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Prototypical gang recruits in New Zealand prisons

A thesis

Submitted in fulfilment

of the requirements for the degree

of

Master's of Social Sciences in Psychology

at

The University of Waikato

by

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THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

2021

Abstract

Gangs have long been associated with antisocial behaviour and crime. To maintain themselves, gangs require a steady flow of new recruits. A better understanding of who is being recruited into gangs is the first step in preventing recruitment and lowering the impact of gangs on society. We asked what the prototypical gang recruit in New Zealand prisons is? To answer this, we needed to establish which factors are most likely to make someone more prototypical. Using these factors as our focus, we completed a series of difference of proportion analyses on archival data acquired through Te Ara Poutama. We found that the most prototypical factors for a gang recruit in New Zealand prisons were being a Māori, repeat offender, with a medium RoC*RoI, convicted of violent crimes, being held in a high security unit, and being between the ages of 20-39. These results suggest that prototypicality for gang recruits varies across settings.

Acknowledgements

A very grateful thank you to Te Ara Poutama Aotearoa for providing the data for this research.

Thank you to Covid-19 for ruining my initial plan halfway through, and thank you to Armon for being a reliable guide during what turned out to be an uncharacteristically chaotic time.

Also to Callum and Eryn for keeping me steady and pointing out when sentences either made no sense or sounded like they came out of the '80s (and suggesting I read something newer every now and then to help me update my language).

Finally, my wife, Hannah, for putting up with my more nocturnal writing habits as I worked my way through this thesis.

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Prototypical Gang Recruits in New Zealand Prisons

Gangs have been a conspicuous presence in New Zealand for decades and are considered synonymous with violence, antisocial behaviour, and organised crime (Newbold, 2016). However, gangs can also offer community, stability, and opportunity for financial and material rewards for their individual members (Decker, Katz & Webb, 2007; Fleisher & Decker, 2001; Nadesu, 2009; Tamatea, 2017). Like any community, Gangs must maintain a steady or growing number of members to continue to exist as they succumb to members' natural drop-off due to withdrawal from the lifestyle or death. The recruitment process is important for sustaining a group's size and its social (e.g., influence) or actual capital (e.g., geographical territory). However, in prison, some gang communities' ability to expand and maintain size and capital is hampered due to the limited available social resources. In this thesis, the central question is, whom do gangs choose to recruit in New Zealand prisons?

While gangs may differ in their specific goals, recruitment is a common process, they all must go through. The challenge is to find trustworthy, loyal, and competent members who are comfortable with illegality, the use of violence, and do not pose any risk of infiltration (Densley, 2012). Furthermore, if engagement in criminal activity and an intimidating reputation are prerequisites for a gang, one would be unlikely to open a newspaper to find an ad by the Mongrel Mob looking for "young thieves to join the local chapter, must have 1-2 years' experience in criminal activities and be familiar with Microsoft excel." Existing literature on gang recruitment considers many common factors which play a role in determining who is more likely to be recruited. These factors include adverse life events, antisocial tendencies, delinquent beliefs, lack of parental supervision, peer network beliefs, and peer delinquent behaviours (Esbensen et al., 2010; Hautala et al., 2016; Hill et al., 1999; Pyrooz & Densley, 2015; Thornberry et al., 2003). However, there are cases where people with lower risk levels for recruitment still end up involved in gangs. This anomaly of gang recruitment is likely due to recruitment being a two-way process, sometimes individuals will

choose the gang, and sometimes the gang will choose individuals (Densley, 2012; Viterna, 2006).

Therefore, because we cannot solely rely on the common factors to determine who will be recruited into gangs, we must consider how the recruitment process plays out in different environments.

Gang members commit more crime, and more serious crime, than non-gang members, making them a potential threat to society (Decker et al., 2007; Fleisher & Decker, 2001; Nadesu, 2009; Tamatea, 2017; Tita & Ridgeway, 2007). Not only are gangs a risk to society, but gang life, with its frequent violence and crime, pose risks to its members as well. Therefore, as a society, it is in our best interest to prevent or reduce gang recruitment, as it leads to harm to society for gang members and non-gang members alike.

Suppose research was able to pinpoint who was being recruited into gangs. In that case, targeted interventions could be created, which could reduce the overall consequences that gang membership has on the wider community. It is currently not economically feasible to specifically target individuals within the community due to the broad nature of gang recruitment and the aforementioned anomalous way in which it can occur. This creates a need to rely on larger systematic intervention strategies such as reducing poverty and increasing education. These strategies would work to combat some of the more common factors associated with potential gang recruitment. However, these macro interventions are less effective as they require heavy resourcing and only address a few of the common factors associated with gang recruitment (Cheng, 2017; Lien, 2016).

Prisons offer a unique opportunity for intervention. Because prisons are smaller, more controlled environments, it would be possible to implement targeted interventions that would be difficult in the wider community. Before any interventions could be implemented; however, we must first know who is being selected for recruitment from this environment.

The sections that follow will discuss the definitional issues with gangs, gang structure, and gang activity. The next will address recruitment and how it applies to the context of gangs, theories

on why people join gangs, common factors among recruits, and the typical patterns of recruitment into gangs seen around the world. The third section will be focusing on the important, though little-researched, area of gang recruitment in prisons. This will include the prison environment, violence, recidivism, health, prison culture, and the inmate code. We will also be addressing the relationship between gangs and prisons. Finally, we will discuss prototype theory and how current knowledge about gangs, recruitment, and prisons, come together to provide a profile of a prototypical gang recruit for New Zealand prisons.

Gangs

Before exploring prototypes of gangs in New Zealand prisons, we must first explore what a gang is, its purpose, and its functions.

Definition

Despite the long-term presence of gangs in New Zealand society, the term 'gang' is poorly defined and remains contested. A definition is important as it creates a clearer understanding of who exactly is being discussed. The lack of a clear definition has led to trouble in the United States as vague and overbroad definitions in some states have led to what some would call unfair discrimination of fans of the music group Insane Clown Posse, known as Juggalos, by categorising them as a gang (Fudge, 2014). One of the earliest definitions that broadly encompassed gangs was "An interstitial group formed spontaneously and then integrated through conflict" (Thrasher, 1927, p.57). The central constructs of this definition include spontaneous formation, ergo, that they can come from anywhere without cause, and that once formed, it is conflict which binds them together. These two concepts describe why gangs are not appearing everywhere we go. While they can initially form anywhere, they will dissipate without conflict, which suggests that conflict is a core element to any gang by this description. Through this definition, Thrasher was the first to establish gangs as an empirical object, and his definition gave rise to an area of study that has persisted for over 90 years (Densley, 2017). This definition is somewhat lacking by failing to address any criminal

activity, something that today is very much consistent with the perception of what makes a gang 'a gang'. Excluding criminality fails to differentiate from other legal organised groups, such as sports groups (Decker et al., 2015a).

Postulating that gangs will form spontaneously suggests that there is no underlying factor or factors that drive the formation of gangs. If this were the case, then the only possible intervention strategy would be to reduce the conflict that stabilises gangs. However, existing literature on gangs indicates that there are numerous factors that make people more likely to become gang members, thus countering the notion of spontaneity (Esbensen et al., 2010; Hautala et al., 2016; Hill et al., 1999; Pyrooz & Densley, 2015; Thornberry et al., 2003).

Over the last 20 years, more questions than answers have been raised in the attempt to provide a viable definition for gangs. Should criminal behaviour be included in the definition, thus making the association between gangs and crime a redundant exercise in tautology (Ball & Curry, 1995)? Do we include drug dealing organisations and motorcycle groups? Should there be an age distinction between youth gangs and adult criminal organisations (Hagedorn et al., 1996)? How can we distinguish between gang crime and crime that happens to be perpetrated by individual gang members (Smith et al., 1999)? Can we delineate gang members by their level of association with the gang in question (Esbensen et al., 2001)?

In response to the ambiguity in the definition of gangs, Sullivan (2005) proposed using multiple definitions, in which groups of gangs would be defined by the type of gang they are. To find which definition fits a specific gang, a heuristic typology could be devised using any number of factors that group gangs quickly according to some of their broader patterns and associations. This approach has become common in gang literature. Sullivan (2005) identified three types of gang this way which he named action sets, cliques, and named gangs. Action sets are groups of individuals who co-operate together but are not associated permanently and fail to have any explicit recognition among each other. Cliques are groups of people who share solidarity and engage in

activities together with regularity. There is no formal structure to these groups, and they lack symbols, leaders, and rituals. Named gangs are like cliques. However, they tend to have formalised structure, leadership, symbols and rituals. Named gangs in Sullivan's description are the only group that also necessitates criminal involvement of the group. The primary issue with Sullivan's description is that rather than use these labels to define gangs that are then studied, people being studied would select which of these groups they would fit into. Having the subjects of a study self-selecting their definition limits other researchers' ability to replicate any research properly. Self-selection also limits the ability of researchers to focus a study on any particular defined group. Sullivan designed this approach as the groups he was studying at the time often did not identify as being members of a gang. By creating these three groups and getting his subjects to self-identify, he focused his research on self-identified gangs. Problematically, these descriptions needed to have some degree of ambiguity to allow people to identify more easily. What is needed is a more descriptive approach that excludes people's need to self-identify as being in a gang.

Klein and Maxson (2006) used the idea of a heuristic typology used by Sullivan (2005) to develop a way to categorise different types of gang by membership size, the spread of age range, lifespan, geographical territory, and its members' tendency to be criminally versatile or specific.

Using these characteristics to differentiate gang types, Klein and Maxson (2006) created five categories of gangs, as seen in Table 1. Klein and Maxson even went so far as to delineate individual members within a gang by their role and level of association as seen in Table 2, thus dealing with the issue raised by Esbensen et al. (2001) of delineating gang members by their level of association. Klein and Maxson make two assumptions with their descriptions. Firstly, that gangs are likely to be criminally active and secondly, that they are ethnically representative of the areas from which they arise.

Table 1*Five Categories of Gang from Klein And Maxon (2006)*

Gang type	Description
Traditional	Traditional gangs have been in existence for over 20 years, showing that they can regenerate themselves. They contain relatively clear subgroups, often formed by age or time spent in the gang (Veterans, seniors, juniors, prospects) Sometimes the subgroups are separated by location rather than age. Traditional gangs include a wide range of ages and tend to have larger numbers than other gang types. They are very territorial.
Neotraditional	Neotraditional gangs are similar to traditional gangs but have only been around for roughly ten years or less. Consequently, they are smaller in size, have less clearly defined subgroups, and less hold on what they consider their 'territory'.
Compressed	Compressed gangs are small in size, usually around 50 members, and have no subgroups. They have a limited age range and are much less likely to be territorial. Compressed gangs tend to be relatively new, and it is uncertain if they will develop into a traditional/neotraditional gang or remain a less complex group.
Collective	Collective gangs are a larger form of the compressed gang with a wider age range. It has not developed subgroups or other distinguishing factors similar to that of the neotraditional/traditional gangs.
Specialty	While most gangs engage in a wide variety of criminal activity, the specialty gang focuses very narrowly on a few types of offences. These gangs tend to be small, usually less than 50 members, with no subgroups. The main purpose of this gang is more criminal than it is communal.

