyond a certain point.

Grant's (n.d) paper addressing effective correctional programmes, suggested that intervention periods should range from three to nine months in duration, with lower intensity programmes of an even shorter duration (Grant, n.d). However, Grant's conclusions reflected personal perspective, stemming for an understanding of the literature and experience in the field, and were not substantiated on unfounded evidence.

Although the descriptive statistics found participants experienced a decrease in HOSR and an increase in PID at the 12-24 month period, the GLM analysis found no

significant drop-off in change over time spent in Te Aō Marama. This may suggest that the unit provides continuous development, with no particular duration identified as producing most change. The implications of this result for Te Aō Marama may be that the longer a participant remains in the unit, the more positive change they will experience. This finding was consistent with research on culture and identity development, with research indicating that culture is not static, but continually evolving and changing (Roosens, 1989; Vega, 1992), and that development of identity is a fluid process occurring well into adulthood (Dupree, Spencer, & Bell, 1997).

What is the relationship between offender age, offender RoC*RoI score and gang membership on offender change? Stepwise regression suggested that older participants had more TLV than younger participants. This finding was inconsistent with the correlation coefficient (Table 5) which found that anti-social attitudes and cognitions, as measured on the PID, negatively correlated with age. However, although TLV and PID are both measures of anti-social attitudes and cognitions, there may be differences between the measures. While PID explores whether offenders have pride in offending, TLV explores whether offenders are tolerant to offending. Therefore, the current study's result may be a reflection of older offenders potentially having spent a greater period of time within the criminal justice system than their younger counterparts (Kerbs 2000), subsequently increasing their tolerance for crime (Gendreau, Cullen, & Goggin, 1999).

Further results suggested that nominated person's perceptions of participant wellbeing decreased the older the participant was. This may be reflective of the above finding, with older participants potentially being exposed to a criminal lifestyle for a longer period of time than their younger counterparts, subsequently affecting their wellbeing (Gendreau et al., 1999). Additionally, nominated persons may have perceived a decline in physical health to be predictive of a decline in overall wellbeing, with older participants' physical health likely

to have deteriorated more than their younger counterparts. However, Okun, Stock, Haring and Witter's (1984) meta-analysis indicated that the relationship between poor health and self-reported wellbeing was not highly correlated, with some people with objectively poor health reporting high wellbeing. Moreover, nominated persons' perceptions that offender wellbeing decreased with age, was not replicated by offenders self-reported wellbeing score, and therefore may be more indicative of the discrepancies between the two perspectives.

The increasing age of offenders also tended to produce lower programme attendance scores. This may suggest that, as an offender ages, they become less likely to participate in prison programmes, compared to their younger counterparts. This finding may also be reflective of the previous, in regards to older participants potentially being exposed to a criminal lifestyle for a longer period of time, and therefore being more likely to have already participated in the rehabilitation programmes. Furthermore, a longer period of time in the criminal justice system may have led to an inability to envision changing, due to acceptance of a criminal identity. As a result, older participants may be less motivated to participate in programmes than their younger counterparts.

Additional to this explanation, older offenders' lower likelihood to participate in programmes may be reflective of Department of Corrections' staff encouraging younger offenders to participate in programmes more than older offenders. This may be due to a reflection of desistance (Laub & Sampson 2001; Maruna, 2001; Wilson & Herrnstein 1985), with older offenders perceived to pose less of a threat to society upon release (Smyer & Burbank, 2009).

Participants with a higher RoC*RoI were less likely to engage in programmes in Te Aō Marama compared to participants with a lower RoC*RoI. Research indicated high risk offenders to be less motivated to change and therefore, less willing to participate in prison programmes, and often the first to be excluded from programming (Gordon & Nicholaichuk,

1996; Lowenkamp & Latessa, 2005). However, several meta-analysis have suggested that, for optimum effectiveness, interventions should target high risk offenders (Andrews & Dowden, 1999; Andrews et al., 1990b; Dowden & Andrews 1999a, 1999b, 2000; Wikiriwhi, 1998). Although higher risk offenders are identified as the most needing of interventions, lower risk offenders often tend to receive more interventions (Lowenkamp & Latessa, 2005). This finding may have important implications given the potential harm that can occur by exposing low risk offenders to intensive correctional interventions (Weiner, 1998). Therefore it would be of value for Te Aō Marama to encourage programme participation in offenders with higher risk.

A further significant result suggested that participants with high RoC*RoI had less ICO than participants with a low RoC*RoI. This is an unexpected finding, and may be a reflection of the ICO subscale psychometric properties, given this was the only anti-social attitudes and cognitions subscale that produced a cronbach's alpha rating scale demonstrating unacceptable internal consistency. Furthermore, it was the only subscale that did not significantly decline over time spent in Te Aō Marama (see Hypothesis 1.3). This finding was reflected in the literature (Ashford et al., 2008; Mills, 2000; Yessine & Kroner, 2004), and was suggested to be a result of the ICO consisting of fewer subscale items (Mills, 2000).

Finally, gang members seemed to have stronger self-reported Whānau wellbeing than their non-gang member counterparts. This finding may be a reflection of participants' perception of what "Whānau" is, as the HO measure did not specify Whānau to be blood relatives, therefore, gang members may have considered their gang as their Whānau.

Traditional concepts of whānau have been defined as a diffuse unit, based on common whakapapa and descent from a shared ancestor. However, in more recent times, this has been broadened to include 'kaupapa-based whānau' in which non-traditional situations, where Māori with similar interests, but not direct blood relationships, form a cohesive group (Durie,

1994). Smith (1995) reported that whānau can consist of a group of Māori who may share an association based on some common interests, and Metge (1995) argued that kaupapa-based whānau extends beyond descent, with the term expressing group members' shared purpose, commitment, values and obligations towards one another. Furthermore, Ratima (1996) stated that kaupapa-based whānau provide a source of identity and support for contemporary Māori, and may make important contributions to wellbeing through the provision of social support.

Therefore, "the gang" may be seen to encompass the attributes representative of kaupapa-based whānau (Durie, 1994; Metge, 1995; Ratima, 1996; Smith, 1995), with the finding therefore a reflection of offenders' perceptions of the subscale. If gang was considered whānau, then this may have important implications for the current study. Particularly, offenders' self-reported increase in Whānau over time spent in Te Aō Marama may suggest a strengthening of gang relationships in the unit, rather than familial relationships. However, participant feedback suggested that offenders experienced both a decrease in gang association and an increase in association with family members, over time spent in Te Aō Marama. Therefore, the finding that gang members had higher Whānau wellbeing scores may rather reflect the collectivist worldview gang members hold, with interpersonal relationships likely to be of great value (Hazlehurst & Hazlehurst, 1998).

What is the relationship between change in Māori cultural identity and offenders' scores across wellbeing, anti-social attitudes and cognitions, programme attendance and incidents and misconducts score? As previously mentioned, Māori cultural identity was measured via the CU rating given the poor psychometric properties of the MMM-ICE RS31 Māori identity measure. Results indicated that when offenders experienced increased change in their CU they reported higher levels of wellbeing. These findings were consistent with both bivariate analysis results (Table 5) and offender feedback (Question 1.1), with a positive significant correlation between CU and HOSR, and with offenders suggesting that when they

increased their Māori cultural identity through participation in Te Aō Marama, their wellbeing was subsequently strengthened. Literature was in agreement with these findings.

Hokomau and Sibley's (2010) empirical research investigated whether increases in Māori cultural identity predicted increases in personal wellbeing. Participants consisted of 93 Māori aged 18-74 years old. Māori identity was assessed using the MMM-ICE (Houkamau & Sibley, 2010), and personal wellbeing was assessed using the Personal Wellbeing Index (PWI, Cummins, Eckersley, Pallant, Van Vugt, & Misajon, 2003). Results suggested that Māori cultural identity was associated with a concurrent increase in personal wellbeing. They suggested the relationship to occur as an increase in cultural identity increased a sense of embeddedness within the Māori community, the perception that one has the personal resources to engage appropriately in Māori cultural contexts, and the opportunity to engage as Māori, and with Māori. Increasing these aspects of cultural embeddedness was then suggested to directly increase satisfaction with personal aspects of one's life and circumstances (Hokomau & Sibley, 2010).

This theory may have relevance in the current study as participant feedback suggested that offenders felt more confident in participating in the Māori community due to an increased knowledge of Māori protocol and practices. Furthermore, many participants reported they would be more involved in the Māori community when leaving Te Aō Marama

Hokomau and Sibley (2010) concluded that cultural identity was positively associated with personal wellbeing due to the underlying causal process in which increases in Māori cultural identity heighten personal wellbeing over time. Although lacking sufficient participant numbers, Kupenga-Wanoa's (2004) study produced similar findings, suggesting that an understanding of the loss of identity provided a setting in which Māori offenders in the study were able to 'find themselves', and therefore, obtain a sense of wellbeing.

International research also reflected a relationship between increase in cultural identity and a subsequent increase in wellbeing (Tucker 1999; Zimmerman et al., 1994). Hutnik (1991) suggested that ethnic groups are endowed with unique traditions which enable members to find powerful sources of personal dignity and pride. Consistent with this perspective, empirical research has suggested that ethnic minority individuals who are knowledgeable in their culture, and have developed a secure cultural identity, tend to score higher on various measures of psychological wellbeing, compared to their indigenous counterparts who have not developed a secure cultural identity (Belgrave et al., 1994; Caldwell et al., 2004; Dukes & Martinez, 1997; Phinney, 1989).

Given that the results of the current study indicated that wellbeing levels increased as a result of change in CU, and research has continually demonstrated the positive relationship between the two constructs, it may be the combination of these constructs that produces change in anti-sociality. Consistent with this, Kupenga-Wanoa's (2004) study illustrated that offenders believed that successful recovery was achieved by a balance of their physical, mental, spiritual and emotional aspects, and by a strengthening of Māori identity. The Project Waitangi report (1989) articulated a similar finding stating that anti-social behaviour resulted from an imbalance in the spiritual, cultural, emotional, physical and social wellbeing of an individual or whānau.

The Department of Corrections (2002) specified that the MFU aimed to reduce Māori offending through using Māori culture and practices, as a medium to create change in the attitude and behaviour of Māori inmates. This may reflect the belief that, through increasing Māori cultural identity, offenders would experience attitudinal and behavioural change, and subsequently reduce anti-sociality.

Participant feedback suggested that almost all offenders (98%) believed that the changes they experienced in Te Aō Marama were due to an increase in Māori cultural

identity. Offenders suggested that participation in daily cultural practices regarding history, tikanga, whakapapa, language, and art, provided an increase in knowledge of Māori culture, and a strengthening of Māori cultural identity, which subsequently facilitated further attitudinal and behavioural change. They reported that as their Māori cultural identity increased, they developed a new understanding of what it meant to be Māori, and identified that offending did not fit within this worldview. Therefore, although regression analysis did not establish cultural understanding as a mediating variable to change across the constructs, participant feedback suggested that an increase in Māori cultural identity contributed to a reduction in anti-sociality. These findings have been constructed into figure 20 below.
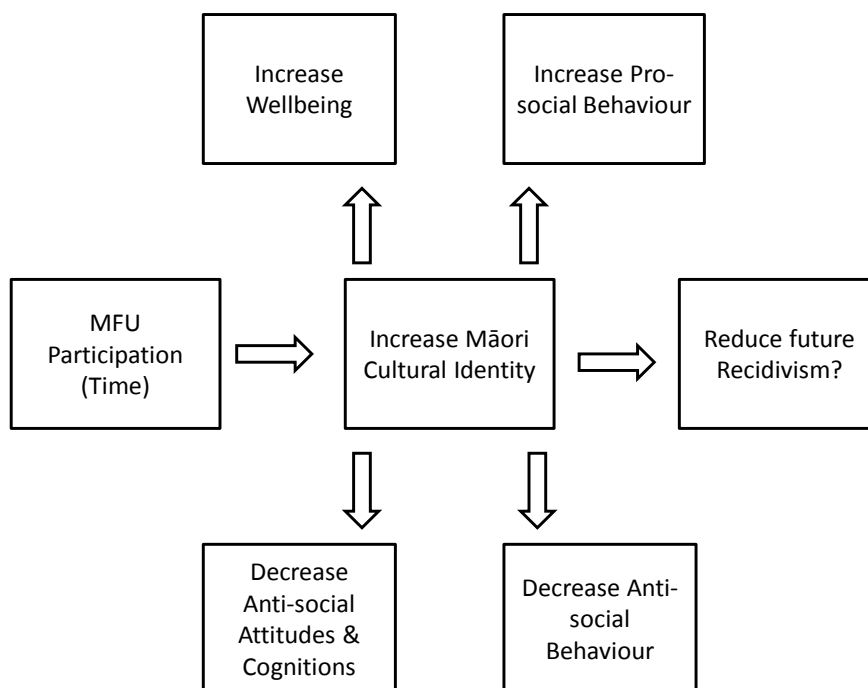
Figure 20. The relationship between time spent in Te Aō Marama and offender change across Māori cultural identity, wellbeing, pro-social behaviour, anti-social attitudes and cognitions and anti-social behaviour, and the predicted effect that changes in these variables may have on re-offending.

Strengths, Limitations and Considerations

The findings need to be considered in light of the study's strengths, limitations and considerations.

Strengths. Empirical studies exploring Māori offending have been argued to reflect European ideology and therefore fail to account for Māori realities (Gibbs, 2000; Kupenga-Wanoa, 2004). As a response, alternative indigenous approaches to understanding Māori offending, considering systemic or structural inequalities within past society as fundamental in understanding current disparities, were presented (Coebergh et al., 2001; Maxwell & Morris, 1999; Maxwell et al., 2004; Maynard et al., 1999; McFarlane-Nathan, 1999; Pratt, 1999; Tauri, 1999; Te Puni Kōkiri, 2000; Wikiriwhi, 1998). However, these studies have been criticised for being based on underdeveloped research methodologies, with findings predominately established through belief and opinion, failing to generate empirical evidence (Marie, 2010). In addressing both the lack of research using indigenous conceptualisation, and the lack of empirically sound indigenous studies, the current research was grounded by a kaupapa Māori framework, was consistent with Māori paradigms (Moewaka-Barnes et al., 1998), and reflected an empirical research design.

Although the sample size in the current study consisted of only 60 participants, given the maximum capacity of offenders housed within Te Aō Marama on one occasion was also 60, the sample size reflected a representative population. Furthermore, the nature of the repeated measures design ensured that individual differences in participants were unlikely to distort the effect of the independent variable (Stangor, 2011). It therefore allowed for accurate results to be generated with fewer participants, in comparison to independent group designs (Russell & Lawton, 2010).

The study's six week time frame between the administration of questionnaires accounted for the potential of order affects (Russell & Lawton, 2010). Furthermore, because the study recruited participants who had been in the unit for various periods of time at initial data collection, and because it occurred in the naturalistic setting as opposed to a laboratory experiment where the research hypothesis may be have been more easily identified, the potential for demand characteristics were reduced (Thayer, 1987). The naturalistic design also produced high ecological validity (Russell & Lawton, 2010).

Due to the study exploring whether the inclusion of cultural content in Māori interventions produces change across both positive and negative constructs, the study may provide useful information applicable beyond a correctional setting.

Limitations and considerations. Given the time constraints, the present study was limited to exploring client change in only one of the five MFUs in the country. However, the selection of Te Aō Marama was justified given that this particular unit was said to be operating in accordance to the MFUs originally prescribed structure and philosophy (Baker, Personal Communication, April 30, 2012; Department of Corrections, 2009b). Furthermore, time restrictions constrained the current study in performing data collection over a six-month period only. Research has highlighted that longer data collection periods generally provide greater information than short-term studies, allowing for the assessment of trends, patterns or changes over time (Ontario Human Rights Commission, 2014). In this sense, client change is able to be explored over a longer period of time, providing information on the effectiveness of the intervention at differing time points. However, because the current study recruited participants who had spent varying periods of time in Te Aō Marama at initial questionnaire administration (0.1 to 46.5 months), the six-month data collection period provided

information about change in offenders who had spent varying degrees of time in Te Aō

Marama, far beyond the six-month period.

Literature argued that for research to adequately measure the effect an independent

variable has on a dependent variable, the effects of other variables must be minimised

(Campbell & Stanley, 1963; Johnson & Stromsdorfer, 1990). This may be achieved through

using a control group (a similar group that does not receive the independent variable). The

use of a control group may maximise a study's internal validity, through allowing results to

be attributed to the intervention (Rossi & Freeman, 1993). However, the current study did

not use a control group. There are several justifications for this.

First, from methodological reason, the feasibility of having a control group would

have been extremely difficult. This would have needed to ensure participants were matched

in terms of demographic data, had spent a similar amount of time in prison for similar

offending, and would have needed to source participants who were not attending any type of

programme or intervention during the research period. Second, from statistical reasoning, the

participant feedback allowed for exploration of what offenders believed equated to any

changes they experienced, and what exactly made the difference for them. This allowed for

the investigation of whether changes were due to Te Aō Marama participation (independent

variable), or other unmeasured influences. Finally, the research was not an evaluation of Te

Aō Marama, but rather an exploration of client change in the naturalistic setting of the unit.

Further limitation of the current study may be the likelihood that participants'

responses were influenced by social desirability. In this sense, offenders may have over-

reported "good behaviour", and under-reported "bad behaviour" in both self-report

questionnaires and participant feedback (Fisher, 1993). A large number of studies have

shown that social desirability can significantly bias questionnaire data (see Klassen, Hornstra,

& Anderson, 1976; Phillips & Clancy, 1970, 1972).

The research attempted to account for this by voicing the necessity for participants to provide honest responses prior to questionnaire administration, assuring participants of their anonymity in the research, and allowing for enough distance between participants' seating to ensure the researcher and other participants were unable to view responses. Furthermore, the current study's application of individual interviews in an open-ended format, refraining from the use of leading questions and minimizing the potential for investigator bias, may have reduced the likelihood of participants responding in a socially desirable way (Russell & Lawton, 2010).

Additionally, file data on pro-social and anti-social behaviour gathered from offenders prior to their MFU entry, and then at the final questionnaire administration, suggested a significant increase in pro-social behaviour and a significant decrease in incidents and misconducts. Given that these results were not provided by participant self-report yet they changed significantly, may provide evidence that the offender's responses were not a reflection of social desirability alone.

Another consideration of the current research is the potential assumption that all Māori may benefit from an increase in their cultural identity. Given that Māori do not all share the same opinions, beliefs and behaviours, it is risky to assume that Māori offenders must acquire commonly-held cultural values, if they do not already possess them (Huriwai et al., 2001). Assuming all Māori offenders would benefit from developing their cultural identity ignores the unique aspects of the individual and may lead to cultural stereotyping (Ebbett & Clarke, 2010). Furthermore, it is important to consider that some Māori individuals who identify as having a secure Māori cultural identity may still engage in crime (Mc Farlane-Nathan, 1999). This may be due to the prevalence of other empirical risk factors of offending (see Andrews & Bonta, 2010). While the current research acknowledges the existence of multiple risk factors to offending, the exploration of these goes beyond the scope

of the study. The focus on exploring a lack of cultural identity as a risk factor to Māori offending was justified given the limited research in this area.

A further limitation of the present study is its inability to provide post-release data regarding the participants' re-offending rates. Because the study is unable to report whether the changes experienced in Te Aō Marama are maintained outside of the unit, the validity of the study may be jeopardised. However, literature has shown that the measures used in the study may be predictive of recidivism. Anti-social attitudes and cognitions have increasingly been associated with anti-sociality, with individuals holding an anti-social thinking style more likely to offend (Andrews & Kandel, 1979; Andrews & Kroner, 2004; Andrews & Leschied, 1994; Andrews et al., 1990; Glueck & Glueck, 1950; Hoge, Andrews, & Leschied, 1994; Morgan et al., 2010; Roy & Wormith, 1985). Furthermore, the two anti-social attitude and cognition measures used in the current study have been evidenced to correlate with recidivism (see Andrews & Wormith, 1984; Shields & Whitehall, 1991; Yessine & Kroner, 2004). Therefore, the reduction in anti-social attitudes and cognitions found across the CSS-M and the PID may be predictive of a decline in future anti-social behaviour. Moreover, the incidents and misconducts rating indicated a significant decline in anti-social behaviour after participation in Te Aō Marama, and Andrews and Bonta (2010) identified history of anti-social behaviour including rule violations, as an important risk factor predictive of criminal recidivism. Additionally, it has been proposed that a secure Māori cultural identity, a positive wellbeing, and involvement in pro-social behaviour; consistent with the current study's results, may reduce offending (Durie, 2005; Hoskins, 2007; Moeke-Pickering, 1996).