Typologies typically fall into two categories; structural and behavioural. Klein and Maxson's (2006) typology falls into the structural category, though there has been some criticism around their exclusion of some of the more behavioural elements (Spindler & Bouchard, 2011). Structural typologies create categories based on specific structural characteristics displayed by a group. Behavioural typologies create categories based specifically on the behaviours a group displays. When applied to a gang context, behavioural typologies tend to delineate gang classifications according to their criminal behaviour, i.e. party gangs vs gangs extensively involved in the dealing and use of illegal drugs. The social context within which a gang arises is subject to environmental factors that affect the gang's behaviour, and therefore, from a behavioural typology, its classification (Decker et al., 1998). Klein and Maxson (2006) identified this as problematic due to the nature of

Table 2*Gang Member Roles, As Described by Klein And Maxson (2006)*

Gang member role	Description
National President	Typically the founder of the gang. They are usually located at or near the national headquarters with several bodyguards and enforcers.
Territorial or Regional Representatives	Sometimes called the national vice president in charge of certain regions.
National Secretary/Treasurer	The member in charge of the gang's money and collecting dues from chapters. It is also this person's role to record any by-law changes within the gang.
National Enforcer	This person answers directly to the national president. They act as a bodyguard and administer punishments for gang violations. They may also locate former members to remove tattoos or colours.
Chapter President	The head of a specific chapter. This position can be either claimed or be voted in. Whoever has the title has the final say of chapter business and its members.
Vice President	The second in command to the chapter president. Usually, handpicked by the chapter president.
Secretary/Treasurer	Usually, the most educated member with the best writing skills. They maintain the roster and accounts and are responsible for collecting dues, keeping minutes, and paying bills.
Sergeant at Arms	Usually, the most physically strong member loyal to the president. They are responsible for maintaining order within the gang. Due to gangs' violent nature, this member may be required to beat other members for any violations.
Road Captain	More typically only found in biker gangs, this member is responsible for planning routes, refuelling, food stops etc.
Member	Fully accepted member of the gang.
Probate or Prospective Member	Individuals who are trying to become full members. They can spend between one month and one year as a probate, during which time they have to prove that they are worthy of becoming members. Some probates are required to commit various crimes to weed out anyone who may not be fully committed to the gang. As probates, they are subjected to the gang's will, and have no rights to vote in any gang activity.
Associate or Honorary Member	These are individuals who have proved their value to the gang. Such individuals could include lawyers, car wrecking owners, or other professionals who have helped the gang from time to time. These people are allowed to party with the gang, though they do not have voting status and are not allowed to wear colours.

gangs to be more criminally versatile. Gangs that lack criminal versatility tend to be smaller groups and typically fall into a speciality gang's structural typology.

While there is no widely used definition of a gang in New Zealand, the New Zealand Gang Intelligence Centre defines New Zealand adult gangs as “an organisation or a group that: (a) is recorded on the New Zealand National Gang List; and (b) promotes, encourages, or engages in criminal activity that is driven by a desire to — (i) create an atmosphere of fear and intimidation; or (ii) make a profit” (Privacy (Information Sharing Agreement between New Zealand Gang Intelligence Centre Agencies) Order 2018).

This New Zealand definition does mention a criminal element, which was a problematic omission from the definition given by Thrasher (1927). While useful to some extent for those who created it, this definition also has its issues. Limited to New Zealand gangs by the first criteria, there may be a delay with any imported gangs to meet this definition. A particular concern as gangs from Australia have recently spread to New Zealand (Savage, 2018). However, legislation in New Zealand that pertains to gangs excludes this or any other definition of a gang (Prohibition of Gang Insignia in Government Premises Act, 2013). With no use of a legal definition, this legislation suggests that the definition that we do have is viewed as insufficient and implies a ‘we know it when we see it’ mentality when defining a gang (Gilbert, 2013). Throughout most New Zealand legislation, the term ‘gang’ does not arise, using the term ‘organised criminal group’ instead. However, it is unclear how useful this is in avoiding the problems with a more explicit definition of gangs. For this research, there is a need for a clear understanding of what is considered a gang in order to know who is being recruited into them.

Legal definitions of what constitutes a gang vary across the world, while these do tend to focus more on the criminal element of gangs, they still fall short as robust definitions. A chess club could, in theory, be defined as a gang if they were to trespass on government property as a part of a peaceful protest under many of the legal definitions of a gang (National Gang Center, 2006; U.S.

Department of Justice, 2015). For the purposes of this study, we will be using the definition of the traditional gang described by Klein and Maxson (2006) as is most closely related to gangs commonly seen in New Zealand.

Growth of Gangs in New Zealand

The number of gangs in New Zealand has been growing since the 1950s, with membership increasing drastically since the 1970s. This was, in part, due to effective gang leadership, and the shift towards national levels of organisation rather than being limited to a more specific area (Tamatea, 2015). Gang communities have grown so drastically that in 2018 the *Economist* reported that more New Zealanders were joining gangs than were joining the army (*New Zealand has more gangsters than soldiers*, 2018). As the number of gangs increased and rates of gang membership grew, so too did inter-gang violence that attracted media attention and helped drive the negative perception of gangs deep into the social zeitgeist. Negative attitudes towards gang members become a barrier for members looking to leave as they are more likely to struggle to reintegrate into society (Kelsey, & Young, 1982; Meek, 1992; Tamatea 2015). Therefore, if getting gang members to leave is difficult, an alternative course of action to reduce gang membership could focus on reducing recruitment. With gang numbers on the rise, bringing with them the potential for harm, it is important that we find a way to reduce recruitment. However, before limited resources can be utilised, it is critical to understand who is being recruited.

Gang Features

Gangs have attained notoriety in the public eye, primarily for their antisocial behaviour – behaviours that cause distress, harassment, or harm to any individual. More than just affecting individuals, antisocial behaviour can create anxiety or fear, degrading quality of life for neighbourhoods, and communities (Schofield et al., 2011). Gangs exemplify this through their criminal behaviour (burglary, theft, destruction of property), violence, and the intimidation practices they employ (Pyrooz & Densley, 2015). Gangs have reached a level of criminal notoriety within

society around the world that even wearing patches or other gang regalia can be intimidating due to the association between gang regalia, gangs, and their criminal activity. Wearing gang patches or other regalia, while knowing of the associations and reaction it creates in others is therefore antisocial behaviour (Newbold, 2016). The intensity of the intimidation that came with gang patches led to them being banned in Whanganui, New Zealand (Prohibition of gang insignia in government premises Act 2013).

Rituals are commonplace amongst gang communities; it was even a defining factor in Sullivan's (2005) description of named gangs. While absent from other definitions, certain rituals remain important as a means of supporting gang structure and a shared identity (Tamatea, 2010). The most common example of a gang ritual is an initiation ceremony to symbolise a probate member's move to a full member. This can take many forms, from receiving a patch to receiving a beating, or even being made to commit an act of violence – robbery, assault, rape, or murder – against a rival gang or even a non-gang member (Descormiers & Corrado, 2016; Vigil, 2003).

Implications

Within prisons, gang members are significantly more likely to be responsible for prison misconduct than non-gang members (Cunningham & Sorensen, 2007; Ralph & Marquart, 1991; Saunders et al., 2009). Practical issues also arise within prisons with higher gang populations, as was the case in Auckland's maximum-security prison, Paremoremo, where inter gang-related conflict resulted in the prison needing to be run on a unit basis, physically separating gang members from rival gangs into different areas within the prison (Meek, 1992). The potential for inter-gang violence poses a great risk to staff and non-affiliated prisoners who may get caught in the crossfire, and separating gangs has been a management strategy to avoid this. However, splitting up gang members presents other issues. People with minimal ties to a gang will still be placed with that gang to avoid any risk for inter-gang violence, but this then places non-gang members in a place with significantly more pressure to join a gang (Starbek, 2014).

Being in a gang may provide for some of the needs of its members, but inevitably also exposes them to violence, physical harm, crime, risk of incarceration, poorer mental health, and may severely reduce quality of life (Gibson et al., 2012; Kerig et al. 2015; Krohn et al., 2011; Tamatea, 2015; Watkins & Taylor, 2016). Furthermore, gang members are the most likely victims of gang violence (Beresford & Wood, 2016; Klein et al., 2006; Katz et al., 2011). Unsurprisingly, the increased exposure to violence also results in significantly higher rates of lifetime incidents of PTSD and PTSD type symptoms among gang members (Beresford & Wood, 2016; Kerig et al., 2015; Kulkarni et al., 2010; Li et al., 2002).

The relationship between gang membership and crime has been well documented and shows that identified gang members tend to commit more crimes more frequently than their non-gang member criminal counterparts (Decker et al., 2007; Fleisher & Decker, 2001; Tamatea, 2017; Tita & Ridgeway, 2007) and the crimes they commit are often more serious (Beresford & Wood, 2016; Gibson et al., 2012; Huizinga et al., 2003; Thornberry et al., 2003). Even after imprisonment, gang members are far more likely to return to criminal behaviour than their non-gang counterparts. Within two years of being released, gang members are more likely to be charged and returned to prison – typically through parole or probation – by 76% to 347% when compared to general prison population (Olson et al., 2004; Saunders et al., 2009).

Despite the widespread negative impact of gangs, it would be wrong to assume that they are solely antisocial groups. Amid the antisocial behaviour, there are prosocial behaviours described as actions that indirectly or directly benefit or help others without directly benefiting the person or persons performing the act. An example of this was seen in New Zealand where following a mosque shooting in Christchurch in 2019, Mongrel Mob members stood outside of mosques all around the country in the following weeks in order to provide security for people wishing to use the mosques for worship and prayer (Kerr, 2019). In this example, the Mongrel Mob utilised their intimidating presence to provide a sense of security. This was important for a group of people, who at the time,

had a strong reason to feel insecure and unsafe in their place of worship. Other examples include the Tribal Huk gang feeding schoolchildren in Ngarawahia and chasing methamphetamine dealers out of town (Cronin, 2014; Kerr, 2016). In the Waikato, the Mongrel Mob have gone so far as employing a public relations person to help with their public image and highlight some of the good they do in the community (Laing, 2019). However, while many of these actions seem good at face value, they are a double-edged sword. While these prosocial acts create a positive image for gangs, this, in turn, can make gangs a more attractive opportunity for potential recruits, possibly further increasing recruitment numbers. When so much work is being done within gangs to appeal to new recruits, paired with the overwhelmingly negative effect of gangs, it is important that we understand who is being recruited.

Gang Recruitment

To better understand who is being selected for recruitment into gangs, there is a need first to understand why people would want to join a gang, and how the process of gang recruitment tends to manifest across groups.

Recruitment

Recruitment is the process of searching out the most qualified or well-suited people for a role and encouraging them to join an organisation (Vanterpool, 2017). Matching a person to a role may at times be as simple as matching a CV to a list of requirements, however, often deeper consideration needs to be given to ensure a good fit between new recruits and the group they join. Personality, culture, and values all play a part in securing a specific role. When an individual who is recruited matches the beliefs and culture of a group and its people, the group as a whole can work together more effectively to bring about the organisation's goals (Ingham, 2015; Vanterpool, 2017). The idea behind this concept is prototype theory, which is that there is a set of characteristics that would make an individual best for a role. The closer an individual is to possessing all of those

characteristics, the more prototypical and ultimately more well suited they are to that role (Horowitz et al., 1981; Kamp, 1995).

To ensure recruited individuals are a good fit for both their role and the group they are recruited into, it is important to recruit across a variety of contexts. Different contexts are more likely to have people with different skills and traits. By recruiting from various areas and contexts, groups can expand their potential recruitment pools and encourage diversity. Furthermore, increasing the range of recruitment contexts, is also likely to increase recruits (Vanterpool, 2017).

A steady or increasing number of recruits is a critical component of any group that wants to last. Without new members, groups are doomed to end eventually. For some, this may not be a concern. For gangs, however, many members sense of identity is tied to the gang, and through the meeting of individuals social needs, the gang can become a surrogate (and at times legitimate) family. This means that letting the gang end includes losing social support, thus making maintaining the gang an understandably important task to its members (Fleisher & Decker 2001).