Participant feedback results suggested that the majority of offenders felt participation in Te Aō Marama would influence their behaviour when released, with 93% of participants reporting they would be less likely to re-offend. They suggested that this may be due to four different constructs; positive change in their attitude and cognition, an increase in their Māori

cultural identity, whānau support and an understanding of consequences. Anti-social attitudes and cognitions, a lack of consequential thinking, and fragmented familial relationships have been identified as risk factors to offending (Andrews & Bonta, 2010; Black, Cullen, & Novaco, 1997; Hoge, Andrews, & Leschied, 1996; Mann, Hanson, & Thornton, 2010), and conversely, pro-social support and a positive cultural identity have been argued to mitigate offending (Becroft, 2009; Department of Corrections, 2009a; Hart et al., 2007; Singh & White, 2000; Smith & Stern, 1997). Furthermore, literature has suggested conflict between holding a secure Māori cultural identity and committing anti-social behaviour (Cooper, 2012; Hakiaha, 1998; Kruger et al., 2004; McFalane-Nathan, 1999; Pihama et al., 2003; Snowball & Weatherburn, 1998; Winter, 1998).

Although these results indicated offenders attitudinal and behavioural change, alongside their perspectives of why they believed they would be less likely to re-offend on release, and were consistent with the literature regarding risk factors and mitigating factors to offending, it is important to consider that this study obtained data from when offenders were housed in Te Aō Marama. This may have important implications as being immersed in a group may create a bond and cohesiveness contributing to change, which may not be maintained when no longer part of that group (Beal, Cohen, Burke, & McLendon, 2003; Forsyth, Zyzniewski, & Giammanco, 2002; Gully, Devine, & Whitney, 1995; Mullen & Copper, 1994; Neale, Mannix, & Mullen, 2010; Oliver, 1988).

Group cohesion has been commonly defined as the tendency for a group to be in unity while working towards a shared goal (Carron & Brawley, 2000). Forsyth (2010) suggested that a group can be said to be in a state of cohesion when its members possess bonds linking them to one another and to the group as a whole. Moreover, Dyaram and Kamalanabhan (2005) and Yukelson, Weinberg and Jackson (1984) argued that members of strongly cohesive groups are more inclined to readily participate and accomplish collective tasks or

goals, and meta-analyses have shown that there is a positive relationship between cohesion and performance (Beal et al., 2003; Forsyth et al., 2002; Gully et al., 1995; Mullen & Copper, 1994; Oliver, 1988).

When investigating this phenomenon in the context of the current study, the consistency between the research results and the Te Aō Marama objective may reflect the participants' desire and pressure to accomplish the MFUs collective goal. Therefore, changes may be a reflection of increased performance due to group cohesiveness.

An important aspect of cohesiveness is its dynamic nature in that its strength gradually changes over time, from when the group is formed to when it is disbanded (Carron & Brawley, 2000), with cohesiveness dissipating when the group separates (Neale et al., 2010). Therefore, if changes in participants are a reflection of cohesiveness rather than genuine individual change, it is likely these will reduce when individuals are no longer part of the MFU group. In this sense, it would be problematic to assume that the participant changes identified would be maintained outside Te Aō Marama. Therefore, the study refrains from stating that the results are indicative of a reduction in future recidivism.

It is also important to consider external versus internal contingencies in regards to offender change. McMurran's (2002) research, exploring offenders' motivation to change, reported that, if offender change was motivated by external contingencies, this may suggest that social acceptance and the avoidance of sanctions and disapproval were contributing factors to the change in offenders. Whereas, if offender change was motivated by internal contingencies, this may suggest that offenders experienced development of moral codes, values and beliefs, with anti-sociality not seen "fit" with the adoption of these.

Participant feedback in the current study indicated that change may be a result of both external and internal contingencies (See Questions 1.1, 2.1, 3.1 and 4). While offenders commented on potential consequences as an influential factor to their change, responses also

reflected a discord with holding a Māori cultural identity and offending, due to the values and belief systems a Māori identity holds. Research has suggested that motivation driven by internal contingences is a more reliable predictor of long term offender change than motivation driven by external contingencies (Wild, Newton-Taylor, & Alletto, 1998). Therefore, offenders who experienced change as a result of an increase in Māori cultural identity and the subsequent adoption of a Māori belief and value system, may be more likely to remain offence-free after leaving Te Aō Marama, than offenders whose motivation to change was due to external contingencies.

Other research has suggested that for changes resulting from participation in a programme to remain after the completion of the programme, it is essential that there is a continuation of learning (Kupenga-Wanoa, 2004; Opie, 2012). American Indian research by Lloyd (2006) suggested that in order for a minority culture to survive and thrive after the integration with the dominant culture, they must use their cultural customs, practice the spiritual aspects of their culture, and continue to be educated. Lloyd reported that, in securing one's Navajo identity, it is essential to continually practice worldview, language and kinship. When applying this to the current study, it would suggest that for changes in Māori cultural identity to remain post Te Aō Marama, there would need to be a continuation of learning after the MFU placement.

This perspective was replicated in the participants' feedback, with over one quarter of offenders suggesting the need for a continuation programme, and a preference for this to occur on a marae. Responses reflected that this would allow for the continued strengthening of Māori cultural identity. This was consistent with Kupenga-Wanoa's (2004) perspective. She argued that the New Zealand correctional system lacked follow-up tikanga Māori programmes developed for those that were released from prison. Her study signified the need for Māori tikanga programmes to be developed and accessible for offenders in the

community environment and on the marae, after release. The probation officers in her study argued that, pertinent to Māori offending, it was not only necessary to develop Māori-based interventions at the intervention stage, but to also develop tikanga Māori programmes in the community after release, at a rehabilitation level.

Furthermore, offenders' feedback in the present study suggested that cycles of offending behaviour may resurface when no longer housed within the MFU environment, and that a continuation programme may mitigate this. Research has argued that the successful outcomes of transitions from prison to the community are not dependent solely on an offender's desire to change, but are shaped by practices and processes that limit or facilitate the success of such desires (Maruna, 2001; Opie, 2012). Therefore, a successful transition depends not only on the work of the offender, but equally on the willingness of the prison system and society at large, to provide continual support to the offender (Opie, 2012).

Recommendations for Future Research

To the best of the author's knowledge, this was the first empirical study to investigate the relationship between Māori cultural identity theory and change, in offenders housed within a MFU. Therefore, a replication of the current study would be valuable and should endeavour to reduce the limitations outlined above. This may be conducted within Te Aō Marama, and across the other four MFUs; Te Whare Tirohanga, Te Whare Whakaahuru, Te Hikoinga and Whanui.

The current research measured offender change over a six-month period. While the cohort of participants had been in the MFU for varying amounts of time, providing information on new participants alongside those who were in the later stages of their MFU experience, a longer research period would have generated a greater pool of data, strengthening the analysis and the reliability of the results (Ontario Human Rights

Commission, 2014). Therefore, it would be valuable to investigate offender change in Te Aō Marama over a longer time period (Department of Corrections, 2009a).

Given that the current study explored client change when offenders were housed within Te Aō Marama, it would be optimal for further study to investigate whether changes were maintained post MFU, in providing external validity. Investigating whether the participants continued to develop their Māori cultural identity and wellbeing, and decrease their anti-social attitudes and cognitions outside of the unit, will provide crucial information regarding the potential for Te Aō Marama participation to have lasting effects. Furthermore, if changes across the constructs return to levels reflective of initial data collection, this may provide evidence regarding cohesiveness theory, or the need for a continuation programme.

Because anti-social behaviour was measured through incidents and misconducts committed while incarcerated, it would be interesting to investigate whether participants experienced a decrease in anti-social behaviour when in the community (Hoskins, 2007). Therefore, additional to reapplication of the measures, it would be of vital importance to explore whether the changes participants experienced when housed in Te Aō Marama amounted to a reduction in re-offending rates when in the community, in comparison to a matched control. This would provide important information regarding whether change in Māori cultural identity, and subsequent change across wellbeing, pro-social behaviour and anti-social attitudes, cognitions and behaviour, were predictive of future re-offending patterns.

Literature has argued the importance for studies to first explore whether interventions result in changes in participants, and to then investigate whether these changes are predictive of recidivism at programme completion (Patton, 1980; Russell & Lawton, 2010). Given Te Aō Marama aims to reduce Māori offending through increasing Māori cultural identity,

future research exploring re-offending rates of the participants may provide valuable information regarding the external validity of the current study (Carmines & Zeller, 1991).

Additionally, it would be of value to investigate Māori cultural identity theory in a Māori female offender population, given statistics continually report a disproportionate level of Māori women within corrections (Statistics New Zealand, 2012). Results from research in a female population may provide support for the establishment of MFUs within New Zealand's Women's Prisons (Mataki, 1998).

The literature review highlighted the scarcity of existing empirical studies exploring Māori cultural identity theory of offending. Given the paucity of research, there is insufficient data to yield cultural identity theory of Māori offending as evidence-based. Further studies exploring the theory through empirical methodology may allow for a greater understanding of the relationship between Māori cultural identity and offending, adding to the limited research pool (Blackshaw & Walker, 2002; Houkamau & Sibley, 2010).

Conclusion

The literature on Māori cultural identity theory has been dominated by studies lacking empirical evidence (see Coupe, 2000; Durie, 2005; Fitzsimons & Smith, 2000; Hoskins, 2007; Lawson-Te Aho, 1998). Consistent with this, research exploring Māori cultural identity theory of offending has been largely restricted to belief and opinion-based studies (Marie, 2010). This is despite expressions for a more nuanced understanding of whether Māori cultural identity may reduce negative disparities across Māori statistics, generally (Marie et al., 2008b) and with offenders, specifically (Department of Corrections, 2009a; Marie, 2010; Wikirriwhi, 1998). The current study contributed to this knowledge gap by conducting an exploratory study into the relationships between Māori cultural identity and offender change in a programme aiming to strengthen offenders' cultural identity. No other

studies have investigated these variables within a MFU, and therefore it makes a valuable contribution to the Māori cultural identity and correctional rehabilitation literature.

The results suggested that offenders experienced an increase in Māori cultural identity, wellbeing, and pro-social behaviour, and a reduction in anti-social attitudes, cognitions and behaviour, over time spent in Te Aō Marama. Further, it was found that the amount of change an offender experienced was continual, with the length of time an offender participated in Te Aō Marama increasing the amount of attitudinal and behavioural change they experienced. There was no period of time spent in the unit that resulted in the most change. Therefore, it is recommended that for offenders to experience the greatest benefit, they should be housed in Te Aō Marama for extended periods of time beyond the twelve-month maximum time frame originally stipulated (Department of Corrections, 2009b).

An additional key finding unexpectedly found in the current study was the discrepancy between nominated person's report of participant wellbeing and the participant's self-reported wellbeing. This is of clinical importance given the suggestion to combine self-report results with informant-report results in gaining a holistic perspective of participant wellbeing (Durie & Kingi, 1997; Kingi, 2002). Further, it may highlight the necessity for clinicians to be cautious in interpreting their perceptions of a Māori client's wellbeing, as this may differ from the client's self-report (Campbell & Fiske, 1959; Davies, 1996; Meiser-Stedman et al., 1997).

Studies have argued that an increase in Māori cultural identity may increase a Māori individual's pro-sociality, whilst mitigating anti-sociality (Coebergh et al., 2001; Maxwell & Morris, 1999; Maxwell et al., 2004; Maynard et al., 1999; McFarlane-Nathan, 1999; Pratt, 1999; Tauri, 1999; Te Puni Kōkiri, 2000; Wikiriwhi, 1998). In support of this, the current study's findings suggested that offenders' increase in cultural understanding was found to be associated with higher wellbeing, and offenders' predominantly identified Māori cultural

identity contributed to the change they experienced in Te Aō Marama. Therefore, it is recommended that correctional interventions continue to develop offenders' Māori cultural identity in an attempt to enhance attitudinal and behavioural change. However, although the inclusion of culture has shown promising results in Māori correctional interventions, there remains a lack of empirical evidence regarding how and if these indigenous interventions may reduce Māori offending (Kupenga-Wanoa, 2004).

While the current study did not extend to measuring a behavioural outcome, the increased rates of attitudinal and behavioural change experienced in Te Aō Marama, and the offenders' prediction that these changes would reduce their likelihood of offending after MFU, may indicate the potential for a reduction in re-offending. Further, literature has established the relationship between Māori cultural identity and wellbeing, and a reduction in anti-sociality (Durie, 2001; Kruger et al., 2004; Moeke-Pickering, 1996), and studies investigating the validity of anti-social attitude and cognition measures indicate the measures' ability to predict recidivism (Andrews & Wormith, 1984; Shields & Whitehall, 1991; Yessine & Kroner, 2004). As such, increasing Māori cultural identity in an attempt to reduce Māori offending represents a worthwhile approach, and deserves further attention from correctional professionals and researchers.

This study represents an initial foray into understanding whether an increase in Māori cultural identity may result in attitudinal and behavioural change in offenders, ultimately reducing re-offending. However, research in this area remains scarce and would benefit from ongoing study. As such, these findings need to be replicated and followed up with further research.

References

Aboriginal Justice Implementation Commission. (1999). *Report of the Aboriginal Justice Inquiry of Manitoba*. Winnipeg, MB, Canada.

Allen, C. (2002). *Blood narrative: Indigenous identity in American Indian and Māori literary and activist texts*. Durham, NC: Duke University Press.

Allison, M. (2002). Critiquing the critics: A brief response to critics of restorative justice. *The British Journal of Criminology: An International Review of Crime and Society, 42*(3), 596–615. doi:10.1093/bjc/42.3.596

Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct*. Burlington: Elsevier Science.

Andrews, D.A., & Dowden, C. (1999). A meta-analytic investigation into effective correctional intervention for female offenders. *Forum on Corrections Research*, *11*(3), 18-21.

Andrews, K. H., & Kandel, D. B. (1979). Attitude and behavior: A specification of the contingent consistency hypothesis. *American Sociological Review, 44*(2), 298-310. doi:10.2307/2094512

Andrews, D. A., & Wormith, J. S. (1984). *Criminal Sentiments and Criminal Behaviour*. Programs Branch User Report. Ottawa, Ontario, Canada: Ministry of the Solicitor General of Canada.

Andrews, D. A.,Wormith, J. S., & Kiessling, J. J. (1985). *Self-reported criminal propensity and criminal behaviour: Threats to the validity of assessment and personality* (Programs Branch User Report). Ottawa: Solicitor General Canada.

Andrews, D.A., Zinger, I., Hoge, R.D., Bonta, J. Gendreau, P., & Cullen, F.T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology, 28*(3), 369-404. doi:10.1111/j.1745-9125.1990.tb01330.x

Anonymous. (2006). 'Warrior gene' blamed for Māori violence. National Nine News. August 8, 2006. Retrieved June 15, 2011, from http://news.ninemsn.com.au

Arbona, C., Jackson, R.H., McCoy, A., & Blakely, C. (1999). Ethnic Identity as a Predictor of Attitudes of Adolescents Toward Fighting. *Journal of Early Adolescence*, 19(3), 323-340. doi:10.1177/0272431699019003002

Arnett, J.J. (2002). The psychology of globalization. *American Psychologist*, 57, 774-783. doi: 10.1037//0003-066X.57.10.774

Ashford, J.B., Wong, K.W., & Sternbach, K.O. (2008). Generic correctional programming for mentally ill offenders: A pilot study. *Criminal Justice and Behavior*, *35*(4), 457-473. doi:10.1177/0093854807313356

Ausubel, D.P. (1960). Acculturative Stress in Modern Māori Adolescence. *Child Development. 31*(4), 617-631. doi: 10.2307/1126010

Bachman, R. (1992). *Death and violence on the reservation: Homicide, family violence, and suicide in American Indian populations*. New York: Auburn House.

Bakker, L., Riley, D. & O'Malley, J. (1999). *Risk of reconviction: Statistical models predicting four types of re-offending*. Christchurch: Department of Corrections.

Barlow, C. (1991). *Tikanga Whakaaro - Key Concepts in Māori Culture.* Auckland: Oxford University Press.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173. doi: 10.1037/0022-3514.51.6.1173

Battiste, M. (2004). Animating sites of postcolonial education: Indigenous knowledge and the humanities. *CSSE plenary address.*

Baxter, J. (1998). Culture and women's mental health: International perspectives and issues for Aotearoa/New Zealand. *Folding back the shadows. A perspective on women's mental health*. Otago, New Zealand: University of Otago Press.

Beal, D. J., Cohen, R., Burke, M. J. & McLendon, C. L. (2003). Cohesion and performance in groups: A meta-analytic clarification of construct relation. *Journal of Applied Psychology, 88*(6), 989-1004. doi:10.1037/0021-9010.88.6.989

Becroft, A. (2009). What causes youth crime and what can we do about it. In *NZ Bluelight Ventures Inc - Conference & AGM*.

Belgrave, F., Cherry, V., Cunningham, D., Walwyn, S., Latlaka-Rennert, K., & Phillips, F. (1994). The influence of Africentric values, self-esteem, and black identity on drug attitudes among African American fifth graders: A preliminary study. *Journal of Black Psychology, 20*, 143–156.

Bellamy, P., (2009). Young People and Gangs in New Zealand. *Parliamentary Library Research Paper.* NZ Parliamentary Library, Wellington: Social Policy Team.

Bennett, D. (2009). What you don't know about your friends. *Boston Globe*, pp. C1–C2.

Berridge, D. M., & Crouchley, R. (2011). *Multivariate generalized linear mixed models using R*. Boca Raton, FL: CRC Press.

Bevan-Smith, J. (2010). This horrid practice: The myth and reality of traditional Māori cannibalism - A review. *New Zealand Journal of History, 44*, 203-205.

Billing, K. M. (2009). *"Sowing the Seeds for Change." A process evaluation of Te Kakano, the SAFE Programme for Māori men who have sexually offended against children* (Doctoral thesis). University of Auckland, Auckland, New Zealand.

Black, L., Cullen, C., & Novaco, R. W. (1997). Anger assessment for people with mild learning disabilities in secure settings. In B. S. Kroese, D. Dagnan, & K. Loumidis

(Eds.), *Cognitive-behaviour therapy for people with learning disabilities* (pp. 33-52). London: Routledge.

Blackshaw, J. & Walker, N. (2002). What have we learnt? Using evidence-based practice when working with Aboriginal and Torres Strait Islander young offenders. *Paper presented at the What works? Evidence-based practice in child and family services conference.* Sydney, Australia.

Blair, I.V. (2001). Implicit stereotypes and prejudice. In G.B. Moskowitz (Ed.), *Cognitive social psychology: The Princeton Symposium on the legacy and future of social cognition* (pp. 359–374). Mahwah, NJ: Erlbaum.

Board, P. (2002). Code of ethics for psychologists working in Aotearoa/New Zealand. *Wellington: Psychologists Board.*

Bourhis, R., Giles, H., Leyens, J. Ph., & Tajfel, H. (1979). Psycholinguistic distinctiveness: Language divergence in Belgium. In H. Giles & R. N. St. Clair (Eds.), *Language and Social Psychology* (pp. 158–185). Oxford: Blackwell.

Bowker, N.I. (2001). Understanding Online Communities Through Multiple Methodologies Combined Under a Postmodern Research Endeavour [70 paragraphs]. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 2(1), Art. 19, http://nbn-resolving.de/urn:nbn:de:0114-fqs0101194

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and wellbeing. *Journal of Personality and Social Psychology*, *77*(1), 135-149. doi: 10.1037/0022-3514.77.1.135.

Brant, C. (1982). Native ethics and principles. Retrieved July 12, 2013, from http://mrc.uccb.ns.ca/brant.html

Brewin, M., & Coggan, C. (2004). Evaluation of the Ngāti Porou Community Injury Prevention Project. *Ethnicity & Health, 9*(1), 515.

Brook, J. S., Whiteman, M., Balka, E. B., Win, P. T., & Gursen, M. D. (1998). Drug use among Puerto Ricans: Ethnic identity as a protective factor. *Hispanic Journal of Behavioral Sciences*, *20*(2), 241-254. doi: 10.1177/07399863980202007

Broughton, J. (1993). Being Māori. *New Zealand Medical Journal, 106*(968*),* 506-508.

Broughton, J. (1999). Māori Health Research Unit, Medical School, University of Otago, Dunedin. Dr John Broughton, personal communication. In Tatz, C. M. (Ed.), *Aboriginal Suicide is Different: Aboriginal Youth Suicide in New South Wales, the Australian Capital Territory and New Zealand: Towards a Model of Explanation and Alleviation, a Report to the Criminology Research Council on CRC Project 25/96-7* (p. 116). Macquarie University, Sydney, NSW, Australia: Centre for Comparative Genocide Studies.

Broughton, J., Fergusson, D.M., Rimene, C., Horwood, L.J., & Sporle, A. (2000). *Nga Tini Aho O Te Ao Hou. The many strands of Contemporary Māori society: Māori ethnicity and identity in the Christchurch Health and Development Study*. Dunedin: NTMHRU.

Brown, M. (1993). *Background to the Mongrel Mob Survey in the Northern Region*. Unpublished paper. Auckland.

Brzozowski, J.A., Taylor-Butts, A., & Johnson, S. (2006). Victimization and offending among the Aboriginal population in Canada. *Juristat, 26*(3), 1-31.

Byers, M. (2002). Correctional Initiatives for Māori In New Zealand. *Corrections Today*, *64*(1), 25.