Theories on Joining A Gang

There are several theories as to why people want to join gangs. Social disorganisation theory suggests that young people form gangs to compensate for lack of other organisational structures. Economic destabilisation in poorer communities leads to social disorganisation, which in turn leads to the breakdown of traditional social institutions – such as school, church, and family. Due to the lack of social organisation, society loses the behavioural control of its populace. Without the control of these social organisations, young people would come together and bond through the excitement of conflict and criminal activity, leading to the formation of gangs which provides an alternative form of antisocial social organisation (Thrasher 1927). Thrasher (1927) maintained that one of the major causes of social disorganisation came from immigration. Through the clashing cultures of immigrant communities and the nation's culture, parents may struggle to help their children adjust to the new customs, preventing a properly organised community.

Shaw and McKay (1943) further developed Thrashers' model of social disorganisation into their social transmission model. Cultural transmission suggests that poorer families have less functional control over their children, as they are required to spend more time working to sustain the family, which results in children being more susceptible to succumbing to delinquent behaviour. In this model, the more stable culture that should be found in the home is absent and replaced by the delinquent culture on the streets, thus enculturating youth into gangs. While middle class and above have the time to be at home and enforce a more stable environment, those of lower socioeconomic class are not as equipped with time or resources to provide the same level of control. This supposedly answers the question of why gangs tend to emerge from lower socioeconomic groups. This suggests that the economic environment can influence an individuals' involvement with a gang.

These two theories of social disorganisation by Thrasher (1927) and social transmission by Shaw and McKay (1943) address elements of sociological factors that may influence gangs' formation; however, they both fail to address psychological factors.

Differential associations include environmental factors as mentioned in Shaw and McKay's (1943) work while also addressing the psychological constructs of attitudes and beliefs about crime. Sutherland and Cressey (1978) suggest that while social disorganisation plays a role, the key factor is an individuals association with others who already have pro-criminal attitudes, as it provides the opportunity for those pro-criminal attitudes to be transferred from one person to another. This occurs through repeated exposure and leads to individuals adopting pro-criminal attitudes through their associates' example and tutelage. These pro-criminal attitudes, in turn, lead to a higher likelihood of gang membership.

Strain theory suggests that society sets universal goals that only some can achieve, those who cannot achieve those goals will at times rebel against those goals and social norms due to the strain of being unable to attain them. Groups of these frustrated people form together to create a

delinquent subculture where instant gratification is the key feature and is often achieved through illegal means. This allows the individuals to attain the universal goals set by society, despite not having the legitimate means to be able to (Hartung and Cohen, 1955; Merton, 1938; Wood & Alleyne, 2010).

The theory of differential opportunity expands on strain theory by suggesting that not only are some people limited in their legitimate ability to achieve the universal goals set by society, but they are also limited in their illegitimate ability to reach them. This explains why some people who are unable to attain universal goals do not turn to criminality to achieve them (Cloward & Ohlin, 2013; Wood & Alleyne, 2010).

Social bond or control theory (Gottfredson & Hirschi, 2005) takes a different approach to the theories mentioned above. Rather than asking why it is that individuals engage in criminal activity, this theory seeks to understand why others do not. While many of the previous theories have focused on the effects of negative relationships on delinquency development, social bond theory focuses on the absence of key positive relationships. Gottfredson and Hirschi (2005) propose that people are inherently disposed towards criminal behaviour due to its propensity for immediate gratification. It is only through social bonds formed in childhood that a person learns to act differently. Without this input, children are left to act on their natural impulses towards immediate gain, without consideration for consequences, inevitably leading to more criminal behaviour (Wood & Alleyne, 2010).

Wood & Alleyne (2010) were able to integrate these theories along with theories of social disorganisation, cultural transmission, differential association, and social bond to create an integrated model to describe the many pathways to gang membership (see Appendix A for a visual representation of this model). This framework examines why youth may or may not join gangs by presenting alternate paths towards and away from criminality and gang membership. This model depicts how individual characteristics, social factors, and environment can help shape cognitions.

Cognitions about the perception of gangs, perceived opportunities, strain, perceived hostility, fear of victimisation, and attitudes to authority lead to the selection of peers who have similar values. These peers can then promote opportunities for either criminal learning or social control. Criminal learning can lead to criminal activity and gang membership for the purposes of protection, social support, status, power, and excitement. However, this model is limited when used in a New Zealand context, as many of our gangs are multi-generational rather than exclusively youth. While this model suggests that relationships are a force for stopping and preventing criminal behaviour, it fails to acknowledge that relationships can similarly encourage criminal activity when those relationships are with people who have pro-criminal attitudes. Furthermore, this model does not consider a prisons' role or the interaction that national networks of gangs have when influencing individuals.

Common Factors Among Gang Recruits

There are a number of common factors for individuals who join gangs. In this case, we refer specifically to traditional gangs, according to Klein and Maxson (2006), which exist in the community. None of these factors acts in isolation, but rather, it is when many of these factors are present for an individual across multiple domains – personal life, working environment, childhood and familial history – that add together to make an individual more likely to join a gang. Klein and Maxson (2006) found support for six key factors; negative life events, antisocial tendencies, delinquent beliefs, lack of parental supervision, peer network beliefs, and peer delinquent behaviours (Esbensen et al., 2010; Hautala et al., 2016; Hill et al., 1999; Pyrooz & Densley, 2015; Thornberry et al., 2003). Common developmental precursors for gang membership include a dysfunctional upbringing, abusive home life, rejection from peers, delinquent behaviour, and early exposure to gangs. Individuals are more likely to join a gang if they have more access to gangs through friends or family being gang members themselves, as this exposes the non-member to and normalises antisocial attitudes/behaviours while allowing access to the gang from a younger age (Tamatea, 2015). Further research has shown that youth exposed to violence are at greater risk of joining a gang. Peer drug

use also poses a greater risk. It can be used as a proxy for peer delinquent behaviours, as drug use is strongly correlated with other delinquent behaviour forms. (Gordon et al., 2004; Watkins & Taylor, 2016).

Age. Age is highly correlated with crime, and therefore also for gang membership. One of the consistent findings in studies of crime around the world is the age-criminal curve, which acts as a description of the prevalence of crime across age within a society. This curve tends to increase in late adolescence and peak in the teenage years (15-19) and then declines in the early twenties onwards (Loeber & Farrington, 2014). This means that we would expect gang recruits to be far more common in younger age brackets than they would be in older ones. We would expect this because criminal behaviour is an antisocial tendency, one of the primary risk factors for gang membership as described by Klein and Maxson (2006). While this would not exclude older people, it is far more common in younger people.

Prison. However, when looking at prisons, the existing literature on risk factors for gang recruitment falls short as it fails to address how the process of recruitment may differ between the context of being in prison versus being in the community. The six key factors mentioned by Klein and Maxon (2006) make someone more likely to join a gang and make them more likely to be convicted and imprisoned. If then, these factors are less helpful in a prison setting for determining who is likely to be recruited, we must find other factors and assess them to discover a prison specific prototype for those most likely to be recruited.

Recruitment Pathways

Within the literature, two main patterns arise regarding the methods of recruitment among gangs. These two methods are coercion and signalling (Grayner, 2012; Pizzini-Gambetta & Hamill, 2011).

Coercion. The use of coercion can be direct or indirect. When used directly, there are threats or use of violence or other forms of manipulation against the individual or people that the individual cares about. This is done to force the person to do what the gang wants to avoid future harm to themselves or others. Indirect coercion utilises a reputation for direct coercion to ensure obedience without the need to act. In cases where indirect coercion is used, direct coercion can be subsequently employed if the individual is resistant to the initial pressure. Youth gangs in South America have been known to chase potential recruits across the country to force them to join, reinforcing their ability to use indirect coercion due to the lengths they will go to if need be (Fariña et al., 2010; Grayner, 2012). When gangs are able to recruit forcefully in this way, not joining is often the path of most resistance. Refusal is often perceived as disrespect towards the gang, and in order to uphold their reputation, gangs are often prompted into a punitive response. Those who have tried to refuse recruitment will often face harassment, violence and threats against them and their families. One reported case of a man who refused to be recruited resulted in him being ambushed, having his eyes gouged out and his tongue cut off, before finally being killed. With such harsh consequences, it is no wonder that many people opt to join a gang rather than try to refuse their advances (Fogelbach, 2011; Welsh 2017).

Signalling. Gangs can offer a number of benefits that may be attractive for prospective members. These could be but are not limited to; material gains that can be acquired through organised crime, easier access to drugs, an outlet for criminal behaviours, protection, an antisocial peer group that will normalise antisocial behaviours, community, and acceptance (Wood & Alleyne, 2010). For these reasons, it may be very desirable for individuals to join a gang, even though they may not be a target for recruitment. In order to join, individuals will engage in a practice called signalling.

Signalling in relation to gang recruitment is acting in certain ways that show a gang that you are worthy of joining and will often involve committing various crimes and engaging in antisocial

behaviour. The core principle for signalling theory is that a signal will be considered reliable when for an honest signaller, the benefits outweigh the cost, and for a dishonest signaller, the costs outweigh the benefits. An example of this would be the act of attacking someone with a knife and stealing their money and other valuables. For someone trying to enter the gang, the benefits of the money outweigh the cost of the assault provided they have strong antisocial attitudes. For an undercover police officer trying to infiltrate the gang, the cost of assaulting someone would outweigh the benefit of the monetary gains (Zahavi, 1975). This method satisfies gangs' need to find trustworthy, loyal, and competent members who will use violence and illegal behaviours, all while under the threat of infiltration. The illegal acts often used in signalling also provide gangs with information that can be used against prospective members to help enforce the loyalty and trustworthiness that they are looking for in recruits (Pizzini-Gambetta & Hamill 2011).

Motivational Crowding. When choosing to join a gang, there may be elements of coercion, there may be elements of signalling, but there is almost certainly more than one element at play. This is called motivational crowding and is the theory that there are many factors that influence decisions. Positive factors, called pull factors, will attract a person one way for some sort of benefit. Negative factors, called push factors, will help force a person one way in order to avoid some consequence. The combination of both push and pull factors (a type of carrot and stick) are thought to be at work with most decisions, and when strong enough will be able to overpower contrary, internal motivations to make someone act in a way they would not have chosen to in isolation (Frey & Jegen, 2001).

Gang recruitment literature offers several examples of these push/pull factors in play. In El Salvador young prospective gang members will be used to run drugs and do other small tasks to prove their loyalty to the gang (signalling), which leads to rewards and status within the gang over time (a strong pull motivator); however, it is common knowledge among these recruits that refusal to do any of the tasks set for them will result in punishment (coercion, and an example of a push

motivator) (Fogelbach, 2011; Welsh 2017). As we will see further on, the New Zealand prison environment, paired with the presence and power that gangs may have in these institutions, offer up the opportunity for both pull and push factors to be exerted onto prospective gang recruits, whether they like it or not.

The Relationship Between Gangs and Prisons

In California, gangs such as the Mexican Mafia, Nuestra Familia, Aryan Brotherhood and Black Guerrilla Family had their origins in prisons and later spread into the community (Camp & Camp, 1985; Irwin, 1980). These are not the only examples of gangs finding their origins within the prison system, although, to date, there are no records of New Zealand gangs originating in prisons. The closest example would be the Mongrel Mob, whose name originates from a Judge in the Hastings District Court referring to the men before him as a pack of 'mongrels' which the group embraced and later became the name they are known by (Gilbert, 2013). Despite this, prisons remain a veritable breeding ground for gangs, providing a captive audience for recruitment to take place. The first official recognition of a gang problem in New Zealand came about in 1980 as a result of four serious gang-related incidents across different prisons within a few months of each other, which led to separating gangs into different units in the prisons. This lessened inter-gang violence, however newly incarcerated individuals with even a small tie to a gang were placed with other active gang members, increasing gang recruitment risk through delinquent peers (Meek, 1992).