Caldwell, C. H., Kohn-Wood, L. P., Schmeelk-Cone, K. H., Chavous, T. M., & Zimmerman, M. A. (2004). Racial discrimination and racial identity as risk or protective factors for violent behaviors in African American young adults. *American Journal of Community Psychology, 33*(1-2), 91–105. doi:10.1023/B:AJCP.0000014321.02367.dd

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, *56*(2), 81-105. doi:10.1037/h0046016

Campbell, D. T., Stanley, J. C., & Gage, N. L. (1963). *Experimental and quasi-experimental designs for research*. Boston: Houghton Mifflin.

Capobianco, L., Shaw, M., & Dubuc, S. (2003). *Crime prevention and indigenous communities: Current international strategies and programmes*. Ottawa: International Centre for the Prevention of Crime.

Carmines, E. G. & Zeller, R.A. (1991). *Reliability and validity assessment*. Newbury Park: Sage Publications.

Carron, A.V., Brawley, L.R. (2000). Cohesion: Conceptual and measurement issues. *Small Group Research, 31*(1), 89-106. doi: 10:1177/104649640003100105

Centre for Research, Evaluation and Assessment. (2009). *Te hurihanga pilot: Evaluation report*. Wellington, New Zealand: New Zealand Ministry of Justice.

Chalmers, T., Williams, M.M., & Gavala, J. (2012). Exploring Client Change in Waikeria Prison's Māori Focus Unit (MFU): Te Aō Marama. *Psychology Aotearoa. 4*(2), 128-131

Chandos, J. (1984). *Boys Together: English Public Schools 1800-1864*. London: Hutchinson.

Chapple, S. (2000). Māori socio-economic disparity. *Pol Sci, 52,* 101-115.

Clark, A., & Friedman, M. J. (1983). Factor structure and discriminant validity of the SCL-90 in a veteran psychiatric population. *Journal of Personality Assessment*, *47*(4), 396-404. doi: 10.1207/s15327752jpa4704_10

Coebergh, B., Bakker, L., Anstiss, B., Maynard, K., & Percy, S. (2001). *A seeing 'I' to the future: The criminogenic needs inventory (CNI).*Wellington, New Zealand: Department of Corrections.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum. Collie, R.M., & Polaschek, D.L.L. (2003). Sorting Women's Risk: New

Zealand Women Prisoners' Misconducts and Internal Security Risk. *New Zealand Journal of Pyschology, 32*(2), 101-109.

Cooper, E. (2012). *Mokopuna rising: intervention in whānau violence* (Doctoral thesis). University of Auckland, Auckland, New Zealand.

Corrective Services New South Wales. (2013). Compendium of Correctional Programs in New South Wales. Sydney, NSW.

Coupe, N. M. (2000). The epidemiology of Māori suicide in Aotearoa/New Zealand. *South Pacific Journal of Psychology*, *12*(1), 1-12.

Couture, J., Parker, T., Couture, R. & Laboucane, P. (2001). A Cost Benefit Analysis of Hollow Water's Community Holistic Circle Healing Process. *Aboriginal People's Collection.* Canada: Solicitor General of Canada.

Cram, F. (2009). Māori & violence: What's the problem? *MAI Review, 2*, 1-3.

Cultural and Indigenous Research Centre Australia. (n.d). *Evaluation of indigenous justice programs in support of the National Indigenous Law and Justice Framework.* Project B- Offender Support/Reintegration- to be evaluated by CIRCA.

Cummins, R. A., Eckersley, R., Pallant, J., Van Vugt, J., & Misajon, R. (2003). Developing a national index of subjective wellbeing: The Australian unity wellbeing index. *Social Indicators Research*, *64*, 159–190. doi: 10.1023/A:1024704320683

Cusick, J. G. (1998). Historiography of acculturation: An evaluation of concepts and their application in archaeology. *Studies in Culture Contact: Interaction, Culture Change, and Archaeology*, 25, 126-145.

De Groot, A. D. (1961). Methodologie.'s-Gravenhage: Mouton.

Del Pilar, J. A., & Udasco, J. O. (2004). Deculturation: its lack of validity. *Cultural diversity and Ethnic Minority Psychology*, *10*(2), 169-176. doi: 10.1037/1099-9809.10.2.169

Department of Corrections. (2001). Let Māori take the journey: Na tau rourou, na taku rourou, ka ora ait e iwi: Summary of the hui and written submissions on He whaakinga: *The Department of Corrections draft Treaty of Waitangi policy statement.* Wellington: Author.

Department of Corrections. (2002). Reducing Inequalities: *Māori Focus Units.* Wellington, New Zealand: Department of Corrections.

Department of Corrections. (2003). *Census of Prison Inmates and Home Detainees 2003.* Wellington, New Zealand: Department of Corrections.

Department of Corrections. (2007). *Over-representation of Māori in the criminal justice system. An exploratory report.* Wellington, New Zealand: Department of Corrections.

Department of Corrections. (2008). *Māori strategic plan: 2003–2008.* Wellington, New Zealand: Department of Corrections.

Department of Corrections. (2009a). *Strategy, Policy and Planning Department of Corrections New Zealand What Works Now?* A comprehensive review of the international research literature brings the Department up to date with new knowledge on effectiveness in offender rehabilitation. Wellington, New Zealand: Department of Corrections.

Department of Corrections. (2009b). Māori Focus Units and Māori Therapeutic Programmes. *Evaluation Report.* Wellington: Policy Strategy and Research Group & Kahui Tautoko Consultancy Ltd.

Department of Corrections. (2009c). Māori representation in the criminal justice sector. In G.S. Orr (Ed.), *Principles Emerging from Waitangi Tribunal Decisions.* Unpublished paper presented to Tribunal Members.

Department of Corrections. (2010). Pasifika history and culture an important part of rehabilitation. Wellington, New Zealand: Department of Corrections.

Department of Corrections. (2010-2011). Financial Review: Additional Questions 155-168. *Law and Order Committee Questions*. Wellington, New Zealand: Department of Corrections.

Department of Corrections. (2013). Outcome: Re-offending is Reduced. What the Department will do to achieve this outcome: *Specific projects that the Department will work on over the medium term to reduce re-offending.* Wellington, New Zealand: Department of Corrections.

Dobson, A. J. (1990). *An Introduction to Generalized Linear Models*. London: Chapman and Hall.

Dodson, M. (1998). *Family Group Conferencing: Mandatory Sentencing and the Stolen Generations.* Māori and Criminal Justice He Whaipaanga Hou: Ten Years on 1988-1998 Conference. Wellington: Victoria University Law School in Te Whanganui-a-Tara.

Doone, P. (2000). *Hei Whakarurutanga mote ao: report on combating and preventing Māori crime.* Wellington: Crime Prevention Unit.

Dowden, C., & Andrews, D.A. (1999a). What works for female offenders: A meta-analytic review. *Crime and Delinquency, 45*(4), 438-452. doi: 10.1177/0011128799045004002

Dowden, C., & Andrews, D.A. (1999b). What works in young offender treatment: A meta-analysis. *Forum on Corrections Research*, *11*(2), 21-24.

Dowden, C., & Andrews, D.A. (2000). Effective correctional treatment and violent reoffending: A meta-analysis. *Canadian Journal of Criminology, 42*(4), 449-467.

Dukes, R., & Martinez, R. (1997). The effects of ethnic identity, ethnicity and gender on adolescent wellbeing. *Journal of Youth and Adolescence, 26*(5), 503–516. doi:10.1023/A:1024525821078

Dupree, D., Spencer, M. B., & Bell, S. (1997). African American children. In G. Johnson-Powell & J. Yamamoto (Eds.), *Transcultural child development: Psychological assessment and treatment* (pp. 237-268). New York: John Wiley.

Durie, M. (1985). A Māori perspective of health. *Journal of Social Sciences and Medicine, 20*(5), 483-486. doi:10.1016/0277-9536(85)90363-6

Durie, M. (1994, 1996, 1998). *Whaiora: Māori health development.* Auckland, New Zealand: Oxford University Press.

Durie, M. (1995a). Ngā Matatini Māori: Diverse Māori Realities. *Presented at the Wānanga Pūrongo Kōrerorero, Māori Health Framework Seminar.* Turangawaewae Marae, Ngaruawahia

Durie, M. H. (1995b). Te hoe nuku roa framework a Māori identity measure. *The Journal of the Polynesian Society*, *104*(4), 461-470.

Durie, M. (1998). *Te mana, Te kawanatanga: The politics of Māori self-determination.* Auckland: Oxford University Press.

Durie, M. (1999). Mental health and Māori development. *Australian and New Zealand Journal of Psychiatry.* 33(1), 5-12. doi:10.1046/j.1440-1614.1999.00526.x

Durie, M. (2001). *Mauri ora: The dynamics of Māori health*. Auckland: Oxford University Press.

Durie, M. (2003a). Contemporary Māori development: Issues and broad directions. In M. Durie (Ed.), *Ngā Kāhui Pou: Launching Māori Futures* (pp. 87-104). Wellington: Huia Publishers.

Durie, M. (2003b) Imprisonment, Trapped Lifestyles, and Strategies for Freedom. In M. Durie (Ed.), *Ngā Kāhui Pou: Launching Māori Futures* (pp. 59-73). Wellington, New Zealand: Huia Publishers.

Durie, M. (2005). *Whānau as a model for early intervention in conduct disorders*. Severe Conduct Disorder Conference, Wellington.

Durie, M. H., & Kingi, Te K. R. (1997). *A Framework for Measuring Māori Mental Health Outcomes.* A report prepared for the Ministry of Health. Massey University, Palmerston North, New Zealand: Department of Māori Studies.

Dyaram, L., & Kamalanabhan, T. J. (2005). Unearthed: The other side of group cohesiveness. *Journal of Social Science*, *10*(3), 185-90.

Ebbett, E., & Clarke, D. (2010). Māori Identification, alcohol behaviour and mental health: a review. *International Journal of Mental Health and Addiction*, *8*(2), 214-231.

Eggleston, E. J. (2000). New Zealand Youth Gangs: Key Findings and Recommendations from an Urban Ethnography. *Social Policy Journal of New Zealand*, *14*(8), 148-163.

Erikson, E. H. (1968). *Identity: Youth and crisis* (No. 7). New York, USA: WW Norton & Company.

Faden, R. R., & Beauchamp, T. L. (1986). *A History and Theory of Informed Consent*. New York: Oxford University Press.

Fall, R.M. (2000). *The healing of aboriginal offenders: A comparison between cognitive-behavioural treatment and the traditional aboriginal sweat lodge ceremony* (master's thesis). University of Saskatchewan, Saskatoon, Canada.

Families Commission. (2009). Family Violence Statistics Report (2009). *A Families Commission Report, 4(09)*. Wellington: Families Commission, Kōmihana ā whānau.

Fergusson, D. (2003). Violent crimes: Assessing race and ethnic differences. In D.F. Hawkins (Ed). *Interpersonal violence: The ethnicity, race and class nexus* (pp. 138–53). Cambridge, UK: Cambridge University Press.

Fergusson, D. M., Donnell, A. A., & Slater, S.W. (1975). *The Effects of Race and Socio-economic Status on Juvenile Offending Statistics, Research Report No 2*. Wellington: Government Printer.

Fergusson, D.M., Horwood, L.J., & Lynskey, M.T. (1993). Ethnicity and bias in police contact statistics. *The Australian and New Zealand Journal of Criminology, 26*(3), 193–206. doi:10.1177/000486589302600302

Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research*, *20*(2), 303-315. doi:10.2307/2489277

Fitzsimons, P., & Smith, G. (2000). Philosophy and indigenous cultural transformation. *Educational Philosophy and Theory*, *32*(1), 25-41. doi:10.1111/j.1469-5812.2000.tb00430.x

Forsyth, D.R. (2010). *Components of cohesion. Group dynamics* (5th ed.). Wadsworth: Cengage Learning.

Forsyth, D.R., Zyzniewski, L.E., & Giammanco, C.A. (2002). Responsibility diffusion in cooperative collectives. *Personality and Social Psychology Bulletin, 28*(1), 54-65.

Foster, G. M. (1960). *Culture and conquest*. Chicago: Quadrangle Books.

Frantz, F. (1968). *The Wretched of the Earth*. New York: Grove Press.

Fraser, N. (1995). From redistribution to recognition? Dilemmas of justice in a 'post-socialist' age. *New Left Review, 1*(212), 68-93

French, D. (1961). Wasco-Wishram. In Edward H. Spicer (Ed.), *Perspectives in American Indian culture change,* (pp. 337-430). Chicago: The University of Chicago Press.

Gale. F., Bailey-Hamis, R. & Wundersitz, J. (1990). *Aboriginal Youth and the Criminal Justice System: The injustice of justice.* Cambridge: Cambridge University Press.

Gavala, J., Hopner, V., & Gardner, D. (2011). *Exploratory Factor Analysis of Māori Identity as measured by the MMM-ICE RS31*. For the Royal New Zealand Navy. Massey University, Auckland, New Zealand: School of Psychology.

Geary, J. E. (2007). *Adolescent sexual offender treatment programmes in New Zealand: a process evaluation* (Unpublished Doctoral thesis). University of Auckland, Auckland, New Zealand.

Geisinger, K. F. (1994). Cross-cultural normative assessment: Translation and adaptation issues influencing the normative interpretation of assessment instruments. *Psychological Assessment*, *6*(4), 304-312. doi: 10.1037/1040-3590.6.4.304

Gendreau, P., Cullen, F. T., & Goggin, C. (1999). *The effects of prison sentences on recidivism*. Ottawa, ON: Solicitor General Canada.

Gendreau, P., Goggin, C. E., & Law, M. A. (1997). Predicting prison misconducts. *Criminal Justice and Behavior*, *24*, 414-431. doi:10.1177/0093854897024004002

Gendreau, P., Grant, B. A., Leipciger, M., & Collins, C. (1979). Norms and recidivism rates for the MMPI and selected experimental scales on a Canadian delinquent sample. *Canadian Journal of Behavioral Science*, *11*, 21–31. doi:10.1037/h0081569

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston: Allyn & Bacon.

Gibbs, M.K. (2000). The Ngai Tahu (Pounamu Vesting) Act 1997: Legislation note. *New Zealand Journal of Environmental Law*, *4,*257–269.

Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. *Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education*. Columbus, OH: The Ohio State University.

Glover, M. (1995). *Te Puna Roimata: Māori Women's Experiences of Male Partner Violence: 7 Case Studies*. Hamilton: University of Waikato.

Glueck, S., & Glueck, E. (1950). *Unraveling Juvenile Delinquency*. Cambridge, Mass.: Harvard University Press.

Goodwin, C. J. (2005). *Research in Psychology: Methods and Design*. USA: John Wiley & Sons, Inc.

Gordon, A., & Nicholaichuk, T. (1996). Applying the risk principle to sex offender treatment. *Forum on Corrections, 8*(2), 58-60.

Gottfredson, M.R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford University Press.

Grant, B.A. (n.d). Effective correctional programmes: 135th international senior seminar visiting experts' papers. *Resource Material Series, 74*.

Green, S. B., & Salkind, N. J. (2008). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (5th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Greenland, H. (1991). Māori ethnicity as ideology. In P. Spoonley, D. Pearson, & C. Macpherson (Eds.), *Nga Take: Ethnic relations and racism in Aotearoa/New Zealand.* (pp. 90-107). Palmerston North: Dunmore Press Ltd.

Greg. L. (2004). Authentic and Essential: A review of Anita M Heiss' Dhuuluu-Yala (To Talk Straight): Publishing Indigenous Literature. *Australian Humanities Review, 33.*

Gregory, S., & Takagi, P. (2004). Critique of Restorative Justice. *Social Justice, 31*(3), 147–163.

Gully, S.M., Devine, D.J., & Whitney, D.J. (1995). A meta-analysis of cohesion and performance: Effects of level of analysis and task interdependence. *Small Group Research*, *26*(4), 497-520. doi:10.1177/1046496495264003

Gutiérrez., R.A. (1991). *When Jesus Came, the Corn Mothers Went Away: Marriage, Sexuality, and Power in New Mexico*. Stanford, CA: Stanford University Press.

Hakiaha, M. (1998). *Resolving Conflict from a Māori Perspective.* Māori and Criminal Justice He Whaipaanga Hou: Ten Years on 1988-1998 Conference. Wellington: Victoria University Law School in Te Whanganui-a-Tara.

Hannan, A. (2007). *Interviews in Education Research: How will I record the interview?* Drake Circus, UK: Faculty of Education, University of Plymouth.

Hansen, A., (2006). Tampering with nature: "nature" and the "natural" in media coverage of genetics and biotechnology. *Media, Culture and Society, 28*(6), 811–834. doi:10.1177/0163443706067026

Harper, K. (1998). *Tribal Justice Systems and Sovereignty. As an expression of Indigenous Sovereignty: The Experience in the USA*. Māori and Criminal Justice He Whaipaanga Hou: Ten Years on 1988-1998 Conference. Wellington: Victoria University Law School in Te Whanganui-a-Tara.

Hart, J., O'Toole, S., Price-Sharps, J., & Shaffer, T. (2007). The risk and protective factors of violent juvenile offending: An examination of gender differences. *Youth Violence and Juvenile Justice, 5(4),* 367-384. doi:10.1177/1541204006297367

Harvey, S., Barry, A., Fitzgerald, J., Evans, I., & Bennett, S. (2007). Best Practice Outcome Measurement for Children and Young People with High and Complex Needs. *Focus*, *4*, 1.

Havemann (Ed.), *Indigenous rights in Australia, Canada & New Zealand*. (pp. 316-334). Auckland: Oxford University Press.

Hazlehurst, K.M., & and Hazlehurst, C. (1998). *Gangs and Youth Subcultures: International Explorations*. New Brunswick, New Jersey: Transaction Publishers.

Hill, M. (2011). Research Debunks Māori Abuse. National, Fairfax NZ News. Retrieved July 12, 2013, from http://www.stuff.co.nz

Hirschi, T., & Gottfredson, M.R. (1983). Age and the explanation of crime. *American Journal of Sociology, 89*(3), 552-584. doi:10.1086/227905

Hochstim, J. (1967). A critical comparison of three strategies of collecting data from households. *Journal of the American Statistical Association, 62*(3), 976–989.

Hoge, R. D., Andrews, D. A., & Leschied, A. W. (1994). Tests of three hypotheses regarding the predictors of delinquency. *Journal of Abnormal Child Psychology*, *22*(5), 547-559. doi:10.1007/BF02168937

Hoge, R. D., Andrews, D. A., & Leschied, A. W. (1996). An investigation of risk and protective factors in a sample of youthful offenders. *Journal of Child Psychology and Psychiatry*, *37*(4), 419-424. doi: 10.1111/j.1469-7610.1996.tb01422.x

Hogg, M. A., Terry, D. J., & White, K. M. (1995). A tale of two theories: A critical comparison of identity theory with social identity theory. *Social Psychology Quarterly*, 58(4), 255-269. doi: 10.2307/2787127

Hook, G.R. (2009). "Warrior genes" and the disease of being Māori. *MAI Review, 2*(1).

Hornberger, N. H. (1998). Language policy, language education, language rights: Indigenous, immigrant, and international perspectives. *Language in Society*, *27*(4), 439-458.

Hoskins, J. (2007). Whānau transformation through tribal reconnection. *MAI Review, 1*(3), 1-8.

Houkamau, C.A., & Sibley, C. G. (2010). The Multi-Dimensional Model of Māori Identity and Cultural Engagement. *New Zealand Journal of Psychology*, *39*(1), 8-28.

Houkamau, C. A., & Sibley, C. G. (2011). Māori cultural efficacy and subjective wellbeing: A psychological model and research agenda. *Social Indicators Research*, *103*(3), 379-398. doi:10.1007/s11205-010-9705-5

Howard, K. I., Kopta, S. M., Krause, M. S., & Orlinsky, D. E. (1986). The dose–effect relationship in psychotherapy. *American Psychologist*, *41*(2), 159-164. doi:10.1037/0003-066X.41.2.159

Howden-Chapman, P., & Tobias, M. (2000). *Social inequalities in health: New Zealand 1999.* Wellington, New Zealand: Ministry of Health and Wellington School of Medicine.

Howell, J., Miller, P., Park, H.H., Sattler, D., Schack, T., Spery, E., et al. (2005). *Reliability and Validity.* Colorado, USA: Colorado State University Department of English.

Human Rights and Equal Opportunity Commission. (2007). Bringing them home education module. Retrieved May 6, 2012, from www.humanrights.gov.au.

Huriwai, T. (2001). MaCRNs. *Corrections News*. Wellington: Department of Corrections.

Huriwai, T., Robertson, P.J., Armstrong, D., Kingi, T.P. and Huata, P. (2001). Whānaungatanga- a process in the treatment of Māori with alcohol and drug-use related problems. *Substance Use Misuse*, *36*(8), 1033-51.

Hutnik, N. (1991). *Ethnic minority identity: A social psychological perspective*. Oxford, UK: Clarendon Press.

Ihimaera, L.V., Maxwell-Crawford, K.M., & Tassell, N.A. (2004). He Waka Arahi. *Training – Workforce nexus framework: the interface between Māori mental health training and education workforce development*. Ministry of Health, Wellington, New Zealand: Te Rau Matatini.

Iwamasa, G. Y. (2003). Recommendations for the treatment of Asian American/Pacific Islander populations. *Psychological Treatment of Ethnic Minority Populations*, *1*, 8-12.

Jackson, M. (1987, 1988). *He Whaipaanga Hou*: Māori *and the Criminal Justice System: A New Perspective*. Wellington, Ministry of Justice.

James, W. H., Kim, G. K., & Armijo, E. (2000). The influence of ethnic identity on drug use among ethnic minority adolescents. *Journal of Drug Education*, *30*(3), 265-280.

Jenkins, K. (1988). He Hono ki t e Wairua. The spiritual link: A Māori perspective on the spiritual dimension of social wellbeing. In *The April Report: Future Directions. Report of The Royal Commission on Social Policy, 3(1)*, 449-461.Wellington: Government Printer.

Jenkins, K., Harte, H.M. (2011). *Traditional Māori Parenting: An Historical Review of Literature of Traditional Māori Child Rearing Practices in Pre-European Times*. Auckland, New Zealand: Te Kahui Mana Ririki.

Jeong, H.O. (2009). *The nurturing hypothesis: residence in a progressive environment and its impact on political engagement among Latinos and Asian Americans in the United States* (Doctoral thesis). University of Iowa, Iowa, USA.

Johnson, T. R., & Stromsdorfer, E. W. (1990). Evaluating net program impact. In A. B. Blalock (Ed.), *Evaluating social programs at the state and local level: The JTPA evaluation design project* (pp. 43-131). Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.

Jones, C. P. (2001). Invited commentary: ''Race,'' racism, and the practice of epidemiology. *American Journal of Epidemiology, 154*(4), 299–304. doi:10.1093/aje/154.4.299

Joni Te Puna o Te Aroha Bryant. (1998). *The overview; He Whaipaanga Hou/Ten years on. Māori and Criminal Justice He Whaipaanga Hou*: Ten Years on 1988-1998 Conference. Wellington: Victoria University Law School in Te Whanganui-a-Tara.

Joseph, P. (1997). *Māori youth suicide in Aotearoa: selected interviews with Māori elders* (Doctoral thesis). University of Auckland, Auckland, New Zealand.

Kahukiwa, R., & Grace, P. (1984). *Wahine Toa: Women of Māori Myth*. Collins: The University of California.

Kerbs, J. (2000). The older prisoner: Social, psychological, and medical considerations. In M. Rothman & B. Dunlop (Eds.), *Elders, crime, and the criminal justice system: Myth, perceptions, and reality in the 21st century* (pp. 207-228). New York: Springer.

King, M., Smith, A., & Gracey, M. (2009). Indigenous health part 2: The underlying causes of the health gap. *The Lancet*, *374*(9683), 76-85. doi: 10.1016/S0140-6736(09)60827-8

Kingi, T.K.R. (2002). *Hua Oranga: Best Health Outcomes for Māori* (Doctoral thesis). Massey University, Wellington, New Zealand.

Kingi, H., Aranui, H., Tamihana, T.R., Crossman, M., & Nuttall, M. (1991). *Māori Psychology: Wero, a panui for Māori students in psychology.* Hamilton: University of Waikato Psychology Department.

Klassen, D., Hornstra, R.K., & Anderson, P.B. (1976). Influence of social desirability on symptom and mood reporting in a community survey. *Journal of Consulting and Clinical Psychology, 43*(4), 448-452. doi: 10.1037/h0076863

Klein, M.W. (1995). *The American Street Gang: Its nature prevalence and control.* New York: Oxford University Press.

Kopta, S. M., Howard, K. I., Lowry, J. L., & Beutler, L. E. (1994). Patterns of symptomatic recovery in psychotherapy. *Journal of Consulting and Clinical Psychology*, *62*(5), 1009-1016. doi:10.1037/0022-006X.62.5.1009

Krawll, M. B. (1994). *Understanding the role of healing in Aboriginal communities*. Canada: Solicitor General.

Kruger, T., Pitman, M., Grennell, D., McDonald, T., Mariu, D., Pomare, A., et al. (2004). *Transforming whānau violence: A conceptual framework.* Wellington: Te Puni Kōkiri.

Kupenga-Wanoa, M. (2004). *Māori Voices from Within: A Study of the Perspectives of Former Offenders and Probation Officers in the Criminal Justice System* (master's thesis). Massey University, Palmerston North, New Zealand.

Kuper, A. (1999). *Culture: The Anthropologists' Account.* Cambridge: Harvard University Press.

Laub, J.H., & Sampson, R.J. (2001). Understanding desistance from crime. *Crime and Justice: A Review of Research, 28*, 1-70.

Laub, J.H., & Sampson, R.J. (2003). *Shared beginnings, divergent lives.* Cambridge, MA: Harvard University Press.

Lawson-Te Aho, K. (1998). Māori youth suicide-colonisation, identity and Māori development. In *Te Pumanawa Hauora's (Ed), Te Oru Rangahau Māori Research and Development Conference* (pp. 7-9). New Zealand.

Lea, R. A., & Chambers, G. K. (2007). Pharmacogenetics in admixed Polynesian populations. *Guilherme Suarez-Kurtz Eureka Bioscience Database (ISBN: 1-58706-130-9).*

Lee, J.S. (2004). *Intergenerational conflict, ethnic identity and their influences on problem behaviours among Korean American adolescents* (Doctoral thesis). University of Pittsburgh, Pittsburgh, Pennsylvania, USA.

Lee, J.M., Steinberg, L., & Piquero, A.R. (2010). Ethnic identity and attitudes toward the police among African American juvenile offenders. *Journal of Criminal Justice 38*(4), 781–789.

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science*, *7*(3), 172-180. doi:10.1207/S15 32480XADS0703_8

Levy, M. (2007). *Indigenous psychology in Aotearoa: Realizing Māori aspirations* (Doctoral thesis). University of Waikato, Hamilton, New Zealand.

Lloyd, L. (2006). Navajo cultural identity: What can the Navajo Nation bring to the American Indian identity discussion table? *Wicazo Sa Review, 21*(2), 79-103.

Logan, D. E., Claar, R. L., & Scharff, L. (2008). Social desirability response bias and self-report of psychological distress in pediatric chronic pain patients. *Pain*, *136*(3), 366-372.

Lowenkamp, C. T., & Latessa, E. J. (2005). Increasing the effectiveness of correctional programming through the risk principle: Identifying offenders for residential placement. *Criminology & Public Policy*, *4*(2), 263-290.

Luke, G., & Lind, B. (2002). Reducing Juvenile Crime: Conferencing vs Court. *Crime and Justice Bulletin*. Australia: New South Wales Bureau of Crime Statistics and Research.

Lynch, J., Bevan, J., Achter, P., Harris, T., & Condit, C.M. (2008). A preliminary study of how multiple exposures to messages about genetics impact on lay attitudes towards racial and genetic discrimination. *New Genetics and Society, 27*(1), 43-45.

MacAndrew, C. & Edgerton, R. (1969) *Drunken Comportment: A Social Explanation*. Chicago: Aldine.

Macgregor, S. (2008). Sex offender treatment programs: effectiveness of prison and community based programs in Australia and New Zealand. *Indigenous Justice Clearinghouse. Standing Committee of Attorneys-General.* Australian Government: Australian Institute of Criminology.

Madsen, H., & Thyregod, P., 2010. *Introduction to General and Generalized Linear Models*. London: Chapman & Hall/CRC Press.

Mann, R. E., Hanson, R. K., & Thornton, D. (2010). Assessing risk for sexual recidivism: Some proposals on the nature of psychologically meaningful risk factors. *Sexual Abuse: A Journal of Research and Treatment*, *22*(2), 191-217.

Marcell, A. V. (1994). Understanding ethnicity, identity formation, and risk behavior amongadolescents of Mexican descent. *Journal of School Health*, 64(8), 323-328.

Marie, D. (2010). Māori and Criminal Offending: A Critical Appraisal. *Australian & New Zealand Journal of Criminology* 2010 43: 282- 300

Marie, D., Fergusson, D. M., & Boden, J. M. (2008a). Ethnic identification, social disadvantage, and mental health in adolescence/young adulthood: Results of a 25 year

longitudinal study. *Australian and New Zealand Journal of Psychiatry, 42*(4), 293–300. doi: 10.1080/00048670701787644

Marie, D., Fergusson, D. M., & Boden, J. M. (2008b). Educational achievement in Māori: The roles of cultural identity and social disadvantage. *Australian Journal of Education*, *52*(2), 183-196.

Marie, D., Fergusson, D. M., & Boden, J. M. (2009). Ethnic identity and criminal offending in a New Zealand birth cohort. *Australian and New Zealand Journal of Criminology, 42*(3), 354-368. doi:10.1375/acri.42.3.354

Mark, G. T., & Lyons, A. C. (2010). Māori healers' views on wellbeing: The importance of mind, body, spirit, family and land. *Social Science & Medicine*, *70*(11), 1756-1764. doi: 10.1016/j

Marsiglia, F.F., Kulis, S., Hecht, M., L., & Sills, S. (2004). Ethnicity and Ethnic Identity as Predictors of Drug Norms and Drug Use Among Preadolescents in the US Southwest. *Substance Use & Misuse, 39(7)*, 1061-1094. doi:10.1081/JA-120038030

Maruna, S. (2001). *Making Good: How Ex-Convicts Reform and Rebuild Their Lives.* Washington, DC: American Psychological Association Books.

Massey University. (2013). *Code of Ethical Conduct for Research, Teaching and Evaluations involving Human Participants. Formulation and Publication of Results.* Palmerston North: Massey University, Te Kunenga ki Pūrehuroa.

Masters, B., Trynes, M, Kaparu, R., Robertson, N. & Waitoki, M. (2003). An evaluation of the cultural supervision prototype undertaken within the Department of Corrections, Hamilton. In Nikora, L.W., Levy, M., Masters, B., Waitoki, W., Te Awekotuku, N., & Etheredge, R.J.M. (Eds). *The Proceedings of the National Māori Graduates of Psychology Symposium 2002: Making a difference* (pp.49-55). Hamilton, New Zealand: Māori and Psychology Research Unit, University of Waikato.

Mataki, T. (1998). *Mana Wahine.* Māori and Criminal Justice He Whaipaanga Hou: Ten Years on 1988-1998 Conference. Wellington: Victoria University Law School in Te Whanganui-a-Tara

Maxwell, G., Kingi, V., Roberson, J., Morris, A., & Cunningham, C. (2004). *Achieving effective outcomes in youth justice: Full report.* Wellington, New Zealand: Ministry of Social Development.

Maxwell, G., & Morris, A. (1999). *Understanding reoffending: Full report.* Wellington, New Zealand: Institute of Criminology, Victoria University of Wellington.

Maynard, K., Coebergh, B., Anstiss, B., Bakker, L., & Huriwai,T. (1999). Ki te arotu: Toward a new assessment: The identification of cultural factors which may predispose Māori to crime. *Social Policy Journal of New Zealand Te Puna whakaaro, 3*(3)*.*

McClintock, K., Mellsop, G., & Kingi, T. (2010). *Hua Oranga Report*. Wellington, New Zealand: Te Rau Matatini.

McClintock, K., Mellsop, G., & Kingi, T. (2011). Development of a culturally attuned psychiatric outcome measure for an Indigenous population. *International Journal of Culture and Mental Health, 4*(2), 128 – 143.

McFarlane-Nathan, G. (1999). *FreMO: Framework for reducing Māori offending.* Wellington: Department of Corrections.

McMurran, M. (2002). *Motivating Offenders to Change: A Guide to Enhancing Engagement in Therapy*. West Sussex, England: John Wiley & Sons Ltd.

Meiser-Stedman, R., Smith, P., Glucksman, E., Yule, W., & Dalgleish, T. (2007). Parent and child agreement for acute stress disorder, post-traumatic stress disorder and other psychopathology in a prospective study of children and adolescents exposed to single-event trauma. *Journal of Abnormal Child Psychology*, *35*(2), 191-201. doi:10.1007/s10802-006-9068-1

Memmot, P., Stacy, R., Chambers, C., & Keys, C. (2001). *Violence in Indigenous communities*. Canberra, Australia: Attorney General's Department.

Merrill, J., Alterman, A., Cacciola, J., & Rutherford, M. (1999). Prior treatment history and its impact on criminal recidivism. *Journal of Substance Abuse Treatment*, *17*(4), 313-319. doi: 10.1016/S0740-5472(99)00012-4

Metge, J. (1995). *New growth from old: The whānau in the modern world.* Wellington: G.P. Print.

Metge, J. (2001). Family and whānau in a changing world. In S. Birks (Ed.), *Proceedings of social policy forum 2001: Child and Family: Children in families as reflected in statistics, research and policy* (pp. 19-25). Palmerston North, New Zealand: Massey University.

Mikaere, A. (1994). Māori women: Caught in the contradictions of a colonised reality. *Waikato L. Rev.*, *2*(125), 125-149.

Mills, J. (2000). *Criminal Attitudes: Assessment and the Relationship with Psychopathy and Response Latencies* (Doctoral thesis). Carleton University, Ottawa, Canada.

Milne, M. (2005). *Māori perspectives on kaupapa Māori and psychology: a discussion document.* Report for the New Zealand Psychologists Board.

Ministerial Advisory Committee on a Māori perspective for the Department of Social Welfare. (1986). *Puao te ata tu. Historical perspective.* Wellington: Government Print.

Ministerial Review Report. (2005). *Department of Corrections Māori Focus Units. Ministerial Review of targeted policies and programmes.* Wellington, New Zealand: Department of Corrections.

Ministry of Justice. (2009). Strategic policy brief: *Māori over-representation in the criminal justice system.* New Zealand: Department of Corrections.

Ministry of Justice. (2013). Over-representation of Māori in prison: *Māori over-representation in the criminal justice system.* Wellington: New Zealand Ministry of Justice, Tāhū o te Ture.

Ministry of Social Development. (2006). *Children at increased risk of death from maltreatment and strategies for prevention.* Wellington: Ministry of Social Development.

Ministry of Social Development. (2008). *Youth gangs in Counties Manukau.* New Zealand: Centre for Social Research and Evaluation, Te Pokapū Rangahau Arotake Hapori.

Moeke-Pickering, T. M. (1996). *Māori identity within whānau: A review of literature.* Hamilton, New Zealand: University of Waikato.

Moewaka-Barnes, H., Tunks, M., Wa, A., & Dacey, B. (1998). Whaiki Māori Research Group. In *Te Oru Rangahau: Māori Research & Development Conference, Proceedings* (Ed.). Te Pumanawa Hauora (p. 213). Te Putahi-a-Toi, School of Māori Studies. Palmerston North, New Zealand: Massey University.

Monti P.M., Corriveau D.P. & Curran J.P. (1982). Assessment of social skill in the day hospital: Does the clinician see something other than the researcher sees? *Int. J. Part.Hospitaliz.*

Morgan, R.D., Fisher, W.H., Duan, N., Mandracchia, J.T., & Murray, D. (2010). Prevalence of criminal thinking among state prison inmates with serious mental illness. *Law Hum Behav*, *34*(4), 324–336. doi:10.1007/s10979-009-9182-zMorgan, R., Fisher, W., & Wolff, N. (2010). *Criminal thinking: Do people with mental illnesses think differently?* Centre for Behavioural Health Services and Criminal Justice Research: Policy brief. Rutgers: The state University of New Jersey.

Mullen, B., & Copper, C. (1994). The Relation Between Group Cohesiveness and Performance: An Integration. *Psychological Bulletin, 115*(2), 210-227. doi:10.1037/0033-2909.115.2.210

Nadesu, A. (2009). Reconviction patterns of offenders managed in the community: A 60-month follow-up. *New Zealand Department of Corrections Report*. Wellington: Department of Corrections.

Nagel, T., Robinson, G., Condon, J., & Trauer, T. (2009). Approach to treatment of mental illness and substance dependence in remote Indigenous communities: Results of a mixed methods study. *Australian Journal of Rural Health*, *17*(4), 174-182. doi:10.1111/j.1440-1584.2009.01060.x

Nakhid, C., & Shorter, L. T. (2014). Narratives of Four Māori Ex-Inmates About Their Experiences and Perspectives of Rehabilitation Programmes. *International Journal of Offender Therapy and Comparative Criminology*, *58*(6), 697-717.

Nathan, N.J., Wilson, & D., Hillman. (2003). *Te Whakakotahitanga: An evaluation of the Te Piriti special treatment proramme for child sex offenders in New Zealand*. Wellington, New Zealand: Department of Corrections.

Neale, M.A., Mannix, E.A., & Mullen, E. (2010). *Fairness and groups. Research on managing groups and teams.* Emerald Group Publishing, Bingley, UK.

New Zealand Police. (1998). Criminal Investigation Branch, 'Organised Crime'. Retrieved March 8, 2012 from http://www.police.govt.nz

Newbold, G. (2000). *Crime in New Zealand.* Palmerston North, New Zealand: Dunmore Press Ltd.

Nice, M. (2002). *Results of interchange graduate's test assessments: a technical report for the alcohol & drug criminal justice working group and the interchange program.* Multnomah County Performance Management Group.

O'Deane, M. (2010). *Gangs: Theory, Practice and Research.* San Clemente, CA, USA: LawTech Custom publishing.

Okun, M.A., Stock, W.A., Haring, M.J., & Witter, R.A. (1984). The social activity/subjective wellbeing relation: a quantitative synthesis. *Res.Aging, 6*(1), 45–65.

Oliver, L.W. (1988). *The Relationship of group cohesion to group performance: A research integration attempt.* Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

O'Malley, P. (1973). The influence of cultural factors on Māori crime rates. *New Zealand Society-Contemporary Perspectives.* Sydney: John Wiley and Sons Australasia Pty Ltd.

Ontario Human Rights Commission. (2014). What is involved in collecting data – six steps to success. Retrieved June 30, 2014, from http://www.ohrc.on.ca

Opie, A. (2012). Vision narratives, hope and transitions in the Antipodes: Early engagement with possibilities of desistance. *Probation Journal, 59*(3), 203–218

Orlinsky, D. E., Ronnestad, M. H., & Willutzki, U. (2004). Fifty years of psychotherapy process-outcome research: Continuity and change. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (5th ed., pp. 307-389). New York: John Wiley and Sons.

Ott, R.L. (1993). *An introduction to statistical methods and data analysis* (4th ed.). Belmont, CA: Duxbury Press.

Pallant, J. (2005). SPSS survival manual: A step by step guide to data analysis using SPSS for Windows, *12*(2). Crows Nest, N.S.W.: Allen & Unwin

Patton, M.Q. (1980). *Qualitative Evaluation Methods.* Beverly Hills, CA: Sage.

Pearson, D. (2001). *The politics of ethnicity in settler societies: States of unease.* New York, USA: Palgrave.

Pere, R. (1982). *AKO: Concepts and Learning in the Māori Tradition.* Wellington, New Zealand: Te Kohanga Reo National Trust Board.

Pere, L. M. (2006). *Oho mauri: Cultural identity, wellbeing, and tāngata whai ora/motuhake* (Doctoral thesis). Massey University, Wellington, New Zealand.

Phillips, D.L., & Clancy, K.J. (1970). Response biases in field studies of mental illness. *American Sociological Review*, *35*(3), 503-515. doi: 10.2307/2092992

Phillips, D.L., & Clancy, K.J. (1972). Some effects of "social desirability" in survey studies. *American Journal of Sociology*, *77*(5), 921-940. doi:10.1086/225231

Phinney, J.S. (1989). Stages of Ethnic Identity Development in Minority Group Adolescents. *The Journal of Early Adolescence, 9*(1-2), 34-49. doi:10.1177/0272431689091004

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: review of research. *Psychological Bulletin*, *108*(3), 499-514. doi:10.1037/00332909.108.3.499

Phinney, J. S. (1992). The multigroup ethnic identity measure a new scale for use with diverse groups. *Journal of Adolescent Research*, *7(2),* 156-176. doi:10.1177/074355489272003

Phinney, J., Ong, A., & Madden, T. (2000). Cultural values and intergenerational values discrepancies in immigrant and non-immigrant families. *Child Development*, *71*(2), 528-539. doi:10.1111/1467-8624.00162

Piersma, H. L., & Boes, J. L. (1995). Agreement between patient self-report and clinician rating: Concurrence between the bsi and the gap among psychiatric inpatients. *Journal of Clinical Psychology*, *51*(2), 153-157. doi:10.1002/1097-4679(199503)

Pihama, L., Jenkins, K., & Middleton, A. (2003). *'Te rito' action area 13 literature review: Family violence prevention for Māori research report*. Auckland, New Zealand: The University of Auckland.

Pinnock, D., & Douglas-Hamilton, M. (1998). Rituals, Rites and Tradition: Rethinking Youth Programs in South Africa. In K. Hazlehurst & C. Hazlehurst (Eds.), *Gangs and Youth Subcultures: International Explorations* (pp. 307-341). New Brunswick, New Jersey: Transaction Publishers.

Poata-Smith, E. S. (1997). The political economy of inequality between Māori and Pakeha. In B. Roper & C. Rudd (Eds.), *The Political Economy of New Zealand* (p.160). Auckland, New Zealand: Oxford University Press.