Prison Environment

The environment of prison is significantly different to that outside of prison. With more violence, poorer health outcomes (both mental and physical) and an 'inmate code' as a form of internal governance, what we may expect to see from gang recruits outside of prison may vary widely from what we expect to see from gang recruits inside of prison (Department of Corrections, 1999; Skarbek, 2014; Wolff et al., 2007).

Violence. Considering that 38.6% of New Zealand's incarcerated population's most serious offence is violence, it is not surprising to find that violence is a pervasive feature in prisons (Prison facts and statistics - June 2019, 2019). This is further explained when considering that prisons are crowded gatherings of hundreds of people with antisocial tendencies who are socially and materially deprived (Bowker, 1980; Toch, 1985; Wolfgang & Ferracuti, 2010). Wolff, Blitz, Shi, Siegel and Bachman (2007) found that the rates of physical assault for male incarcerated individuals were 18 times higher than the general population. The same rates were found with female incarcerated individuals; however, men were more likely to be threatened with weapons. Over six months, 20% of incarcerated individuals reported being the victim of some form of physical abuse. Smaller facilities tended to have higher rates of inmate on inmate violence and lower rates of staff on inmate violence. In contrast, larger facilities were the opposite, with lower rates of inmate on inmate violence, but higher rates of staff on inmate violence. Knowing that gang members are responsible for more violence than non-gang members, it could be expected that violent people may be more desirable recruits for gangs. Given the violence within prisons, they become ripe hunting grounds for potential new recruits as well as a place for gang violence to be exhibited (Pizzini-Gambetta & Hamill 2011).

Rates of Recidivism, are our Prisons Working? A report done in March 2009 in New Zealand which looked at the previous 60 months, found that 70% of incarcerated individuals had re-offended within two years, and 52% had returned to prison within five years of being released. Rates of recidivism increased with younger groups, with those under 20 having the highest recidivism rate of 72% over five years after release (Nadesu, 2009).

Gang members are more likely to be life course persistent offenders and are therefore more likely to be found in the group who recidivate (Bonta & Andrews, 2017; Esbensen et al., 2001; O'Brien et al., 2013; Olson et al., 2004; Saunders et al., 2009). This is unsurprising when considering the various barriers to desistance from crime when belonging to a gang. Fleisher and Decker (2001)

described some of these barriers as (a) the structure of gangs facilitates opportunities for crime by gathering antisocial peers; (b) gangs tend to persist beyond individual membership; (c) gangs make up social networks that provide a sense of belonging, cutting ties with a gang means losing this support as well; (d) gang members tend to be socioeconomically disadvantaged, consistent with their typically coming from the fringes of mainstream communities; and, (e) self-identity and gang-identity are often connected.

We know that gang members are more likely to recidivate than non-gang members (Olson et al., 2004; Saunders et al., 2009). When looking for potential new recruits, people who are more likely to have life course persistent criminal behaviour patterns would be more attractive to gangs as they can provide more to the gang through sheer longevity. For this reason, it can be assumed that repeat offenders, individuals who have already shown a tendency to recidivate, would be a more attractive choice in a potential recruit.

Prison Culture and the Inmate Code. Prisons have a culture of their own, commonly known as the inmate code (Skarbek, 2014). Although the inmate code is typically grounded in the culture of the area, some version of it exists in most prisons (Akers, Hayner, & Gruninger, 1977). Skarbek (2014) argues that the inmate code develops naturally in response to the deprivation and obstacles put in place within prisons, and is typically reinforced by gangs. The purpose of this is to regulate the trade of contraband, to limit violence, and to instil a degree of predictability and at times peace into an environment where that may be lacking (Symkovych, 2017). The strength of these gangs varies from prison to prison. When only a few prisoners take part, those who do often enjoy more security and access to contraband goods, in other prisons where everyone is forced to take part, individuals often strive to reach places of higher importance in order to get access to better goods and privileges. Both cases provide motivation for new prisoners to join gangs in some capacity either out of external pressure or internal desire for what they can offer (Symkovych, 2017; Trammell, 2012).

Do Prisons Cause Gangs or Attract Them? There are three theoretical models for the connection between gang membership and incarceration, the origination model, the manifestation model, and the intensification model. The origination model, holds that incarceration is the driving force behind gang membership. The prison setting offers motivational crowding, essentially the carrot and stick of motivation, in which people are pushed towards gangs to avoid potential negative repercussions and pushed towards gangs to gain potential benefits (Decker et al., 2015b). These pushes and pulls, if strong enough, inevitably led to gang recruitment for incarcerated individuals. The violent and oppressive environment of prisons results in frustrations, while gang membership offers a way of being able to adapt to the environment and regain a sense of autonomy (Pyrooz et al., 2017).

The manifestation model takes the opposite approach to the origination model by proposing that gang membership exists irrespective of prisons. Though they make up a minority of the population, gang members are more likely to be incarcerated due to the higher rates of crime and seriousness of offence type (Tapia, 2011). This model explains that gang culture found in prisons is due to a natural drift of culture from outside of prisons moving in as it is a frequent residence for gang members. This could be expected to happen in any place with a high number of gang members, and prison is only special in that it has so many gang members so regularly (Pyrooz et al., 2017; Trammell, 2012).

Both the origination and manifestation models have inherent issues. If the origination model were accurate, we would expect to see much higher rates of gang membership in prisons, particularly among individuals with longer sentences. Additionally, we would expect to see no difference in rates of gang membership among any subgroups outside of prison. If the manifestation model were true, we would expect to see no increase in gang numbers from inside the prison, which could only be achieved if all of the factors that can lead to gang recruitment outside of prison are absent. This is simply not possible, even if prisons had total control of the environment within their

walls, they have no control of static factors of individuals pasts that make them more likely to join a gang (Pyrooz et al., 2017, Trammell, 2012).

The intensification model blends the origination and the manifestation models. Gang membership is much more likely to originate outside of prison (Pyrooz, 2013; Tapia, 2011). Gang membership outside of prison consequently results in higher crime rates, more serious crime, and higher incarceration rates. Incarceration then complicates issues as people are separated by gang or gang association in order to avoid conflict (Meek, 1992). Individuals then with only slight gang connection are placed into gang friendly environments where several push and pull motivators created by the gangs and the prison environment will get them to join a gang (Pyrooz et al., 2017). Grouping prisoners by gang affiliation also helps maintain existing gang numbers by creating a barrier of social pressure against existing members attempting to leave their gang.

It is clearly evident that there is a relationship between gangs and prisons. With prisons so regularly housing gang members, they become a breeding ground for further activity. While on the face of it this may seem like a negative, having state-run facilities being hives for gang activity, but in reality, it presents a unique opportunity for research such as this. Furthermore, research like this can then inform practices that can subsequently be measured to lessen gang activity within a controlled environment.

Prototypes

What is the 'prototypical' prison gang recruit? A prototype within psychology is the best example or cognitive representation of something within a certain category. More specifically, prototypes clearly defined categories that can be measured to help define ingroups and outgroups that are difficult to measure alone (Horowitz et al., 1981; Kamp, 1995). For example, a prototypical bird may have two wings, claws, feathers, and the ability to fly. This prototype does not include every bird – many native New Zealand birds such as the kiwi, kakapo, moa, and weka, for example, are flightless – but most examples of birds would closely fit this prototype. Lacking one or many of

the components of a prototype does not exclude something; rather, the more features of a prototype something has, the more prototypical it is (Rosch, 1975). The purpose of a prototype is to create a cognitive shortcut to help categorise new information quickly. Anything can, therefore, be more or less prototypical for any given group. In the case of gang recruits in prison, we must first turn to the literature to discover what would be expected to be more or less prototypical in a recruit in order to define our prototype of a prison gang recruit. Once a prototype is established, it can then be used as a shorthand to identify those most likely to become gang recruits quickly.

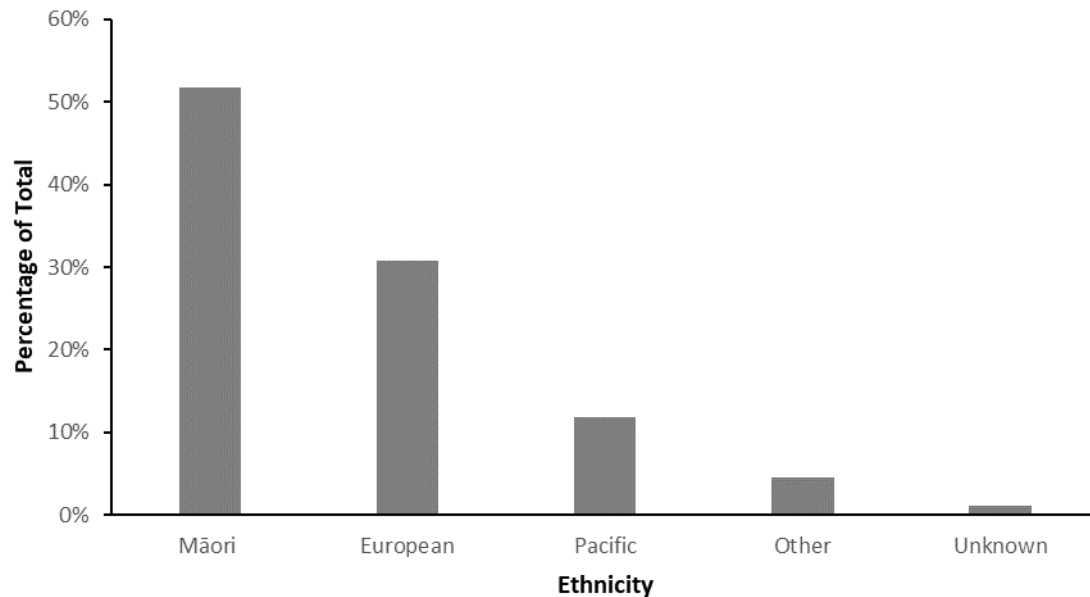
When looking at the social setting of a prison, the prototype or ingroup of potential gang recruits would be made up of several attributes that make someone more attractive as a recruit. When broken down by many categories, the largest groups would be most representative of the prototypical gang recruit, while smaller groups become less and less prototypical despite also being selected for gang recruitment (Hogg, 2001; Hogg, 2008). When looking at the literature, we find several factors that we would expect to be prototypical of those being recruited in New Zealand prisons, namely; ethnic minorities, offenders in the high-security units, violent offenders, repeat offenders, offenders with a high RoC*RoI score, and young offenders (<25).

Ethnicity

Despite making up only 16.5 percent of the national population in New Zealand, Māori make up 51.7 percent of the prison population, making them the largest ethnic group in New Zealand prisons. Similarly, Pasifika peoples make up 8.1 percent of the national population, and yet 11.8 percent of the prison population as of 2019 (see Figure 1 for demographic information). The overrepresentation of ethnic minorities in our prisons is a symptom of wider, complex systemic issues (Tamatea, 2015). Nonetheless, due to their larger numbers in prison, we would expect to see more recruits for gangs coming from ethnic minorities from a statistical perspective. Furthermore, gangs tend to recruit from marginalised groups, as they are more likely to respond to the alternative means of achieving universal social goals because through being marginalised, traditional means

Figure 1

Percentage of Total Prison Population by Ethnicity.