Polack, J. S. (1840). *Manners and customs of the New Zealanders: With notes corroborative of their habits, usages, etc., and remarks to intending emigrants, with numerous cuts drawn on wood* (Vol. 2). London: Madden & Company.

Pool, I. (1991). Te Iwi Māori. *A New Zealand Population. Past, Present and Projected*. Auckland: Auckland University Press.

Portes, A. (1997). Immigration theory for a new century: Some problems and opportunities. *International Migrant Review, 31,* 799-825. doi:10.2307/2547415

Pratt, J. (1992). *Punishment in a Perfect Society: The New Zealand Penal System 1840-1939.* Victoria University Press, Wellington.

Pratt, J. (1999). Assimilation, equality, and sovereignty in New Zealand/Aotearoa. In P. Havemann (Ed.), Indigenous peoples" rights in Australia, Canada, and New Zealand (pp.316-326) Auckland NZ: Oxford University Press New Zealand.

Project Waitangi Report. (1989). A summary produced by Project Waitangi of Moana Jackson's Report: *The Māori and the Criminal Justice System, He Whaipaanga Hou - A new perspective.* Wellington: Project Waitangi.

Quigly, I. (1984). *The Heirs of Tom Brown: The English School Story.* Oxford: Oxford University Press.

Ratima, M. M., Allan, G. R., Durie, M.H., Edwards, W., Gillies, A., Kingi, T.K., et al. (1996). Ngā momo whānau. Department of Māori Studies, Te Pūmanawa Hauora, Massey University. Palmerston North.

Reid, P., Robson, B., & Jones, C. P. (2000). Disparities in health: common myths and uncommon truths. *Pacific Health Dialog*, *7*(1), 38-47.

Richards, K., Rosevear, L., & Gillbert, R. (2011). Promising interventions for reducing indigenous juvenile offending. *Indigenous Justice Clearinghouse. Standing Committee of Attorneys-General.* Australian Government: Australian Institute of Criminology.

Roberts, J. V. (2003). Sentencing reform in New Zealand: an analysis of the Sentencing Act 2002. *Australian & New Zealand Journal of Criminology*, *36*(3), 249-271. doi:10.1375/acri.36.3.249

Robson, B. & Reid, P. (2001) *Ethnicity Matters: Review of the Measurement of Ethnicity in Official Statistics: Māori Perspectives Paper for Consultation.* Wellington: Te Ropu Rangahau Hauora a Eru Pomare.

Rodriguez, D. (2003). State terror and the reproduction of imprisoned dissent. *Social Identities*, *9*, 183-203. doi:10.1080/1350463032000101551

Rogler, L. H., Cooney, R. S., & Ortiz, V. (1980). Intergenerational change in ethnic identity in the Puerto Rican family. *International Migration Review*, *14(2),* 193-214.

Roosens, E. E. (1989). *Creating ethnicity: The process of ethnogenesis.* CA, USA: Sage Publications, Inc.

Rossi, P. H., & Freeman, H. E. (1993). *Evaluation: A systematic approach* (5th ed.). Newbury Park, CA: Sage Publications.

Rossiter, J.C. (2009). *A comparison of Social Desirability Bias Among Four Widely Used Methods of Data Collection as Measured by the Impression Management Subscale of the Balance Inventory of Desirable Responding* (Doctoral thesis). Kent State University, Ohio, USA.

Roy, R. E., & Wormith, J. S. (1985). *The Effects of Incarceration: 1. Measuring Criminal Sentiments.* Ministry of the Solicitor General of Canada, Secretariat.

Rucklidge, J. J., McLean, A. P., & Bateup, P. (2013). Criminal Offending and Learning. Disabilities in New Zealand Youth. Does Reading Comprehension Predict Recidivism? *Crime & Delinquency*, *59*(8), 1263-1286. doi:10.1177/0011128709336945

Russell, J., & Lawson, J.M. (2010). Exploring Psychology Study and Revision Guide for AS Level AQA A. *Research Methods in Psychology: An introduction to research methods*. New York: Oxford University Press.

Sanchez-Way, R., & Johnson, S. (2000). Cultural practices in American Indian prevention programs. *Juvenile Justice Journal, 2(2),* 20-30.

Sandvik, E., Diener, E., & Seidlitz, L. (1993). Subjective well-being: The convergence and stability of self-report and non-self-report measures. *Journal of Personality*, *61*(3), 317-342. doi:10.1111/j.1467-6494.1993.tb00283.x

Savage, J. (1807). *Some Account of New Zealand: Particularly the Bay of Islands, and Surrounding Country*. London: J. Murray and A. Constable and Company.

Select Committee of Inquiry Into Violent Offending. (1979). *Report of the Select Committee into Violent Offending*. Wellington, New Zealand: Government Printer.

Shahnazarian, D., Hagemann, J., Aburto, & M. Rose, S. (2013). *Informed Consent in Human Subjects Research*. Office for the Protection of Research Subjects (OPRS), University of Southern California.

Shields, I. W., & Simourd, D. J. (1991). Predicting predatory behavior in a population of incarcerated young offenders. *Criminal Justice and Behavior*, *18*(2), 180-194. doi:10.1177/0093854891018002006

Shields, I. W., & Whitehall, G. C. (1991). *The Pride in Delinquency Scale*. Paper presented at the eastern Ontario correctional psychologists' winter conference. Canada: Burritts Rapids.

Simourd, D. J. (1997). The Criminal Sentiments Scale Modified and Pride in Delinquency Scale: Psychometric properties and construct validity of two measures of criminal attitudes. *Criminal Justice and Behavior, 24*(1), 52-70. doi:10.1177/0093854897024001004

Simourd, D. J., & Van de Ven, J. (1999). Assessment of criminal attitudes: Criterion-related validity of the Criminal Sentiments Scale – Modified and Pride in Delinquency Scale. *Criminal Justice and Behavior, 26*(1), 90-106. doi:10.1177/0093854899026001005

Singh, V. P. (1977). Some theoretical and methodological problems in the study of ethnic identity: a cross-cultural perspective. *Annals of the New York Academy of Sciences*, *285*(1), 32-45. doi:10.1111/nyas.1977.285

Singh, D., & White, C. (2000). *Rapua te huarahi tika–Searching for solutions: A review of research about effective interventions for reducing offending by indigenous and ethnic minority youth*. Wellington, New Zealand: Ministry of Youth Affairs.

Sissons, J. (1993). The systematisation of tradition: Māori culture as a strategic resource. *Oceania*, 64(2), 97-116.

Skogstad, P. (1994). *Service delivery to Māori: some preliminary data.* New Zealand: Department of Justice Psychological Services, Proceedings of the Conference.

Smith, H. G. (1995).Whakaoho Whānau: New formations of Whānau as an innovative intervention into Māori cultural and educational crises. *He Pukenga Korero: A Journal of Māori Studies*, *1*, 18-36.

Smith, L.T. (1998). Towards the New Millenium: International Issues and Projects in Indigenous Research. In *Te Oru Rangahau: Māori Research & Development Conference, Proceedings* (Ed.), Te Pumanawa Hauora (p.19).Te Putahi-a-Toi, School of Māori Studies. Palmerston North, New Zealand: Massey University.

Smith, C. A., & Stern, S. B. (1997). Delinquency and anti-social behavior: A review of family processes and intervention research. *The Social Service Review*, *71*(3), 382-420.

Smith, S., & Trinder, J. (2001). Detecting insomnia: comparison of four self-report measures of sleep in a young adult population. *Journal of Sleep Research*, *10*(3), 229-235. doi:10.1046/j.1365-2869.2001.00262.x

Smyer, T., & Burbank, P.M. (2009). The U.S. correctional system and the older Prisoner. *Journal of Gerontological Nursing*, *35*(12), 32-37. doi:10.3928/00989134-20091103-02

Snowball, L., & Weatherburn, D. (2008). Theories of indigenous violence: A preliminary empirical assessment. *Australian & New Zealand Journal of Criminology*, *41*(2), 216-235. doi:10.1375/acri.41.2

Snyder, H. (2007). Nothing works, something works – But still few proven programs. *Corrections Today*, *69*, 6-28.

Social Exclusion Unit. (2002). *Reducing re-offending by ex-prisoners*. London: Social Exclusion Unit.

Spicer, P., Novins, D. K., Mitchell, C. M., & Beals, J. (2003). Aboriginal social organization, contemporary experience and American Indian adolescent alcohol use. *Journal of Studies on Alcohol and Drugs*, *64*(4), 450.

Stangor, C. (2011). *Research methods for the behavioral sciences* (4th ed.). Mountain View, CA: Cengage.

Statistics New Zealand. (1998b). *1996 Census of Population and Dwellings: Iwi*. Vol 2., Wellington.

Statistics New Zealand. (2012). New Zealand's prison population. *Ethnicity.* Retrieved November 17, 2013, from http://www.stats.govt.nz

Statistics New Zealand. (2013). Profile and Summary Reports: 2013 Census QuickStats about Māori. Population. Retrieved January 20, 2014, from http://www.stats.govt.nz

Steering Committee for the Review of Government Service Provision. (2007). *Overcoming indigenous disadvantage: Key indicators 2007*. Melbourne: Productivity Commission.

Stokes, E. (1985). *Māori research and development. A Discussion Paper prepared for the Social Sciences Committee of the National Research Advisory Council*. Hamilton, New Zealand: University of Waikato.

Sullivan, C.W. & Grubea, J.M. (1991). Who does well in a day treatment program? Following patients through 6 months of treatment. *International Journal of Partial Hospitalization 7(2),* 101-107.

Sutton, P. (2001). The politics of suffering: Indigenous policy in Australia since the 1970s. *Anthropological Forum*, *11*(2), 125-173. doi:10.1080/00664670125674

Tajfel, H. (1978). *The social psychology of minorities*. New York: Minority Rights Group.

Tanczos, N. (2000). *A Better Kind Of Justice: Māori justice system*. New Zealand: The Ecologist.

Taonui, R. (2010). Mana tamariki: Cultural alienation. *AlterNative: An International Journal of Indigenous Peoples*, *6*(3), 187.

Taonui, R. (2012). Mana Tamariki, Takahi Tamariki—Māori Child Pride, Māori Child Abuse. *Vulnerable Children and the Law: International Evidence for Improving Child Welfare, Child Protection and Children's Rights*, 161.

Tatz, C. M. (1999). *Aboriginal Suicide is Different: Aboriginal Youth Suicide in New South Wales, the Australian Capital Territory and New Zealand: Towards a Model of Explanation and Alleviation, a Report to the Criminology Research Council on CRC Project 25/96-7*. Macquarie University, Sydney, NSW, Australia: Centre for Comparative Genocide Studies.

Tauri, J.M. (1998). *Family Group Conferencing and the Indigenisation of New Zealand's Justice System*. Māori and Criminal Justice He Whaipaanga Hou: Ten Years on 1988-1998 Conference. Wellington: Victoria University Law School in Te Whanganui-a-Tara.

Tauri, J. (1999). Explaining recent innovations in New Zealand's criminal justice system: Empowering Māori or biculturalising the state? *Australian New Zealand Journal of Criminology, 32(2),* 153-167. doi:10.1177/000486589903200205

Tauri, J. M., Webb, R. (2012). A Critical Appraisal of Responses to Māori Offending. *The International Indigenous Policy Journal, 3*(4), 1-16.

Te Hoe Nuku Roa. (1996). *Māori Profiles: An integrated approach to policy and planning*. A report prepared for Te Puni Kōkiri, Department of Māori Studies, Massey University, Wellington.

Te Pou o te Whakaaro Nui. (2010a). *Talking Therapies for Pasifika peoples: Best and promising practice guide for mental health and addiction services*. Auckland: The National Centre of Mental Health Research, Information and Workforce Development.

Te Pou o Te Whakaaro Nui. (2010b). *Talking therapies for people with problematic substance use: Best and promising practice guide for mental health and addiction services.* Auckland: The National Centre of Mental Health Research, Information and Workforce Development.

Te Puni Kōkiri. (2000). Whanake Rangatahi: Programmes and Services to Address Māori Offending. *Social Policy Journal of New Zealand, 16, 185*

Te Puni Kōkiri. (2009). Whānau Ora: whakarāpopotonga summary. *Rangahau Tūkino Whānau Māori Research Agenda on Family Violence.* Wellington: Ministry of Māori Development.

Teske Jr, R., & Nelson, B. H. (1973). Two scales for the measurement of Mexican-American identity. *International Review of Modern Sociology*, *3*, 192-203.

Thayer, R.E. (1987). Problem Perception, Optimism, and Related States as a Function of Time of Day (Diurnal Rhythm) and Moderate Exercise: Two Arousal Systems in Interaction. *Motivation and Emotion*, *11*(1), 19-36. doi:10.1007/BF00992211

Thoits, P. A. (1992). Identity Structures and Psychological Wellbeing: Gender and Marital Status Comparisons. *Social Psychology Quarterly, 55*(3), 236-256. doi:10.2307/2786794

Thomas, D. R. (1986). Culture and ethnicity: Maintaining the distinction. *Australian Journal of Psychology*, *38*(3), 371-380. doi:10.1080/00049538608259023

Thomas, D. R. (1988). Development of a Test of Māori Knowledge. *New Zealand Journal of Psychology, 17*(2),59-67.

Thornton, R. (1998). *Studying Native America: Problems and Prospects.* USA: The University of Wisconsin Press.

Ting-Toomey, S. (1981). Ethnic identity and close friendship in Chinese-American college students. *International Journal of Intercultural Relations*, *5*(4), 383-406. doi:10.1016/0147-1767(81)90049-3

Tipene-Matua, B., Phillips, H., Cram, F., Parsons, M., & Taupo, K. (2009). Māori Research Protocols: Old ways of having new conversations: Basing qualitative research within *Tikanga Māori* (Māori protocol). Katoa Ltd.

Tittle, C.R., & Grasmick, H.G. (1997). Criminal behavior and age: A test of three provocative hypotheses. *Journal of Criminal Law and Criminology*, *88*(1), 309-342.

Tucker, C. (1999). *African American children: A self empowerment approach to problems and preventing academic failure.* Boston: Allyn & Bacon.

Tzuriel, D., & Klein, M. M. (1977). Ego identity: Effects of ethnocentrism, ethnic identification, and cognitive complexity in Israeli, Oriental, and Western ethnic groups. *Psychological Reports*, *40*(3c), 1099-1110. doi:10.2466/pr0.1977.40.3c.1099

UNICEF. (2003). *A league table of child maltreatment deaths in rich nations (Innocenti Report Card No. 5).* Florence: UNICEF Innocenti Research Centre.

Van Voorhis, P., Spruance, L., Listwan, S., Ritchey, P., Pealer, J., & Seabrook, R. (2001). *The Georgia Cognitive Skills Experiment outcome evaluation: Phase I*. Cincinnati, OH: University of Cincinnati.

Vega, W. (1992). Theoretical and pragmatic implications of cultural diversity for community research. *American Journal of Community Psychology, 23*, 375-391.

Visu-petra, G., Borlean, C., Chendran, L., & Buş, I. (2008). An investigation of anti-social attitudes, family background and moral reasoning in violent offenders and police students. Romanian association for cognitive science. *Cognitive Brain and Behavior, 12*(2), 134-159.

Waitangi Tribunal Report. (2005). *The Offender Assessment Policies Report*. WAI 1024. Wellington, New Zealand: Waitangi Tribunal 2005, Legislation Direct.

Waka Hourua. (2014). *National suicide prevention programme for Māori and Pacific communities.* Wellington, New Zealand: Te Rau Matatini.

Walker, R.J. (1979). *Urban Māori: He matapuna - a source: Some Māori perspectives.* Wellington, New Zealand: New Zealand Planning Council.

Walker, R. (1989). Māori Identity. In Novitz and Willmott. (Eds.), *Culture and Identity in New Zealand* (pp 35-52). Wellington, New Zealand: Government Printer.

Walker, R. (1990). *Ka Whawhai Tonu Matou: Struggle Without End.* Auckland: Penguin Books.

Walker, R. (1996). Nga pepa a Ranginui: *The Walker papers.* Auckland: Penguin.

Walker, R. (2002). Māori news is bad news. In J. McGregor & M. Comrie (Eds.), *What's news? Reclaiming journalism in New Zealand* (pp. 215- 231). Palmerston North, New Zealand: Dunmore.

Weatherall, A., Wilson, M., Harper, D., & McDowall, J. (2007). *Forensic/criminal justice psychology: Psychology in Aotearoa/New Zealand.* New Zealand: Pearson Education

Webb, R. (2009). Māori, Pacific peoples and the social construction of crime statistics. *MAI Review, 3*(2), 1-4.

Weiner, J.B. (1998). Managing the iatrogenic risks of risk management. *Risk: Health, Safety & Environment, 9*(1), 39-82.

Wells, C. S., & Wollack, J. A. (2003). *An instructor's guide to understanding test reliability.* University of Wisconsin, Madison: Testing & Evaluation Services.

Wenn, J. N.W. (2007). *Kaupapa Hauora Māori: Nga Whakaaro Whakahirahira o Nga Kaumatua. Te Pumanawa Hauora Research Centre for Māori Health and Development* (Doctoral thesis). Massey University, Wellington, New Zealand.

Wensley, D., & King, M. (2008). Scientific responsibility for the dissemination and interpretation of genetic research: Lessons from the "warrior gene" controversy. *Journal of Medical Ethics, 34*, 507-509. doi:10.1136/jme.2006.019596

Whaia te Ora mo te Iwi (1992). *Strive for the Good Health of the People*. Wellington, New Zealand: Department of Health.

Wharewera-Mika, J. (2012). *'Ahakoa te momo mate, whakanuia tāngata', mental health inpatient services: Māori needs when extremely distressed* (Doctoral thesis). University of Auckland, Auckland, New Zealand.

Whitbeck, L. B., Chen, X., Hoyt, D. R., & Adams, G. W. (2004). Discrimination, historical loss and enculturation: Culturally specific risk and resiliency factors for alcohol abuse among American Indians. *Journal of Studies on Alcohol and Drugs*, *65*(4), 409.

Whitbeck, L. B., Hoyt, D. R., Stubben, J. D., & LaFromboise, T. (2001). Traditional culture and academic success among American Indian children in the upper Midwest. *Journal of American Indian Education*, *40*(2), 48-60.

White, C. L., & Burke, P. J. (1987). Ethnic Role Identity among Black and White College Students An Interactionist Approach. *Sociological Perspectives*, *30*(3), 310-331.

Wikiriwhi, S.M. (1998). Intervention Strategies For Māori Offenders With Alcohol and Drug Abuse Problems Within Community Corrections. Māori and Criminal Justice He Whaipaanga Hou: Ten Years on 1988-1998 Conference. Wellington: Victoria University Law School in Te Whanganui-a-Tara.

Wild, T. C., Newton-Taylor, B., & Alletto, R. (1998). Perceived coercion among clients entering substance abuse treatment: Structural and psychological determinants. *Addictive Behaviors*, *23*(1), 81-95. doi:10.1016/S0306-4603(97)00034-8

Wilson, N.J. (2004). *New Zealand high-risk offenders: Who are they and what are the issues in their management and treatment?* Hamilton, New Zealand: Department of Corrections, Psychological Service.

Wilson, J., & Herrnstein, R. (1985). *Crime and Human Nature: The Definitive Study of the Causes of Crime*. New York: The Free Press.

Wilson, N.J., Tamatea, A., & Riley, D. (2007). Psychology in a Criminal Justice context: Principles and Interventions. In Evans, I, Ruklidge, J., O'Driscoll, M. (Eds.). *Professional Practice of Psychology in Aotearoa/New Zealand.* (pp. 429-444). Wellington: New Zealand Psychological Society.

Winter, P. (1998). Pulling the teams out of the Dark Room: The politicisation of the Mongrel Mob. In K. Hazelhurst & C. Hazelhurst (Eds.), *Gangs and youth subcultures: International explorations* (pp. 245-266). New Brunswick, N.J.: Transaction Publishers.

Wissink, I. B., Deković, M., Yağmur, Ş., Stams, G. J., & de Haan, M. (2008). Ethnic identity, externalizing problem behaviour and the mediating role of self-esteem among Dutch, Turkish-Dutch and Moroccan-Dutch adolescents. *Journal of Adolescence*, *31*(2), 223-240. doi:10.1016/j.adolescence.2007.12.002

Wolfgang, M.E., & Ferracuti, F. (1967). *The subculture of violence*. London: Tavistock.

Yessine, A.K., & Kroner, D.G., (2004). *Altering Anti-social Attitudes among Federal Male Offenders on Release: A Preliminary Analysis of the Counter-Point Community Program Pittsburgh Institution.* Research report. Ottawa, Ontario, Canada: Correctional Service of Canada.

Yukelson, D., Weinberg, R., & Jackson, A. (1984). A multi-dimensional group cohesion instrument for intercollegiate basket-ball teams. *Journal of Sport Psychology, 6*(1), 103-117.

Zimmerman, M., Ramirez, J., Wahienko, K., Walter, B., & Dyer, S. (1994). The enculturation hypothesis: Exploring direct and protective effects among Native American youth. In H. McCubbin, E. Thompson, & A. Thompson (Eds.), *Resiliency in ethnic minority families, Vol. 1. Native and immigrant American families* (pp. 199-220). Madison: University of Wisconsin.