Note. This graph was adapted from Prison facts and statistics - June 2019 (2019) Department of Corrections.

have already been denied them (Hartung & Cohen, 1955; Merton, 1938; Wood & Alleyne, 2010). Therefore, we would expect to see that Māori or other ethnic minorities are more prototypical as gang recruits in prison.

As an organisational category, ethnicity is problematic in its reductive nature. The factors that contribute to ethnic minorities being more likely to be selected into a gang, such as marginalisation and poverty, are easily masked under the heading of ethnicity. This, in turn, runs the risk of perpetuating negative stereotypes about ethnic minorities. These issues are complex and multifaceted. It would be wrong to deny the negative effects of colonialism on indigenous populations all over the world. In New Zealand specifically, the Māori population declined from an estimated 100000 in 1769 down to 42000 in 1896, less than half of what it had been previously. This significant drop was due to many factors, one of the foremost being the introduction of European

diseases which led to multiple epidemics. With colonisation came an increased demand for land, which was at times sold under misconceptions with Te Tiriti o Waitangi (insufficient translations meaning different things for each side, while the pakeha side was then held as correct and the Māori side disregarded), and at times simply confiscated. This loss of land led to large numbers of displaced Māori who, removed from their land, were often reduced to poverty, a position few have had the opportunity to return from (Pool, 2018; Reid et al., 2017).

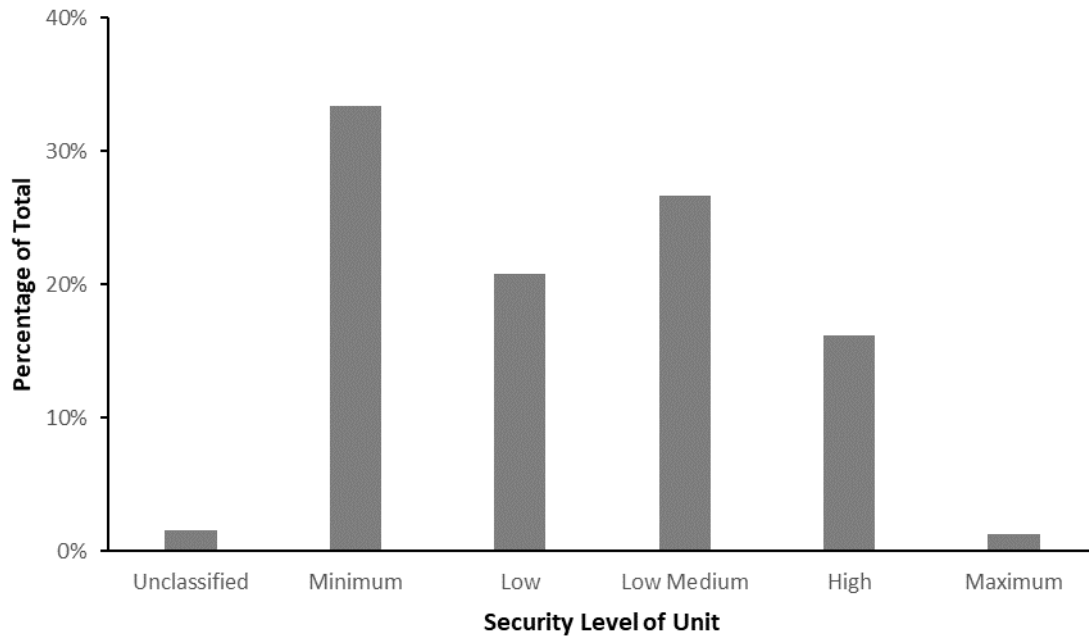
Security Classification Level

Prisons in New Zealand differentiate their incarcerated individuals via levels of security based on the potential risk that each inmate has. These levels are; minimum, low, medium-low, high, and maximum. As security levels get higher, so too do the restrictions on incarcerated individuals in order to ensure an orderly and secure prison environment (Carlson, 2015). Most incarcerated individuals (33.4%) are found in minimum security units (see Figure 2 for security level information).

High-security units are often the most uncontrollable units in prisons. They lack the same level of structure that is enforced in maximum but contain some of the most violent offenders, including some who may be new to prison and looking to prove themselves, this creates a natural breeding ground for violence and unrest. Most prisons have a degree of internal governance, typically through a gang, which enforce some degree of order and normalcy within the prison (Crewe, 2012; Symkovych, 2017; Trammell, 2012). Because high-security units are most disruptive by nature, these then become the most likely place for an individual to want to seek to join a gang in order to have more access to goods and to avoid violence, all while receiving a more structured and enjoyable environment for the length of their incarceration (Starbek, 2014). This is a prime example of the coercive nature of violence, and the effect of motivational crowding where violence is paired with positive alternatives (rather than just a neutral lack of violence)(Fogelbach, 2011; Welsh 2017).

Figure 2

Percentage of Total Prison Population by Security Level of Unit.



Note. This graph was adapted from Prison facts and statistics - June 2019 (2019) Department of Corrections.

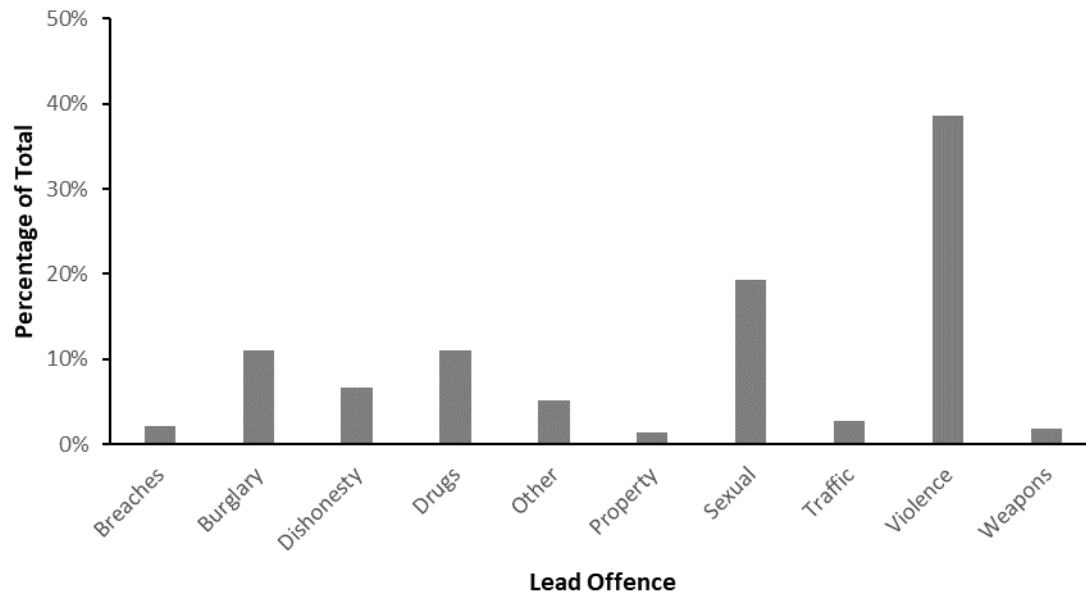
Violent Offenders

We know that 38.6% of incarcerated individuals in New Zealand have been convicted for violent crimes (see Figure 3 for lead offence information). Many of these incarcerated individuals have many offences that have led them to incarceration, so this figure should not represent the average spread of committed crimes. For example, many whose most serious offence is violence will have likely been convicted across multiple categories.

We know that gang members commit more crimes and the crimes that they commit are more violent than those of their non-gang affiliated counterparts (Decker et al., 2007; Fleisher & Decker, 2001; Nadesu, 2009; Tamatea, 2017; Tita & Ridgeway, 2007). It makes sense then that violence would be a desirable attribute for a gang to look for in choosing new members. Signalling

Figure 3

Percentage of Total Prison Population by Lead Offence.



Note. This graph was adapted from Prison facts and statistics - June 2019 (2019) Department of Corrections.

theory would suggest that acts of violence by an individual would signal to a gang that individual's worth to the gang. Furthermore, those that the gang would not like to join (for example cops) are less likely to be criminally violent, so selecting criminally violent criminals helps exclude the unwanted group (Pizzini-Gambetta & Hamill 2011; Zahavi, 1975). Within the prison context, those who commit violent crimes are typically viewed with respect – as opposed to sex offenders for example who are viewed with disdain – and so violent offenders are again more likely to be selected for gang membership. By gathering more respected people, a gang can increase its power and influence within the prison (Crewe, 2012; Symkovich, 2017).

Repeat Offenders

When considering the signalling theory approach of the recruitment process for gangs, one of the key reasons for signalling is proof that potential recruits are trustworthy, that is, that they are

not tied to law enforcement. For this reason, most recruits will go through an extended probation period. In the case of repeat offenders; however, by the action of being incarcerated multiple times, individuals have already demonstrated their opposition to law enforcement. Furthermore, repeat offenders are more likely to be life-course-persistent offenders rather than adolescent limited offenders, meaning that their criminal attitudes are deeply imbedded and less likely to change. These make repeat offenders more desirable gang recruits, having already effectively signalled their suitability. Therefore we would expect that repeat offenders are more prototypical as gang recruits in prison (Olson et al., 2004; Saunders et al., 2009).

RoC*RoI

We have already established that violence and patterns of recidivism are potential factors that make an incarcerated individual more prototypical of a prison gang recruit. In New Zealand, incarcerated individuals are given a Risk of reConviction, Risk of Incarceration (RoC*RoI) score, in order for correctional staff to easily understand an individuals risk.

The RoC*RoI is a measure that considers the relationship between social and demographic variables, criminal history variables, and future offending. The RoC*RoI number is a proportional measure of the likelihood that an individual will be reconvicted in the future, and that that conviction will lead to a term of imprisonment. RoC*RoI scores range from 0.01-1.00 and are broken down into three categories: low (<0.49), medium (0.50-0.69), and high (0.70<). Some of the variables included in the RoC*RoI are age, age of the first offence, and seriousness of previous offences. This means that younger individuals and those convicted of violent crimes are both more likely to have a higher RoC*RoI score. Literature suggests that both younger individuals and violent offenders are more likely to be recruited into a gang. Therefore, we could similarly expect to see individuals with high RoC*RoI scores being recruited (Bakker et al., 1999; Loeber & Farrington, 2014; Symkovich, 2017).

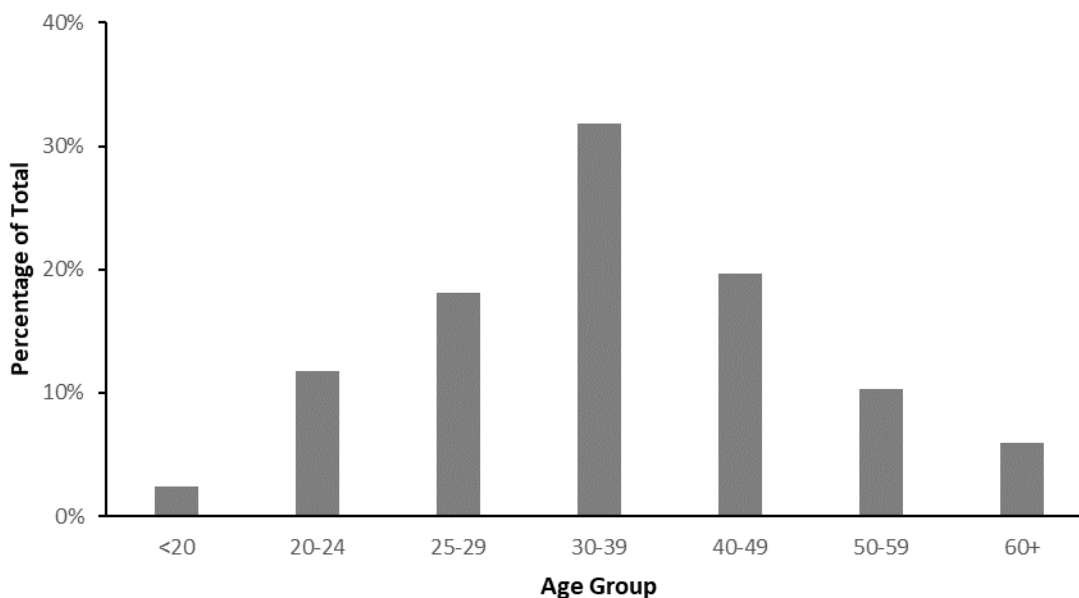
Young Offenders

The largest age group in prisons is made up of those aged 29 and under – under 20 (2.4%), 20-24 (11.8%), and 25-29 (18.1%) – with a total of 32.3% of incarcerated individuals (see Figure 4 for demographic information). However, to accommodate for the age-criminal curve, the age group of 20-29 has been broken into two 5-year groups rather than a single ten-year group as with subsequent age groups (Loeber & Farrington, 2014). Under 20 – much like over 60 – has been left as its own group as there are so few people convicted at this age to warrant further categorisation. When looking at the official age groups once 20-29 has been split in two, the age group of 30-39 ends up being the largest, making up 31.8% of incarcerated individuals (Prison facts and statistics - June 2019, 2019).

Young people have a higher social need, a desire to be a part of something or have status and

Figure 4

Percentage of Total Prison Population by Age Group.



Note. This graph was adapted from Prison facts and statistics - June 2019 (2019) Department of Corrections.

recognition as a part of forming their identity, and opportunities for companionship with like-minded persons (Chu et al., 2011). This makes them prime candidates for gang recruitment as joining a gang would offer them the opportunity to be a part of a larger group that can offer them that status and recognition that they desire. Older people often have found a place where they fit in and have a more stable self-identity, and so are less likely to join a gang in order to seek that out (Chu et al., 2011; White & Mason, 2006; Wood & Alleyne, 2010). Furthermore, young people are more likely to commit crime than older people, and while the age-crime curve peaks at the ages of 14-19, there are far more people in prison in the age brackets of 20-24, 25-29, 30-39 than in the under 20 age group (Loeber & Farrington, 2014). Therefore, it is more likely that younger prisoners will be recruited given that there are more of them in prisons, and they will be seeking out like-minded peers which can be found in gangs.

Research Question and Hypotheses

Gangs have been shown to bring with them increased levels of crime, more severe crime, and are more likely than their non-gang counterparts to follow a life course persistent pattern of offending. To sustain their numbers, gangs are continually engaged in the process of recruitment. Successful recruitment can lead to gang expansion, which in turn can lead to further crime and risk for inter-gang violence as gangs seek to expand their territory.

This study aims to examine gang recruitment in New Zealand prisons and uncover what makes up a prototypical gang recruit in this situation (if one such exists). To this end, our research question is: who are the prototypical gang recruits in New Zealand prisons? Based on the existing literature, I hypothesise that:

- (1) identified gang recruits in New Zealand prisons will most likely reflect people from non-dominant ethnicities when compared to the general prison population – as categorised by primary ethnic affiliation;

- (2) identified gang recruits in New Zealand prisons will most likely be held in higher security facilities when compared to the general prison population – as measured by security classification;
- (3) identified gang recruits in New Zealand prisons will most likely have histories of violence when compared to the general prison population – as measured by lead offence;
- (4) identified gang recruits in New Zealand prisons will most likely have been previously incarcerated – as measured by whether they are a repeat offender;
- (5) identified gang recruits in New Zealand prisons will most likely have a high risk of recidivism – as measured by actuarial risk score (RoC*RoI);
- (6) identified gang recruits in New Zealand prisons will most likely be younger when compared to the general prison population – as measured by age group, and;
- (7) The most prototypical gang recruit in New Zealand Prisons will most likely be from non-dominant ethnicities, be held in higher security facilities, have a history of violence, have been incarcerated prior to their current incarceration, have a high risk of recidivism, and be young.

Method

Rationale

Prison research is typically quantitative as much of the data is gathered by correctional staff during day-to-day administration. This data is typically easily measured and quantified such as an inmate's RoC*RoI score, or the security classification of the unit in which they are held. Other data, such as inmate's thoughts or feelings on why they have joined a gang or being recruited into one, are much more difficult to measure (Watson, 2015). Due to how inmates are tracked and recorded throughout their incarceration, prison research often has large samples sizes that allow it to avoid misleading results caused by outliers (Liu, Wu & Zumbo, 2009). The data for this research was gathered in much the same way and so a quantitative approach has been applied.

The Initial Data

The data for this research was acquired from Te Ara Poutama, the New Zealand Department of Corrections. As the official custodians of the data, the Research Evaluation Steering Committee (RESC) gave their permission to use it to conduct this research into the prototypical gang recruits in New Zealand prisons. The data set was comprised of information on incarcerated individuals in New Zealand prisons over a period of 4 years (2016-2019). The data set only contained information from people whom correctional staff believed to have joined a gang while in prison during the period the data was collected. The data was collected as part of routine data collection by the Department of Corrections staff. The total number of people included in the data set was 3,480 individuals. The contents of the initial dataset can be found in Table 3.

Table 3*Variables Contained in the Dataset Received from the Department of Corrections*

Variables	Description
Full Name	The full name of the incarcerated individual
PRN	The Person Record Number
Directive-Type	Whether the incarcerated individual is convicted, on remand (sentenced), on remand (accused), or on an outstanding recall.
Site Name	The name of the prison the incarcerated individual is housed in.
Unit Name	The name of the unit the incarcerated individual is housed in.
Region Name	The name of the region the incarcerated individual is housed in.
Gang Name	The name of the gang the incarcerated individual is believed to be affiliated with.
Gang Faction Name	The name of the gang faction the incarcerated individual is believed to be affiliated with.
Gang Chapter Name	The name of the gang chapter the incarcerated individual is believed to be affiliated with.
Gang Role	The name of the gang role the incarcerated individual is believed to be affiliated with. See Table 2 for list.
Gang Status	Whether the incarcerated individual is believed to be an active gang member, in good standing with a gang, is suspected of being involved with a gang, or is currently under review for their potential association
Connection Start Date	The date that correctional staff believe the incarcerated individual was recruited into a gang.
Confirm Status	Whether the incarcerated individual's gang connection has been confirmed.
Connection Confirmation Date	The date that the incarcerated individual's gang connection was confirmed.
Relationship Explanation	The justification given for confirming the status of the incarcerated individual's connection to a gang.
RoC*RoI	The classification of the incarcerated individuals Risk of reConviction, Risk of Incarceration. Could be High, Medium, or Low.
Ethnicity	The primary ethnicity of the incarcerated individual.
Lead Offence	The classification of the lead offence of the incarcerated individual for their most recent sentence.
Date of Birth	The date of birth of the incarcerated individual

Sentence Commencement Date (SCD)	The date that the incarcerated individual began their sentence.
Remand Start Date	The date that the incarcerated individual began their remand.
Security of Unit	The security level of the unit that the incarcerated individual was housed in.
First Sentence Commencement Date	The date the incarcerated individual's first sentence began.

Data Cleaning

Several extra columns were added to the data set to help make it clearer and superfluous columns were removed.

Gang Affiliation

Firstly, a column was added for whether an inmate had changed his gang affiliation. This was made by reading through the relationship explained column, and any that mentioned changing gang affiliation were flagged. This was not something that we expected to find in the data set due to the nature of gang rivalries making it uncommon to see a gang member change their affiliation (Kelsey, & Young, 1982; Meek, 1992). It was important to know this as if it were a large group, then we could have looked into potential differences between someone joining a gang for the first time vs changing their affiliation from one gang to another. As it was, only 9 of the 2,275 prisoners left in our dataset post-cleaning had changed their gang, and this number was too small to determine any quantifiable differences.

Secondly, two columns – a primary and secondary column – were added to code the relationship explained column. The relationship explained column was often vague, and so each item was judged to see if it best fit with a justification. It was necessary to code these as it highlighted several cases where there was insufficient reason given to believe an inmate had, in fact, joined a gang. In the case of there being more than one justification, the second column was used. The coded options included; 'claims to have joined a gang', for when it was reported that an inmate had told a correctional staff member that they had joined a gang; 'association with gang members', for when

an inmate had been seen to be frequently associating with groups of known gang members; 'gang markings', for when an inmate was in possession of gang memorabilia – patches, gang colours, etc. – or they had fresh gang tattoos; 'pulls gang signs', for when an inmate was regularly seen to pull gang signs; 'involvement in gang activity', for when an inmate was seen to be overtly involved in gang activity such as gang fights, threats against rival gangs etc.; 'other incarcerated individuals confirm gang status', for when other incarcerated individuals confirmed to correctional staff that an inmate had joined a gang; and 'gang specific language', for when an inmate would use gang specific language either in letters or while tagging items in their cell.

Recidivism

A column was added to show if an inmate was a repeat offender or not. This was done by comparing each incarcerated individuals sentence commencement date or remand start date to the date of their first sentence commencement date. If their first sentence commencement date was before their most recent one rather than being the same as their most recent, then that meant that they had been sentenced before, thus making them a repeat offender. This was important as it was one of the key factors we were interested in examining based on the literature (Nadesu, 2009; Olson et al., 2004; Saunders et al., 2009).

Age

Another column was added to show each incarcerated individuals age at the start date of their most recent conviction. This was created using each incarcerated individuals date of birth and their sentence commencement date. This column was then used to create another which categorised individuals into the age groups of <20, 20-24, 25-29, 30-39, 40-49, 50-59, 60+. These age groups were chosen as they are the ones already used within corrections to differentiate incarcerated individuals. As our research is designed to inform corrections, it was pertinent to use their systems of measurement where possible. Furthermore, by reducing the age of incarcerated

individuals into larger groups and excluding sentence commencement and birth dates, incarcerated individuals were afforded an extra degree of anonymity.

Sentenced vs Remand

To clean the data, incarcerated individuals who were on remand with no prison sentence were removed from the data set, as we were focusing on sentenced prisoners who are recruited rather than looking at a remand population who are typically housed separately to the rest of the prison population. Incarcerated individuals whose relationship explanation was missing were deleted as they could not be confirmed to have been recruited into a gang. Similarly, those whose relationship explanation was too ambiguous were also deleted. Following our exclusion criteria, we removed 1,205 incarcerated individuals' data, leaving us with a total of 2,275 incarcerated individuals' data in our set. A description of the demographics used can be found in Table 4.

Table 4

Variables Used and their description.

Variables	Description
Ethnicity	The primary ethnicity of the incarcerated individual. Options were European, Māori, Pacifica, or other.
Security of Unit	The security level of the unit that the incarcerated individual was housed in. Options were Minimum, Low Medium, High, or Maximum
Lead Offence	The classification of the lead offence of the incarcerated individual for their most recent sentence. Options were Breaches, Burglary, Dishonesty, Drugs, Other, Property, Sexual, Traffic, Violence, or Weapons.
Repeat Offender	Weather the current incarceration is their second or more. Options were Yes, or No.
RoC*RoI	The classification of the incarcerated individuals Risk of reConviction, Risk of Incarceration. Options were High, Medium, or Low.
Age Group	The age group of an individual. Options were <20, 20-24, 25-29, 30-39, 40-49, 50-59, or 60+

Ethics

Ethical approval was given by the University of Waikato¹. Te Ara Poutama act as custodians of the data, and so they, rather than each prisoner whose data was included, were required to give consent. Therefore, RESC also gave ethical approval to the research before consenting and releasing the data.