Zullo, J., & Whitehead, J. (1983). The Christian body and homosexual maturing. In R. Nugent (Ed.), *A challenge to love* (pp. 20–37). New York: Crossroads Publishing.

Appendicies

Appendix A   Interview Questions

1. Has being part of Te Aō Marama changed you in any way?

2. What, exactly, has made the difference for you?

3. Do you think your time in Te Aō Marama will influence your behaviour once you are released? If so, how has your time in Te Aō Marama going to influence your behaviour?

4. Do you think you will you be more or less likely to commit crime as a result of being in Te Aō Marama? Why?

5. When in Te Aō Marama, would you be likely to offend? What stops you?

6. What did you like most about Te Aō Marama? Could there be any improvements?

7. Do you have anything else to say about your experience in Te Aō Marama?

Appendix B   Participant Information Sheet

The Effectiveness of the Maori Focus Unit

MFU PARTICIPANT INFORMATION SHEET

Kia ora,

My name is Tess Chalmers and I am of Te Arawa descent, Ngati Whakaue Hapu, and was brought up in the Bay of Plenty. I am currently a university student, at Massey University in Auckland, and would like to understand your experience here at Waikeria Prison Maori Focus Unit (MFU); Te Ao Marama.

I am interested in exploring how being on a Maori Focus Unit relates to well-being, identity, pro-social behaviour and anti-social behaviour, and if changes in these things occur with time spent in the MFU. I will ask you to complete five questionnaires which will be used to try and understand and evaluate these changes. I will ask you to complete these questionnaires four times over a 6 month period. There is also one questionnaire to be filled out by someone you nominate as knowing you well, for them to give their feedback on your progression The final time you fill out the questionnaires, a few questions will also be asked in regards to your MFU experience. This will be recoded through a voice recorder, in which I will then transcribe and make anonymous in a private university room, and then delete.

I would like to invite you to take part in this research because you are an MFU participant. If you are willing to take part in this study, the research would involve:

- *Completing self-report questionnaires, four (4) times over a six month period, which will take approximately 45 minutes, and answering a few questions regarding your MFU experience on the last occasion which will be recorded, transcribed and then deleted*
- *Allowing me to approach your nominated person to complete a questionnaire about your progression*
- *Allowing me access to your prison file*

Data Management:
- The information will be used for my doctoral research at Massey University and might be used for publication in an academic journal
- No information that can identify you to others will be used in the report. The information you provide will only be available to me and my supervisors
- Any other information collected for this research will be stored in a locked cabinet and destroyed after five (5) years

You are under no obligation to accept this invitation. If you decide to participate, you have the right to decline to answer any particular questions and withdraw your consent to fill out measures at any time during the research.

Project Contacts

This research is being done by Tess Chalmers, a Massey University doctoral student. Dr Mei Wah Williams and Mr Jhanitra Gavala, academic staff at Massey University, are my supervisors. If you have any questions about the project, you can write your questions on the paper provided (inside envelope) and send to the address given on the paper, in the pre-paid, envelope provided.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 11/056. If you have any concerns about the conduct of this research, please contact Dr Ralph Bathurst, Chair, Massey University Human Ethics Committee: Northern, telephone 0800 627739 Extension: 9570

Appendix C   Participant Consent Form

Massey University

The Effectiveness of the Maori Focus Unit

PARTICIPANT CONSENT FORM

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study on the basis that:

- I will fill out the questionnaires and answer a few questions regarding my MFU experience
- My nominated person will fill out a questionnaire about my participation in the MFU
- My prison file will be viewed by the researcher

Signature: _____   **Date:** _____

Full Name - printed _____

If you wish to receive a summary of the research findings, please write down a postal address that you can receive mail from in 12 months.

Address:

Appendix D   Nominated Person Selection Sheet

List of possible nominated persons

Instructions:

Please write down the name of up to 5 people who work in the prison who you feel would be able to comment on your experiences you have had in the Maori Focus Unit. One of these people will be asked to fill out a short questionnaire on behalf of you. This will remain absolutely confidential.
Please List the people in order of preference below:

1.

2.

3.

4.

5.

Appendix E   Nominated Person Information Sheet

The Effectiveness of the Maori Focus Unit

NOMINATED PERSON INFORMATION SHEET

Kia ora,

My name is Tess Chalmers and I am of Te Arawa descent, Ngati Whakaue Hapu, and was brought up in the Bay of Plenty. I am currently a university student, at Massey University in Auckland, and would like to understand the experiences of participants here at Waikeria Prison Maori Focus Unit (MFU); Te Ao Marama.

I am interested in exploring how being on a Maori Focus Unit relates to well-being, identity, pro-social behaviour and anti-social behaviour, and if changes in these things occur with time spent in the MFU. MFU participants will complete five self-report questionnaires, four times over a 6 month period, and answer a few questions regarding their MFU experience on the last occasion. As the nominated person, you will be required to complete a short questionnaire in regards to the participant's progression, at the four different data collection times. If you are not available at a collection time, the questionnaire and a pre-paid envelope with my address on it will be left for you in your pigeon hole, for you to fill out and send back as soon as possible.

I would like to invite you to take part in this research because an MFU participant has nominated you as knowing them well. If you are willing to take part in this study, the research would involve:

- *Completing a questionnaire in regards to a MFU participant's progression at four time points, which take approximately 5 minutes.*

Data Management:
- *The information will be used for my doctoral research at Massey University and might be used for publication in an academic journal*
- *No information that can identify you to others will be used in the report. The information you provide will only be available to me and my supervisors*
- *Any other information collected for this research will be stored in a locked cabinet and destroyed after five (5) years.*

You are under no obligation to accept this invitation. If you decide to participate, you have the option to be sent a summary of the research findings. If you choose not to participate, please send back all un-filled forms in the envelope provided.

Project Contacts
This research is being done by Tess Chalmers, a Massey University doctoral student. Dr Mei Wah Williams and Mr Jhanitra Gavala, academic staff at Massey University, are my supervisors. If you have any questions about the project, I can be contacted via email on: tess.chalmers.1@uni.massey.ac.nz via cell phone on: 0212659919 or alternatively, write your questions on the paper provided, and send in the pre-paid, self addressed, envelope provided.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 11/056. If you have any concerns about the conduct of this research, please contact Dr Ralph Bathurst, Chair, Massey University Human Ethics Committee: Northern, telephone 0800 627739 Extension: 9570 email humanethicsnorth@massey.ac.nz.

Appendix F   Nominated Person Consent Form

Massey University

The Effectiveness of the Maori Focus Unit

NOMINATED PERSONS CONSENT FORM

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study on the basis that:

- I will complete a 5 minute questionnaire in regards to the MFU participant's progression at four time points.

Signature: _____   Date: _____

Full Name - printed _____

If you wish to receive a summary of the research findings, please write down a postal address that you can receive mail from in 12 months.

Address:

Exploring Client Change at Waikeria Prison's Māori Focus Unit: Te Ao Mārama

Summary of the Research and Results

Tess Chalmers, *Massey University, Auckland*
Mei Wah M. Williams, *Massey University, Auckland*
Jhanitra Gavala, *Massey University, Auckland*

The over-representation of Māori is not new, nor does it appear to be changing (Durie, 1999). In successive prison censuses since 1987, Māori have been disproportionately represented in inmate numbers (Durie, 1999). Following the signing of the Treaty of Waitangi, Māori were exposed to a progressive process of colonisation which led to an increasing alienation from their land and culture (Fergusson, 2003). There is relative consensus that assimilation and colonisation resulted in Māori losing aspects of their identity. It is suggested that if forensic interventions are to be effective for Māori offenders, the treatment focus should target the lack of a Māori identity as a risk factor for re-offending (Singh & White, 2000; Department of Corrections, 2009; Becroft, 2009).

The MFU aims to develop the individual and their Māori connectedness through interventions and therapeutic programmes rich in tikanga Māori, with the aim of developing a positive identity and ultimately to see a decline in reoffending (Department of Corrections, 2009). At present there are limited studies that have looked at the relationship between MFU participation, Māori identity, and offender change. The purpose of the current study was to explore the hypothesis that through participating in Te Ao Mārama therapeutic community there would be an increase in Māori identity, an increase in well-being and pro-social behaviour, and a decrease in anti-social attitudes and behaviours that are linked to future reoffending.

Change was measured four times over a period of six months, , using the following measures:

- The Hua Oranga measure (King, 2002) which identified the four domains of Te Whare Tapa Whā, a measure of Māori wellbeing and identity. A nominated prison staff member also rated their perception of the participant's well-being.
- Pride in Delinquency Scale (PID) that measured identification with criminal others and anti-social behaviour.
- The Criminal Sentiments Scale Modified (CSS-M) that measured anti-social attitudes and reoffending risk.
- Engagement in programmes and number of misconducts in the prisons were used to compare participants when they were in the general prison and in Te Ao Mārama.

Results showed that with time spent in Te Ao Mārama, there was an increase in participant's self reported well-being and a decrease in antisocial thoughts and attitudes. There was also a decrease in misconducts in the prison, and an increase in attendance in therapeutic programmes. Interestingly, nominated staff members rated participant's well-being at a much higher level than the individual rated their own well-being. This meant that the nominated person's impression of the participant's well-being did not change over time. Participants however saw their well-being increase as they spent more time in Te Ao Mārama.

Participants were also provided the opportunity to outline potential improvements to Te Ao Mārama. Four main areas identified were:

1. The need for a continuation of the programme on exit of the MFU to assist with reintegration and allow for the continued support in strengthening Māori identity and preventing a slip back into a criminal identity.
2. The need to have representatives from outside of Tainui guest speak. This would help participants from different iwi reconnect with their own iwi and hapū.
3. The need for all Māori offenders to be housed in a MFU on prison entry, and lastly,
4. The need for multiple Māori focus units in every prison in New Zealand

The results of this study may potentially provide support for the establishment of other therapeutic environments based on tikanga Māori, as an effective intervention model for working with Māori offenders.

To all participants and staff in Te Ao Mārama, thank you greatly for your valuable contribution to this study. Without you, this research would not have been possible.

Hei konā mai I roto I ngā mihi
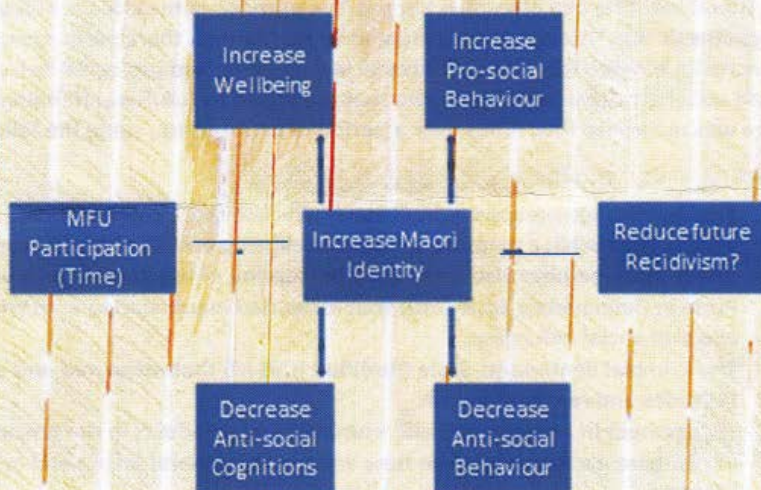
Kotahi ano te kaupapa; ko te oranga o te iwi

There is only one purpose (to our work); it is the wellness and wellbeing of the people

Appendix H   Power Analysis

Table H1

Power Analyses for the Hua Oranga, Pride in Delinquency (PID), and Criminal Sentiments Scale (CSS-M)

Questionnaire	Hua Oranga*	PID	CSS-M
Sections	4	10	3
Questions/section	16	10	41
Response scale	-2 to 2	-10 to 10	0 to 2
Response uncertainty	±1	±3	±1
Score method	Average totals	Total + 100	Total
SE of Score *	2.3	6.2	2.9
Sample size	Average change in scale which has an 80% chance of detection		
$N = 20$	2.3	6.2	2.9
$N = 25$	2.1	5.5	2.6
$N = 30$	1.9	5.1	2.3
$N = 35$	1.7	4.7	2.2
$N = 40$	1.6	4.4	2.0
Score Range	-32 to 32	0 to 200	0 to 82

Note. * SE of Score is the standard error of the score for a particular subject at a particular time. It takes into account the number of responses to make a score, the uncertainty in each response, and the method used to combine the responses into a score. Hua Oranga refers to Self-report and Nominated Persons schedules.

Appendix I   Identification of Outliers

Hua Oranga: Self-report Taha Wairua (HO1)
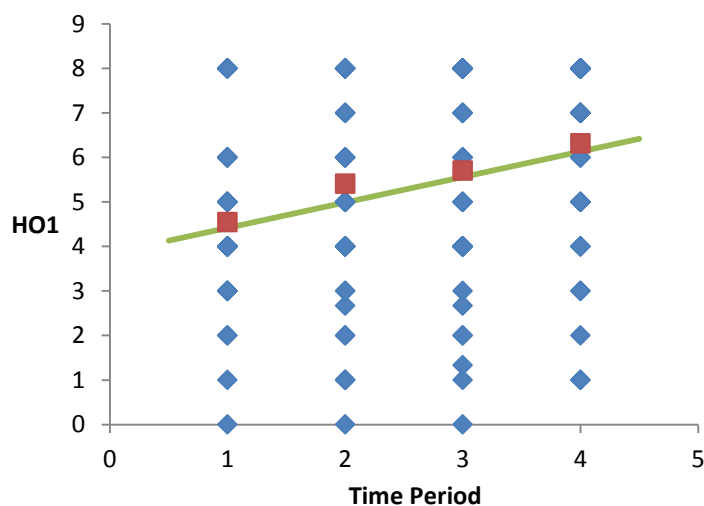**No Outlier**
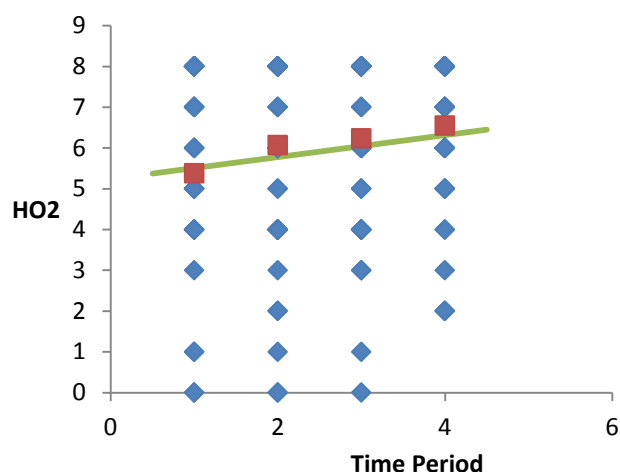

Figure I1. The GLM results for the HO1 subscale showing raw data, mean scores at each time period, and the GLM slope.
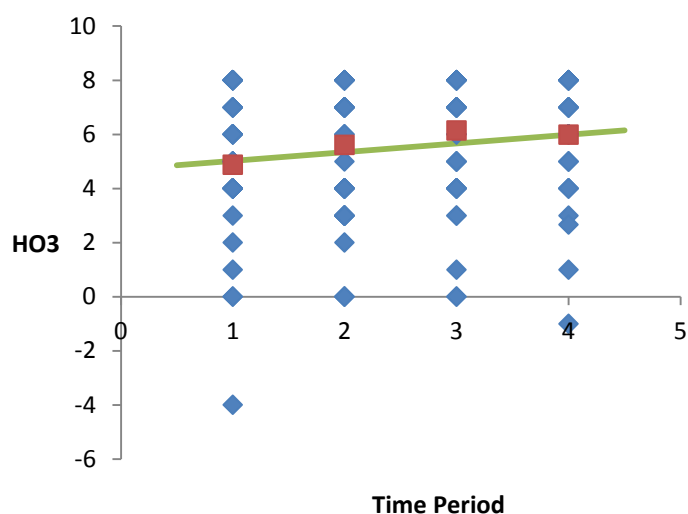
Hua Oranga: Self-report Taha Hinengaro (HO2)
No Outlier
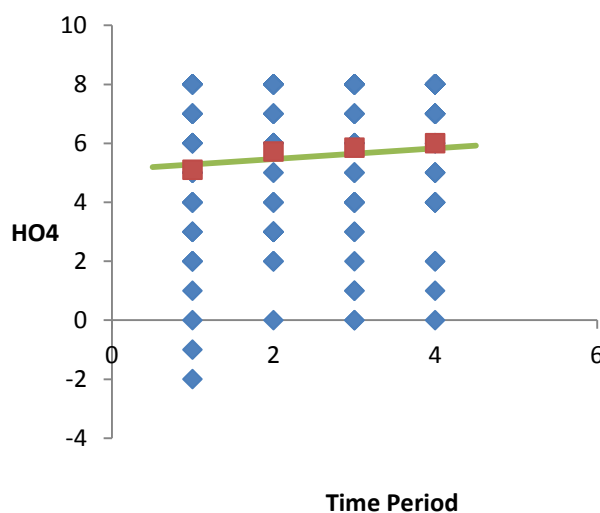

Figure I2. The GLM results for the HO2 subscale showing raw data, mean scores at each time period, and the GLM slope.

Hua Oranga: Self-report Taha Tinana (HO3)
Outlier

Figure I3. The GLM results for the HO3 subscale showing raw data, mean scores at each time period, and the GLM slope, with evidence of outlier.

Hua Oranga: Self-report Taha Whānau (HO4)
No Outlier

Figure I4. The GLM results for the HO4 subscale showing raw data, mean scores at each time period, and the GLM slope.

Hua Oranga: Self-report Total (HOtot)
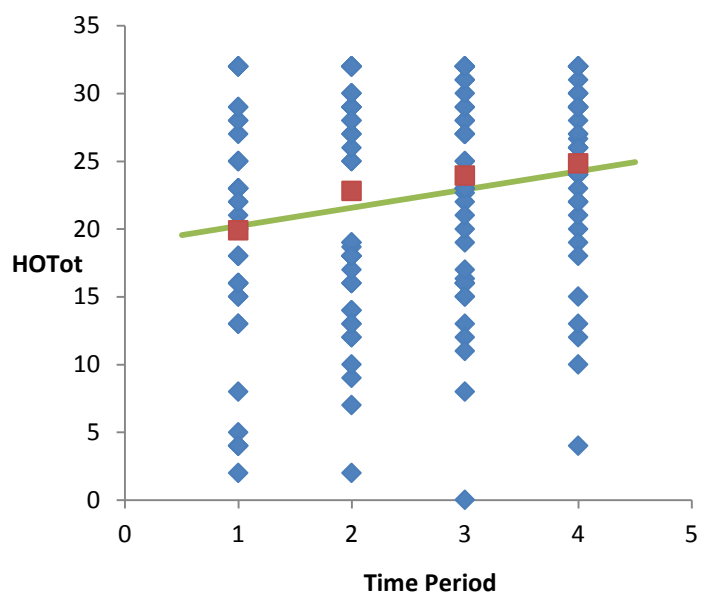**No Outlier**

Figure I5. The GLM results for the HOtot (overall Māori wellbeing score) showing raw data, mean scores at each time period, and the GLM slope.

Hua Oranga: Nominated Person Taha Wairua (NP1)
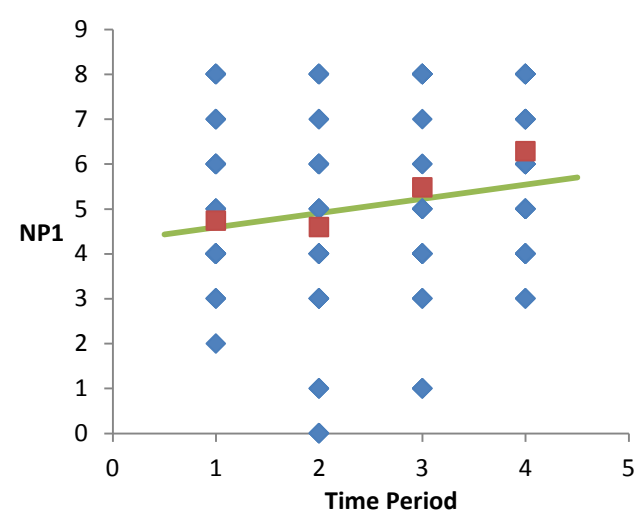**No Outlier**

Figure I6. The GLM results for the NP1 showing raw data, mean scores at each time period, and the GLM slope.