Specific ethical issues that we considered when proposing this research included; the confidentiality of the individuals whose personal data was included, and our responsibility under Te Tiriti o Waitangi to ensure fair representation of Māori.

Confidentiality is a priority for the current study and was maintained between the primary investigator and supervisor using password protected files and computers. Furthermore, the steps mentioned above to anonymise any data that would be used directly in the study were taken to prevent any identifying information being mentioned in this study. Keeping this data anonymous and maintaining the confidentiality of those whose data was contained within the set is important due to the information's sensitive nature.

Because the research is looking at prototypes of individuals selected for gang recruitment, the social groups most involved are likely to be from minority populations, as they are statistically the most likely to be recruited into a gang within a prison setting (Wood & Alleyne, 2010). Furthermore, there is an over-representation of Māori people in our prisons (see Figure 1 for demographic information). As this research focuses on patterns within prisons, there is a higher chance that we will see more Māori involved in gangs than expected in the general population. A potential, yet unfair assumption that some people could draw from this research is that Māori are simply more likely to join a gang because it is who they are. Due to the generally negative perception of gangs, this could reinforce negative stereotypes about indigenous populations. Therefore, as we

¹ Application No. FS2019-23

do not want to support or perpetuate racist beliefs, it is important that we address why we may see an over-representation of Māori or other indigenous populations within our data.

The over-representation of Māori in New Zealand prisons is a multi-faceted dilemma which has been heavily influenced by the long term effects of colonisation, which removed the Māori people from both their land and their language in many areas through New Zealand. This loss of land and language also took with it many peoples' identity and ability to sustain themselves properly, resulting in a dramatic decline in population and leaving many indigenous people in poverty (Pool, 2018; Reid et al., 2017). Colonisation has subsequently had long-term negative effects for the Māori people, which have often seen them pushed to society's margins and influenced the disparity in numbers we see in the criminal justice system. While individual actions that lead to criminal convictions should not be excused, it must be understood that many indigenous populations have been insufficiently supported throughout their history to avoid such behaviours (Deckert et al., 2017; Staines & Scott, 2019). Therefore, this research proceeds with cultural sensitivity, acknowledging the multifaceted issues within our country that have a hand in the over-representation of Māori within this study.

Primary Analysis

Each of the six selected factors (ethnicity, the security of the unit, lead offence, repeat offender, RoC*RoI, and age group) were individually measured by proportion so we could see the count of each factor subcategory across the 2,275 incarcerated individuals data.

Ethnicity contained the subcategories of Māori, Pasifika, European, and other.

Security of unit contained the subcategories of minimum, low medium, high, and maximum.

Lead offence contained the subcategories of weapons, violence, traffic, sexual, property, drugs, dishonesty, burglary, breaches, other, and inadequate data provided.

Repeat offender contained the subcategories of yes and no.

RoC*RoI contained the subcategories of low, medium, high, and not recorded.

Age group contained the subcategories of <20, 20-24, 25-29, 30-39, 40-49, 50-59, and 60+.

Secondary Analysis

Multiple difference of proportion analyses were run using Exploratory Software for Confidence Intervals (ESCI) to determine which combination of factors was most common.

ESCI is a programme designed by Geoff Cummings to analysis effect sizes and confidence intervals for statistical data (Cumming, 2013; Cumming, 2017). By using ESCI, we were able to compare the proportions of a group to each other and determine if one subset was significantly more common than another as it would therefore be more prototypical of a gang recruit in New Zealand prisons.

Using our primary analysis results, the most significant subcategories were combined and compared with a difference of proportions analysis. Significantly larger groups are then representative of more prototypical gang recruits in prison.

Results

Our research question was what is the prototypical gang recruit in New Zealand prisons? To answer this question, we measured the proportional spread of our six hypothesised correlates, measured their frequency among incarcerated individuals who were believed to have been recruited into a gang while in prison. This reveals the most prototypical characteristics for a gang recruit in New Zealand prisons. Following our exclusion criteria, we removed 1205 incarcerated individuals' data, leaving us with a total of 2,275 incarcerated individuals' data in our set.

Primary Analysis

In our primary analysis, we measured the proportional spread of each of our hypothesised correlates. This was to determine which subcategories of these factors were the most prototypical of a gang recruit in prison.

Ethnicity.

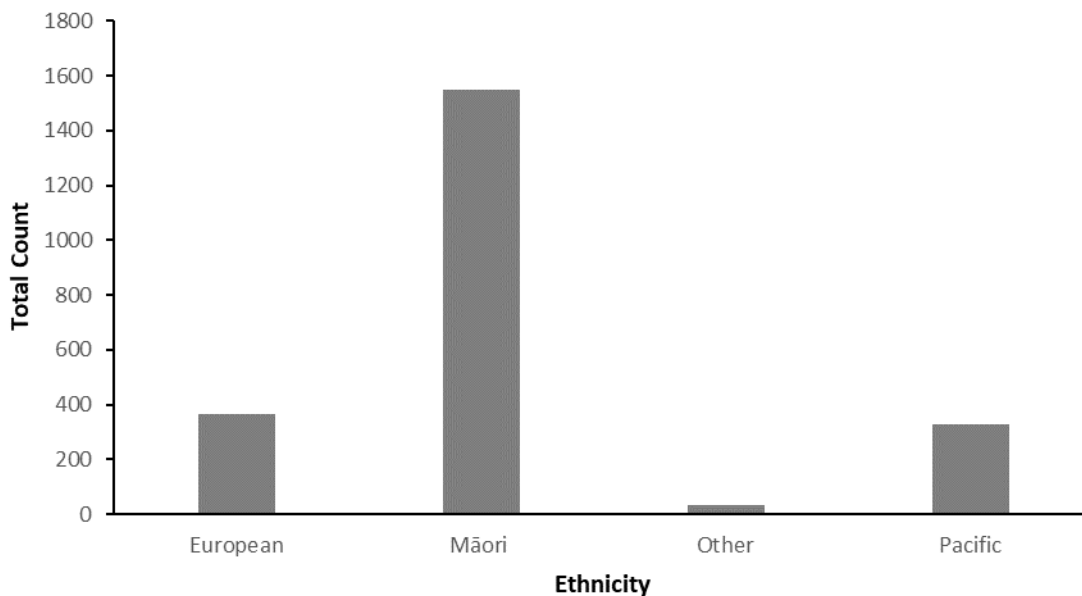
We expected Māori to be the most common subcategory due to their over-representation in prison populations and being a marginalised group.

Figure 1 shows the distribution of gang recruits in prison by ethnic group. Those of European ethnicity made up 367 recruits, a Proportion (P) of 0.161 of those recruited. Those of Māori ethnicity made up 1551 recruits, a P of 0.682 of those recruited. Those of other ethnicities made up 31 recruits, a P of 0.014, of those recruited. Those of Pasifika ethnicity made up 326 recruits, a P of 0.143 of those recruited. The majority of gang recruits in prison were Māori (68.2%).

Māori make up a larger proportion of gang recruits in prison than they do the general prison population (see Figure 5). This supports our hypothesis that identified gang recruits in New Zealand prisons will most likely reflect people from non-dominant ethnicities when compared to the general prison population.

Figure 5

Total Count of Prison Gang Recruits by Ethnicity.



Note. This graph is representative of the ethnicity each incarcerated individual primarily identifies with.

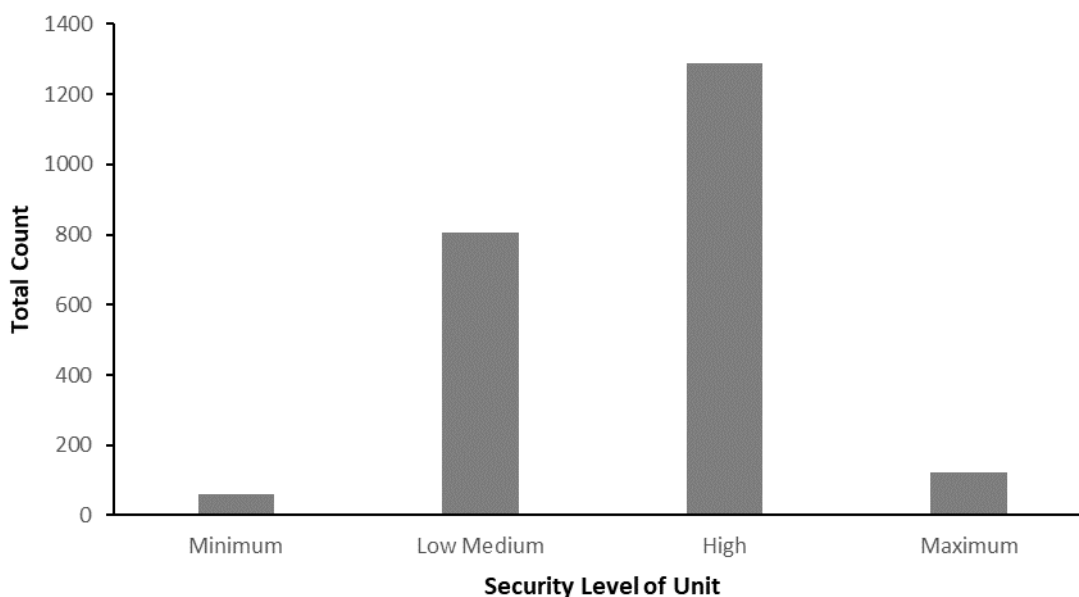
Security.

For the security of the unit, we expected high security to be most common due to its turbulent nature. Figure 6 shows the distribution of prison gang recruits across different unit security levels. Minimum security units had 60 recruits, a Proportion (P) of 0.026 of those recruited. Low medium security had 804 recruits, a P of 0.353 of those recruited. High security units had 1290 recruits, a P of 0.567 of those recruited. Maximum security units had 121 recruits, a P of 0.053 of those recruited. The majority of gang recruits in prison came from high security units (56.7%).

Inmates in high security units make up a larger proportion of gang recruits in prison than they do the general prison population (see Figure 2). This supports our hypothesis that identified gang recruits in New Zealand prisons will most likely be held in higher security facilities when compared to the general prison population.

Figure 6

Total Count of Prison Gang Recruits by The Security of The Unit.



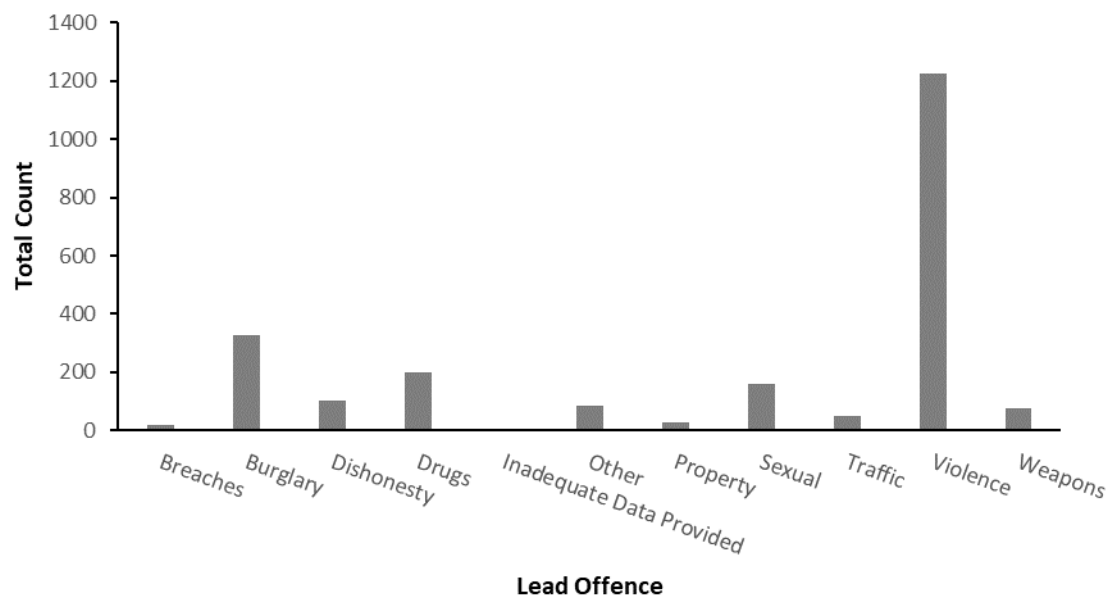
Note. Individuals may have moved into higher or lower security levels during their incarceration. This graph is representative of the security classification each individual was in when they were confirmed to have been recruited into a gang.