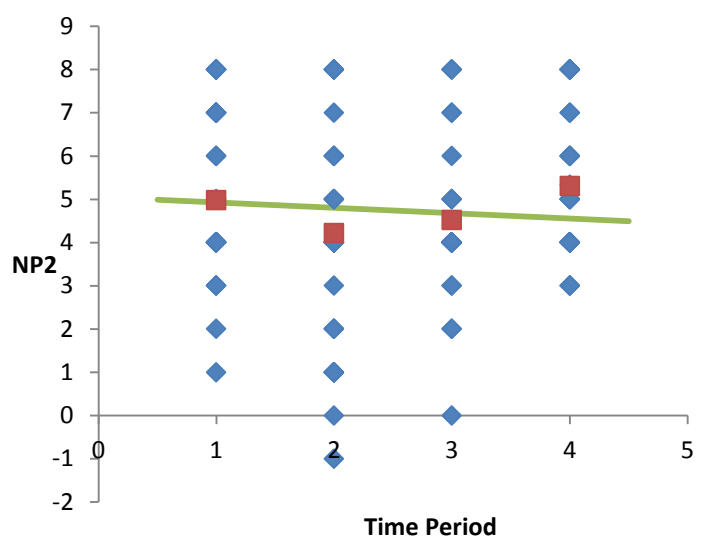**Hua Oranga: Nominated Person Taha Hinengaro (NP2)**
No Outlier

Figure I7. The GLM results for the NP2 showing raw data, mean scores at each time period, and the GLM slope.

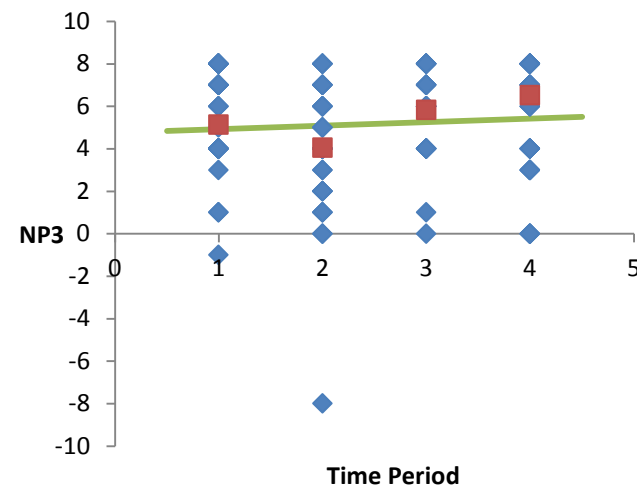**Hua Oranga: Nominated Person Taha Tinana (NP3)**
Outlier

Figure I8. The GLM results for the NP3 showing raw data, mean scores at each time period, and the GLM slope, with evidence of outlier.
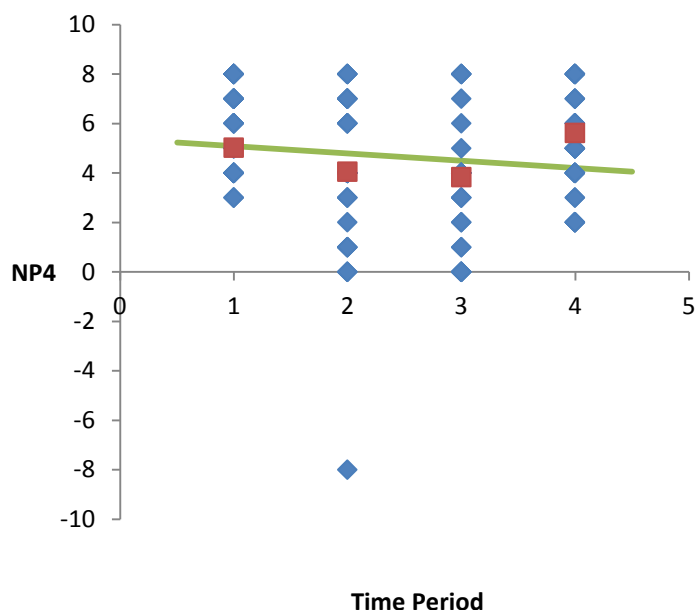
Hua Oranga: Nominated Person Whānau (NP4) Outlier

Hua Oranga: Nominated Person Total (NPTot) Outlier

Figure I9. The GLM results for the NP4 showing raw data, mean scores at each time period, and the GLM slope, with evidence of outlier.
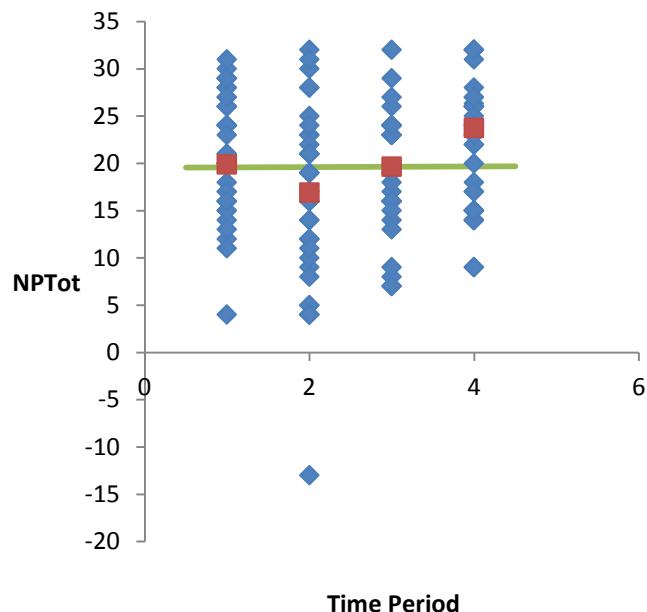
Figure I10. The GLM results for the NPTot showing raw data, mean scores at each time period, and the GLM slope, with evidence of outlier.

CSS-M: Attitudes Towards Law, Courts, and Police (ALCP) No Outlier

CSS-M: Tolerance for Law Violations (TLV) No Outlier

Figure I11. The GLM results for the ALCP showing raw data, mean scores at each time period, and the GLM slope.

Figure I12. The GLM results for the TLV showing raw data, mean scores at each time period, and the GLM slope.
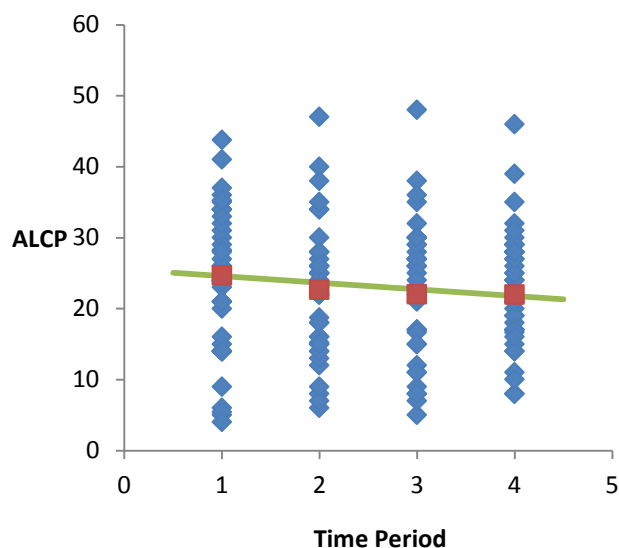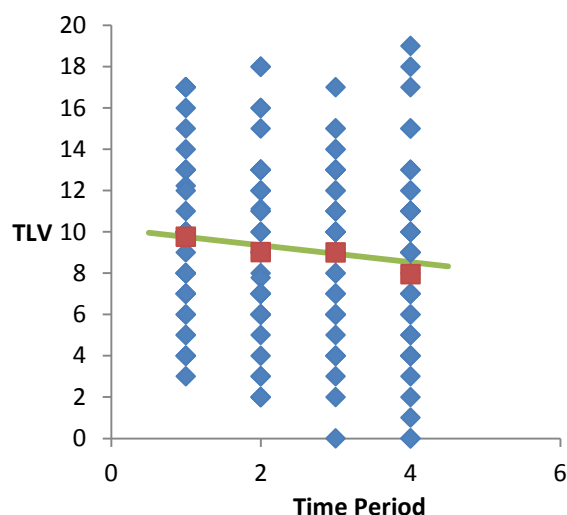
231

CSS-M: Identification with Criminal Others (ICO)
No Outlier
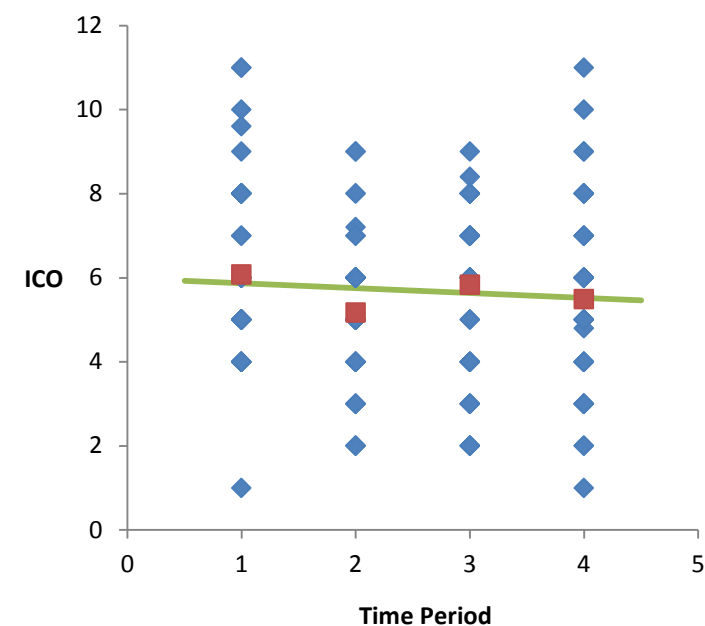
Figure I13. The GLM results for the ICO showing raw data, mean scores at each time period, and the GLM slope.

CSS-M: Criminal Sentiments Scale Total (CSS-MTot)
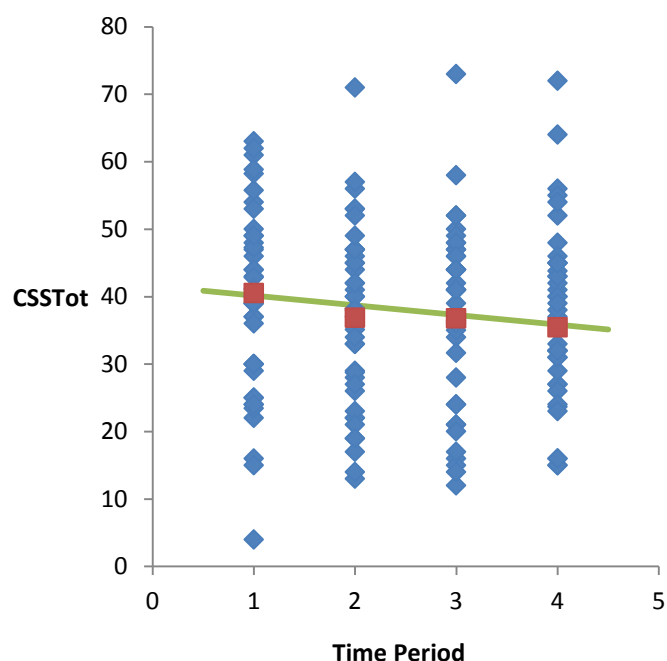**No Outlier**

Figure I14. The GLM results for the CSS-M Total showing raw data, mean scores at each time period, and the GLM slope.

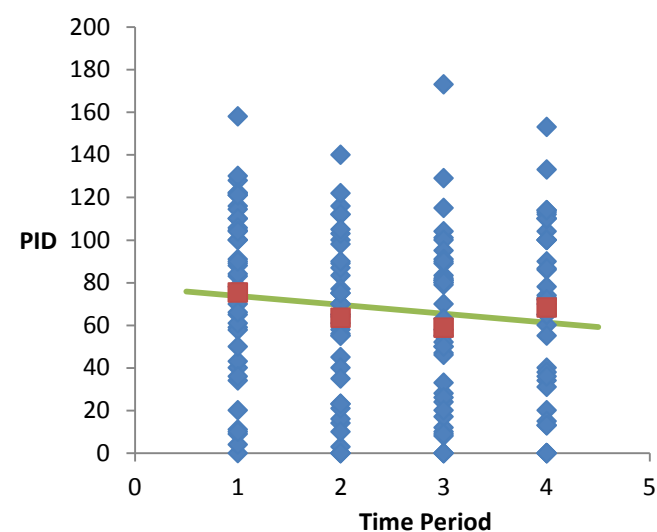**PID: Pride in Delinquency Total (PID)**
No Outlier

Figure I15. The GLM results for the PID measure showing raw data, mean scores at each time period, and the GLM slope

Appendix J   Removal of Outliers

1.   Hua Oranga Self-report Taha Tinana (HO3)

The outlier who scored -4 on time 1 (figure 23), was Participant 5. This participant had a terminal illness which severely affected his physical health, and he sadly passed away during the conduction of the study. Participant 5 was removed from the data and the GLM results were re-computed. The results $F(1,97)=4.97$, p $=0.03$, still showed a significant* increase in Taha Tinana over time spent in Te Ao Mārama (*p<0.05).

2.   Hua Oranga Nominated Persons Taha Tinana (NP3)

The outlier who scored -8 on time 2 (figure 28), was Participant 16, who also had a terminal illness and whose health was deteriorating (he was unable to participate in the Hua Oranga Self-report, due to his deterorating health). Participant 16 was removed from the data and the GLM results were re-computed. The results $F(1,76)=1.40$, p $=0.24$ still showed an increase in Nominated Person Taha Tinana over time spent in Te Ao Mārama, but still not at a significant* level (*p<0.05).

3.   Hua Oranga Nominated Persons Taha Whānau (NP4)

The outlier who scored -8 on time 2 (figure 29), was Participant 16 (as above) who had a terminal illness and whose health was deteriorating, but whose whānau support was not increasing. The decrease in his Nominated Person Taha Whānau score from time one (5) to time two (-8), (no longer in the prison system at time 3 and time 4) may not accurately reflect a true decline in his Taha Whānau, but rather the Nominated Person's perception of an increased necessity of Taha Whānau, due to vast decline in physical health over that time period. Participant 16 was removed from the data and the GLM results were re-computed. The results $F(1,76)=1.93$, p $=0.17$ still showed a decrease in Nominated Person Taha Whānau over time spent in Te Ao Mārama, but still not at a significant* level (*p<0.05).

4.   Nominated Persons Hua Oranga Total (NPTot)

The outlier who scored -13 on time 2 (figure 30), was participant 16 (as above) who had a terminal illness and whose health was deteriorating, but whose whānau support was not increasing (as above NP3 and NP4). Participant 16 was removed from the data and the GLM results were re-computed. The results $F(1,76)=0.14$, p $=0.70$ showed an increase in Nominated Person Total over time spent in Te Ao Mārama, but still not at a significant* level (*p<0.05).

Appendix K   Normal Probability Plots of Residuals

Figure K1. Normal Probability Plot of residuals and regression line for the Hua Oranga Taha Wairua subscale.

Figure K2. Normal Probability Plot of residuals and regression line for the Hua Oranga Taha Hinengaro subscale.

Figure K3. Normal Probability Plot of residuals and regression line for the Hua Oranga Taha Tinana subscale.
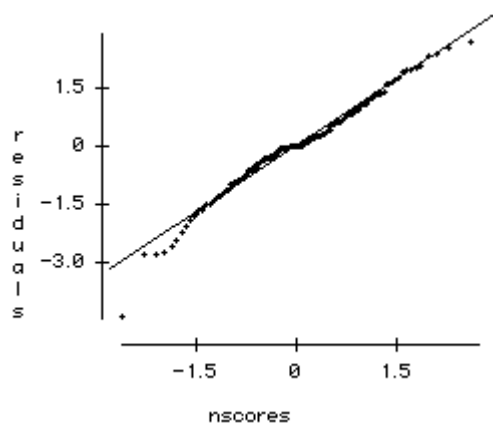

Figure K4. Normal Probability Plot of residuals and regression line for the Hua Oranga Taha Whānau subscale.

Figure K5. Normal Probability Plot of residuals and regression line for the Hua Oranga total score.

Figure K6. Normal Probability Plot of residuals and regression line for the Nominated Persons Taha Wairua score.
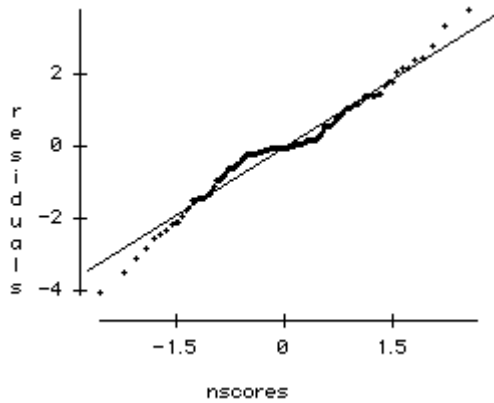
Figure K7. Normal Probability Plot of
residuals and regression line for the
Nominated Persons Taha Hinengaro score.
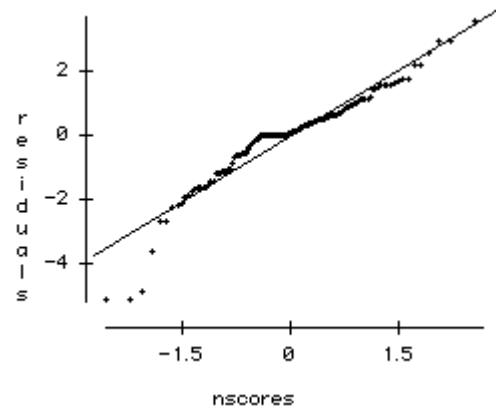
Figure K8. Normal Probability Plot of
residuals and regression line for the
Nominated Persons Taha Tinana score.
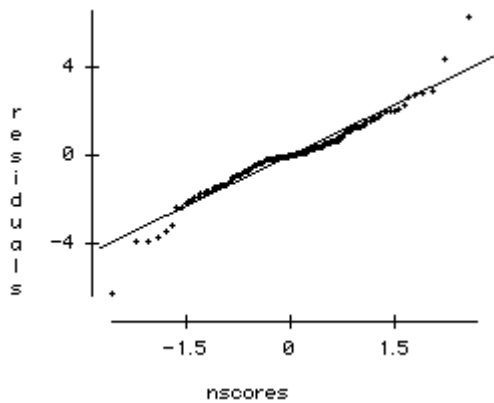
Figure K9. Normal Probability Plot of
residuals and regression line for the
Nominated Persons Taha Whānau score.
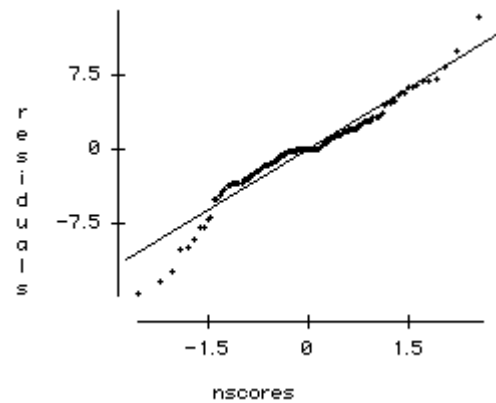
Figure K10. Normal Probability Plot of
residuals and regression line for the
Nominated Persons Hua Oranga Total score.
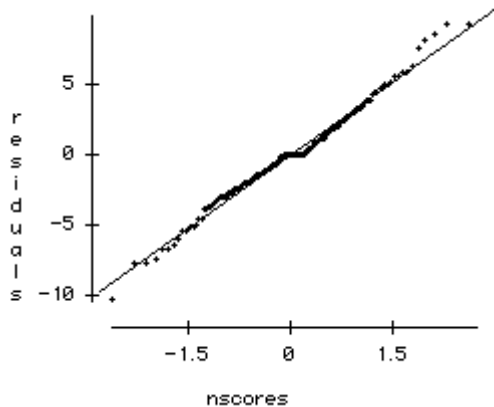
Figure K11. Normal Probability Plot of
residuals and regression line for the ALCP
score.
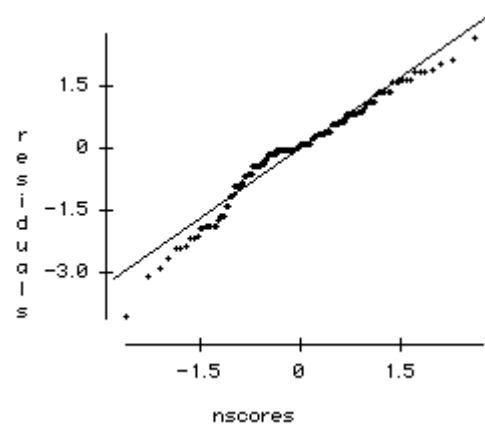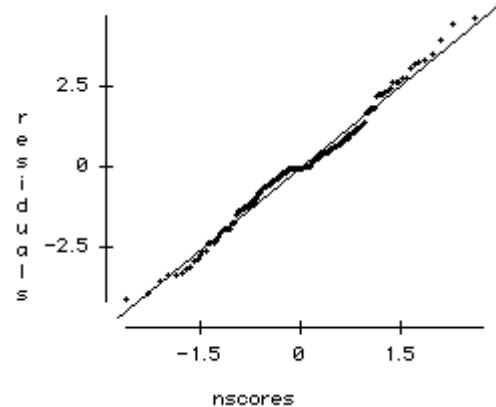

Figure K12. Normal Probability Plot of
residuals and regression line for the TLV
score.
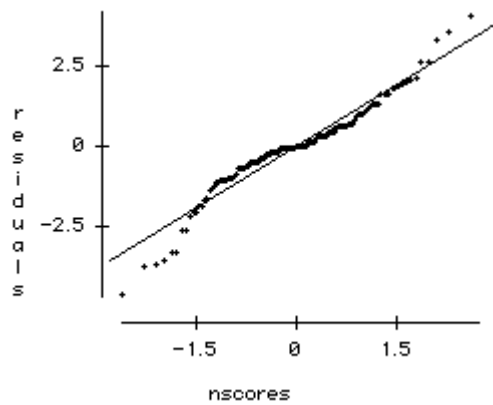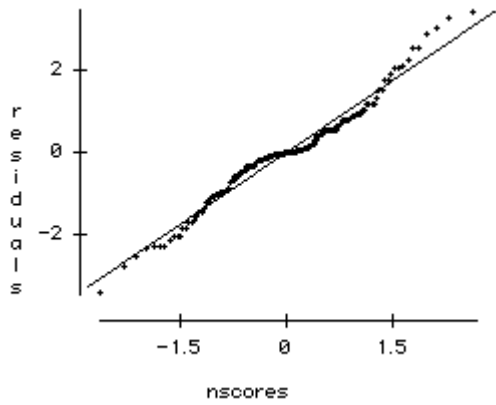
Figure K13. Normal Probability Plot of residuals and regression line for the ICO score.
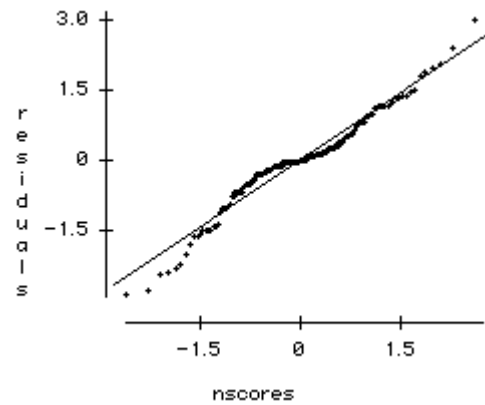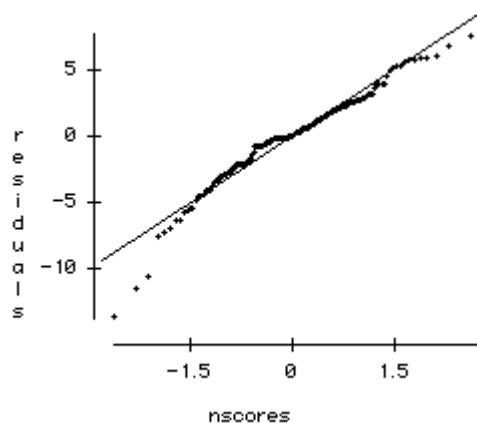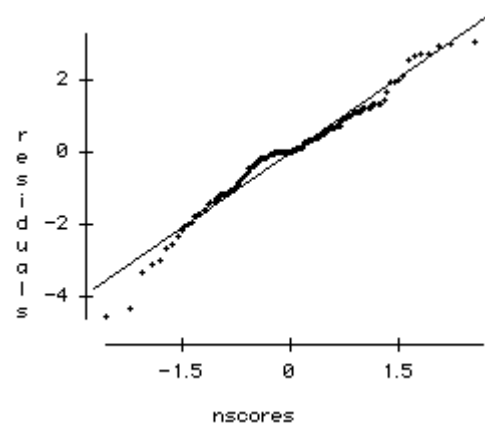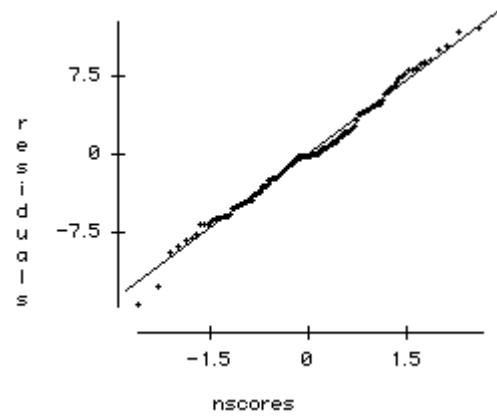

Figure K14. Normal Probability Plot of residuals and regression line for the CSS-M Total score.
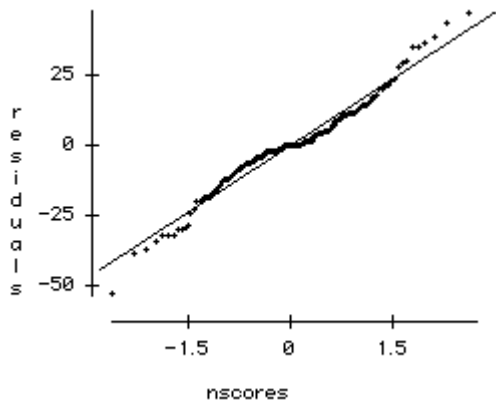
Figure K15. The Normal Probability Plot of residuals and regression line for the PID score.

Appendix L   Massey University and Department of Corrections Ethics Approval

MASSEY UNIVERSITY
ALBANY

26 September 2011

Tess Chalmers
c/- Dr M Williams
College of Humanities and Social Sciences
Massey University
Albany

Dear Tess

HUMAN ETHICS APPROVAL APPLICATION – MUHECN 11/056
Exploring the Effectiveness of Waikeria Prison Maori Focus Unit

Thank you for your application. It has been fully considered, and approved by the Massey University Human Ethics Committee: Northern.

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

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

Dr Ralph Bathurst
Chair
Human Ethics Committee: Northern

cc: Dr M Williams
College of Humanities & Social Sciences

DEPARTMENT OF
CORRECTIONS
ARA POUTAMA AOTEAROA

STRATEGY, POLICY AND PLANNING
Head Office
Wellington

2 November 2011

Tess Chalmers
Private Bag 102 904
North Shore City
AUCKLAND 0745

Dear Tess
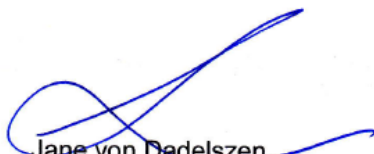
Approval for research proposal

I am pleased to advise that all permissions for your proposal 'Exploring the effectiveness of Waikeria Prison's Māori Focus Unit: a measure of client change' have been completed, and I am now able to give formal approval for your research. Please read and sign the enclosed Research Agreement, and return it in the prepaid envelope provided. A second copy is provided for your own records.

Please liaise with Sally Faisandier in Strategic Analysis and Research at the Department of Corrections to discuss any logistical or administrative issues. Sally can be contacted on 04 460 3087 or email sally.faisandier@corrections.govt.nz.

I wish you well with the research, and look forward to hearing of the outcomes.

Yours sincerely

Jane von Dadelszen
General Manager
Strategy, Policy and Planning

Enclosures   Research agreement x2
              Postage paid envelope

D11-506165

Phone: +64 4 460 3000, Fax: +64 4 460 3214
Mayfair House, 44-52 The Terrace, Private Box 1206, Wellington 6140, New Zealand
www.corrections.govt.nz

238

Appendix M MMM-ICE RS31 and the CU

Multidimensional Model of Māori Identity and Cultural Engagement- Revised

Participant Name: First _____ Last _____ .

_____

(i)	Do you identify as Maori and/or have ancestors who are Maori?	Yes
	(Put an X beside or over either Yes or No)	No
(ii)	Do you know your iwi?	Yes
	(Put an X beside or over either Yes or No)	No

(Please continue to read the instructions below and begin the questionnaire at number 1).

_____

Instructions: This survey contains a list of statements about what you think being Māori means to you personally and how you might feel about being Māori. It is only relevant to people who answered 'yes' to question (i).

All of these statements are opinions and we want to measure a wide range of different opinions about what people think it means to be Māori. There are no right or wrong answers. Please try to answer all the questions as honestly as you can. Place an <u>X beside or over the number</u> **to indicate your response to EACH question.** If you do not want to answer a certain question, you do not have to.

		Strongly Disagree			Neutral			Strongly Agree
		⇓			⇓			⇓
1.	My Māori ancestry is important to me.	1	2	3	4	5	6	7
2.	I feel a strong spiritual association with the land.	1	2	3	4	5	6	7
3.	My Māori identity belongs to me personally. It has nothing to do with my relationships with other Māori.	1	2	3	4	5	6	7
4.	I believe being Māori is awesome.	1	2	3	4	5	6	7
5.	My relationships with other Māori people (friends and family) are what make me Māori.	1	2	3	4	5	6	7
6.	I don't believe in Māori spiritual practices.	1	2	3	4	5	6	7
7.	I have a clear sense of my Māori heritage and what it means for me.	1	2	3	4	5	6	7
8.	It's important for Māori to stand together and be strong concerning political matters.	1	2	3	4	5	6	7
9.	I know how to act the right way when I am on a marae.	1	2	3	4	5	6	7
10.	Being Māori is NOT important to who I am as a person.	1	2	3	4	5	6	7
11.	Māori would be better off if they just forgot about the past and moved on.	1	2	3	4	5	6	7
12.	You can always tell tuturu (true) Māori from other Māori.	1	2	3	4	5	6	7
13.	My Māori identity is fundamentally about my relationships with other Māori.	1	2	3	4	5	6	7
14.	I don't really care about following Māori culture.	1	2	3	4	5	6	7
15.	I stand up for Māori rights, and historical grievances are important.	1	2	3	4	5	6	7
16.	I can sometimes feel my Māori ancestors presence.	1	2	3	4	5	6	7
17.	Real Māori put their whanau first.	1	2	3	4	5	6	7

	Strongly Disagree ⇓		Neutral ⇓			Strongly Agree ⇓	
18. I try to korero (speak) Māori as often as I can.	1	2	3	4	5	6	7
19. You can be a true Māori without ever speaking Māori.	1	2	3	4	5	6	7
20. I sometimes feel that I don't fit in with other Māori.	1	2	3	4	5	6	7
21. I wish I could hide the fact that I am Māori from other people.	1	2	3	4	5	6	7
22. I think Tapu is just a made up thing. It can't actually affect you.	1	2	3	4	5	6	7
23. To be truly Māori you need to understand your whakapapa and the history of your people.	1	2	3	4	5	6	7
24. I think that Māori have been wronged in the past, and that we should stand up for what is ours as guaranteed in the Treaty of Waitangi.	1	2	3	4	5	6	7
25. True Māori maintain strong links to marae.	1	2	3	4	5	6	7
26. I believe that my Taha Wairua (my spiritual side) is an important part of my Māori identity.	1	2	3	4	5	6	7
27. Reciprocity (give-and-take) is at the heart of what it means to be Māori for me.	1	2	3	4	5	6	7
28. I'm comfortable doing Māori cultural practices.	1	2	3	4	5	6	7
29. Karakia is an important part of being Maori.	1	2	3	4	5	6	7
30. I think we should all just be New Zealanders and forget about differences between Māori and Pākehā.	1	2	3	4	5	6	7
31. You can tell a true Māori just by their features and/or skin colour.	1	2	3	4	5	6	7

Thank you very much for your time and effort in completing the questionnaires.

Demographic Data

Please complete the following information. You can decline to answer any question.

Age: _____ years

Name of iwi if known _____

Time spent in Te Ao Marama: _____days or months

Please rate your level of cultural understanding **before** joining Te Ao Marama (Circle or Underline)

Poor / Adequate / Good / Very Good / Excellent

Please rate your level of cultural understanding at this time (Circle or Underline)

Poor / Adequate / Good / Very Good / Excellent

Appendix N   Hua Oranga HOSR and HONP

Hua Oranga Client Measure

Participant Name: First _____ Last _____ .

Instructions: Listed below are some statements about the experience you have had so far in the Maori Focus Unit. You are to rate each statement by circling either Much more, More, No Change, Less, or Much Less. For example, if you feel that since you have been in the Maori Focus Unit you feel much more valued as a person, you would circle Much More. If you feel a little more valued as a person you would circle More. If you feel no more valued as a person than before you were in the Maori Focus Unit you would circle No Change. If you feel slightly less valued as a person since you entered the Maori Focus Unit you would circle Less, and if you feel much less valued as a person you would circle Much Less. If you do not want to answer a certain question, you do not have to.

Q1. As a result of your experience in the Maori Focus Unit do you feel: **(Please Circle One)**

a) more valued as a person ⟶ *Much more   More   No Change   Less   Much less*

b) stronger in yourself as a Maori ⟶ *Much more   More   No Change   Less   Much less*

c) more content within yourself ⟶ *Much more   More   No Change   Less   Much less*

d) healthier from a spiritual point of view ⟶ *Much more   More   No Change   Less   Much less*

Q2. As a result of your experience in the Maori Focus Unit are you: **(Please Circle One)**

a) more able to set goals for yourself ⟶ *Much more   More   No Change   Less   Much less*

b) more able to think, feel and act in a positive manner ⟶ *Much more   More   No Change   Less   Much less*

c) more able to manage unwelcome thoughts and feelings ⟶ *Much more   More   No Change   Less   Much less*

d) more able to understand your problem behaviour ⟶ *Much more   More   No Change   Less   Much less*

Q3. As a result of your experience in the Maori Focus Unit are you: **(Please Circle One)**

a) more able to move about without pain or distress ⟶ *Much more   More   No Change   Less   Much less*

b) more committed to having good physical health ⟶ *Much more   More   No Change   Less   Much less*

c) more able to understand how physical health improves
   mental well-being ⟶ *Much more   More   No Change   Less   Much less*

d) physically healthier ⟶ *Much more   More   No Change   Less   Much less*

Q4. As a result of your experience in the Maori Focus Unit are you: **(Please Circle One)**

a) more able to communicate with your Whanau ⟶ *Much more   More   No Change   Less   Much less*

b) more confident in your relationship with others ⟶ *Much more   More   No Change   Less   Much less*

c) clearer about the relationship with your Whanau ⟶ *Much more   More   No Change   Less   Much less*

d) more able to participate in the prison community ⟶ *Much more   More   No Change   Less   Much less*

Hua Oranga Nominated Person Measure

Your Name: First _____Last _____ .

Client (inmate) Name: First _____Last _____ .

Instructions: Listed below are some statements about what you think, regarding the client's Maori Focus Unit experience. You are to rate each statement by circling either Much more, More, No Change, Less, or Much Less. For example, if you think that since entering the Maori Focus Unit the client feels much more valued as a person, you would circle Much More. If you think the client feels a little more valued as a person you would circle More. If you think the client feels no more valued as a person than before they were in the Maori Focus Unit you would circle No Change. If you think the client feels slightly less valued as a person since entering the Maori Focus Unit you would circle Less, and if you think the client feels much less valued as a person you would circle Much Less. If you do not want to answer a certain question, you do not have to.

Q1. As a result of participation in the Maori Focus Unit does the client feel: **(Please Circle One)**

a) more valued as a person ⟶ *Much more   More   No Change   Less   Much less*

b) stronger as a Maori ⟶ *Much more   More   No Change   Less   Much less*

c) more content within himself ⟶ *Much more   More   No Change   Less   Much less*

d) healthier from a spiritual point of view ⟶ *Much more   More   No Change   Less   Much less*

Q2. As a result of participation in the Maori Focus Unit is the client: **(Please Circle One)**

a) more able to set goals for himself ⟶ *Much more   More   No Change   Less   Much less*

b) more able to think, feel and act in a positive manner ⟶ *Much more   More   No Change   Less   Much less*

c) more able to manage unwelcome thoughts and feelings ⟶ *Much more   More   No Change   Less   Much less*

d) more able to understand how to deal with their problem behaviour ⟶ *Much more   More   No Change   Less   Much less*

Q3. As a result of participation in the Maori Focus Unit is the client: **(Please Circle One)**

a) more able to move about without pain or distress ⟶ *Much more   More   No Change   Less   Much less*

b) more committed to having good physical health ⟶ *Much more   More   No Change   Less   Much less*

c) more able to understand how physical health improves mental well-being ⟶ *Much more   More   No Change   Less   Much less*

d) physically healthier ⟶ *Much more   More   No Change   Less   Much less*

Q4. As a result of participation in the Maori Focus Unit is the client: **(Please Circle One)**

a) more able to communicate with their Whanau ⟶ *Much more   More   No Change   Less   Much less*

b) more confident in relationships with others ⟶ *Much more   More   No Change   Less   Much less*

c) clearer about their relationship with their Whanau ⟶ *Much more   More   No Change   Less   Much less*

d) more able to participate in the prison community ⟶ *Much more   More   No Change   Less   Much less*

Appendix O CSS-M

The Criminal Sentiments Scale- Modified

Participant Name: First _____ Last _____ .

Instructions: Listed below are some statements. You are to rate whether you Agree, are Undecided, or Disagree with each statement. If you do not want to answer a certain question, you do not have to.

Shade circle like this ●   Shade circle like this ●

LAW	Agree	Undecided	Disagree
L1 Pretty much all laws deserve our Respect	O	O	O
L2 It's our duty to obey all laws	O	O	O
L3 laws are usually bad	O	O	O
L4 The law is rotten to the core	O	O	O
L5 You cannot respect the law because it's there only to help a small and selfish group of people	O	O	O
L6 All laws should be obeyed just because they are laws	O	O	O
L7 The law does not help the average Person	O	O	O
L8 The law is good	O	O	O
L9 Law and justice is the same thing	O	O	O
L10 The law makes slaves out of most people for a few people on the top	O	O	O

POLICE	Agree	Undecided	Disagree
P19 The police are honest	O	O	O
P20 A cop is a friend to people in Need	O	O	O
P21 Life would be better with fewer Cops	O	O	O
P22 The police should be paid more for their work	O	O	O
P23 The police are as crooked as the people they arrest	O	O	O
P24 Society would be better off if there were more police	O	O	O
P25 The police almost never help People	O	O	O

COURTS	Agree	Undecided	Disagree
C11 Almost any jury can be fixed	O	O	O
C12 You cannot get justice in court	O	O	O
C13 Lawyers are honest	O	O	O
C14 The court often produces fake witnesses	O	O	O
C15 Judges are honest and kind	O	O	O
C16 Court decisions are pretty much always fair	O	O	O
C17 Pretty much anything can be fixed in court if you have enough money	O	O	O
C18 A judge is a good person	O	O	O

TLV	Agree	Undecided	Disagree
T26 Sometimes a person like me has to break the law to get ahead in life	O	O	O
T27 Most successful people broke the law to get ahead in life	O	O	O
T28 You should always obey the law, even if it keeps you from getting ahead in life	O	O	O
T29 It's okay to break the law as long as you don't get caught	O	O	O
T30 Most people would commit crimes if they knew they wouldn't get caught	O	O	O
T31 There is never a good reason to break the law	O	O	O
T32 A hungry man has the right to steal	O	O	O
T33 It's okay to get around the law as long as you don't actually break it	O	O	O
T34 You should only obey those laws that are reasonable	O	O	O
T35 You're crazy to work for a living if there's an easier way, even if it means breaking the law	O	O	O

ICO	Agree	Undecided	Disagree
I36 People who have broken the law have the same sort of ideas about life as me	O	O	O
I37 I prefer to be with people who obey the law rather than people who break the law	O	O	O
I38 I'm more like a professional criminal than the people who break the law now and then	O	O	O
I39 People who have been in trouble with the law are more like me than people who don't have trouble with the law	O	O	O
I40 I have very little in common with people who never break the law	O	O	O
I41 No one who breaks the law can be my friend	O	O	O

The Pride in Delinquency Scale

Participant Name: First _____ Last _____ .

Instructions: Listed below are some behaviours. You may or may not have done some of them in the past, this does not matter. You are to imagine that you have just done each behaviour, and then rate how proud or ashamed you would feel if you actually did them. If you do not want to answer a certain question, you do not have to.

You are to rate your pride or shame by giving a positive number (+) if you would be proud to do it, and a negative number (-) if you would be ashamed to do it. The bigger the number the more proud or ashamed you would be. So if you gave it a +8, +9, or +10 you would be extremely proud to do it. If you gave a -4, -5 or -6 you would be moderately ashamed to do it. If you gave a +1 or +2 you would be just a little proud. If you would be neither proud nor ashamed you would be right in the middle and you would give it a 0.

Let me give you a few examples before we begin. Most people would give a +10 to saving the life of a drowning child, because they would be extremely proud to do a thing like that. Most people would give a -10 to murdering a young child, because they would be extremely ashamed to do a thing like that. Most people would give a 0 to waking up in the morning, because they wouldn't be proud or ashamed. Now remember, you are to rate each behaviour on how you feel, not on how most people would feel.

Shade circle like this ●	Extremely Ashamed										Neither Proud nor Ashamed										Extremely Proud

Q1 Beating up a child molester	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Q2 Committing sexual assault	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Q3 Breaking into a family's home When no one is in and stealing jewellery and a T.V	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Q4 Seeing a shop being robbed and not calling the police	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Q5 Driving home after a party when you have had too much to drink	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Q6 Hitting someone who insults you	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Q7 Selling methamphetamine (p)	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Q8 Carrying a concealed weapon	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Q9 Pointing a shotgun at a shop Keeper and telling them to Hand over all the money In the till	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Q10 Getting away from the police After a high speed chase	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O