Lead Offence.

For lead offence, we expected violence to be the most common due to the nature of signalling within known patterns of recruitment. Figure 7 shows the distribution of gang recruits across lead offence. Those with weapons lead offences made up 76 recruits, a P of 0.033 of those recruited. Those with violence lead offences made up 1227 recruits, a P of 0.539 of those recruited. Those with traffic lead offences made up 51 recruits, a P of 0.022 of those recruited. Those with sexual lead offences made up 161 recruits, a P of 0.071 of those recruited. Those with property lead offences made up 26 recruits, a P of 0.011 of those recruited. Those with other lead offences made up 86 recruits, a P of 0.038 of those recruited. One recruit had inadequate data for their lead offence a P of <0.000 of those recruited. Those with drugs lead offences made up 200 recruits, a P of 0.088

Figure 7

Total Count of Prison Gang Recruits by Lead Offence.



Note. Incarcerated individuals may have been convicted across more than one offence category. This graph is only representative of the most serious offence of each and is not reflective of the full makeup of offending history.

of those recruited. Those with dishonesty lead offences made up 101 recruits, a P of 0.044 of those recruited. Those with burglary lead offences made up 326 recruits, a P of 0.143 of those recruited. Those with breaches lead offences made up 20 recruits, a P of 0.009 of those recruited. The majority of gang recruits in prison were those with violence lead offences (53.9%).

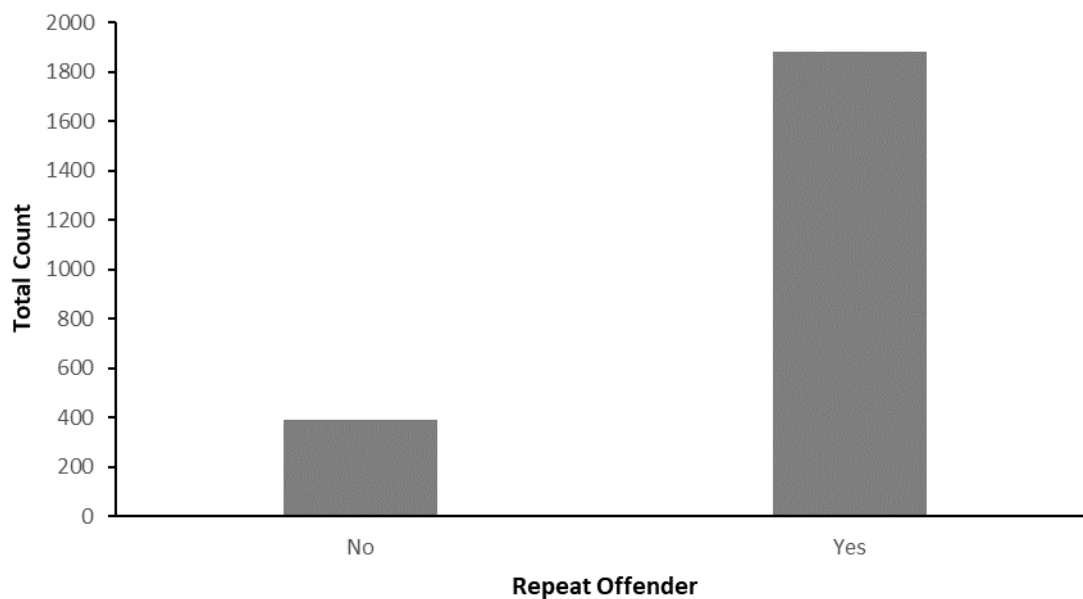
Inmates convicted of violent offences make up a larger proportion of gang recruits in prison than they do the general prison population (see Figure 3). This supports our hypothesis that identified gang recruits in New Zealand prisons will most likely have histories of violence when compared to the general prison population.

Repeat Offender.

We expected repeat offenders to be the most common subcategory. Figure 8 shows the distribution of gang recruits in prison by repeat offender or not. Those who were repeat offenders

Figure 8

Total Count of Prison Gang Recruits by Repeat Offender or Not.



made up 1885 recruits, a P of 0.829 of those recruited. Those who were first offenders made up 390 recruits, a P of 0.171 of those recruited. The majority of gang recruits in prison were repeat offenders (82.9%).

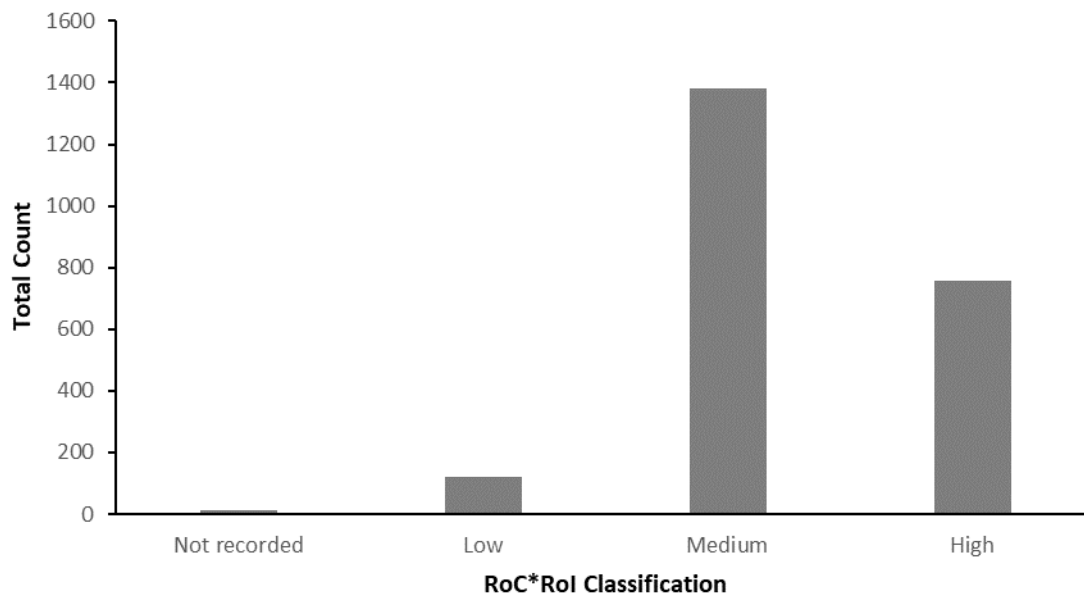
Among gang recruits in New Zealand prisons, being a repeat offender was far more common than not. This supported our hypothesis that identified gang recruits in New Zealand prisons will most likely have been previously incarcerated.

RoC*RoI.

For RoC*RoI, we expected high scores on this measure to relate to gang recruitment because of the inclusion of age at first offence and any violence convictions in the calculated scores. Figure 9 shows the distribution of gang recruits across RoC*RoI classification. Those with high RoC*RoI made up 758 recruits, a P of 0.333 of those recruited. Those with medium RoC*RoI made up 1383 recruits, a P of 0.607 of those recruited. Those with low RoC*RoI made up 121 recruits, a P of 0.053 of those recruited. 14 recruits had no recorded RoC*RoI classification, a P of 0.006 of those

Figure 9

*Total Count of Prison Gang Recruits by RoC*RoI Classification.*



Note. RoC*RoI scores range from 0.01-1.00 and are broken down into three categories: low (<0.49), medium (0.50-0.69), and high (0.70<).

recruited. The majority of gang recruits in prison were those with a medium RoC*RoI classification (60.7%).

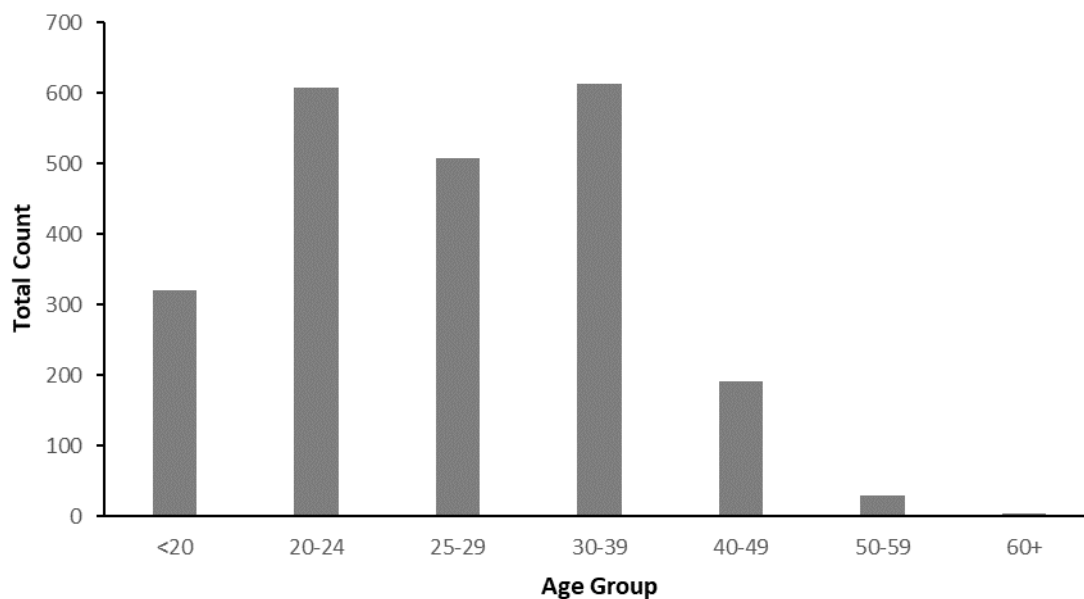
Among gang recruits in New Zealand prisons, having a medium RoC*RoI classification was more common than having a high or low classification. This did not support our hypothesis that identified gang recruits in New Zealand prisons will most likely have a high risk of recidivism.

Age.

For age, we expected the most common group to be the age bracket of 20-24, in accordance with the age-crime curve. Figure 10 shows the distribution of prison gang recruits across age brackets. Those aged <20 made up 321 recruits, a P of 0.141 of those recruited. Those aged 20-24 made up 608 recruits, a P of 0.267 of those recruited. Those aged 25-29 made up 508 recruits, a P of 0.223 of those recruited. Those aged 30-39 made up 614 recruits, a P of 0.269 of those recruited. Those aged

Figure 10

Total Count of Prison Gang Recruits by Age Group.



Note. These age groups were chosen as they are the ones already used within corrections to differentiate incarcerated individuals.

40-49 made up 191 recruits, a P of 0.084 of those recruited. Those aged 50-59 made up 30 recruits, a P of 0.013 of those recruited. Those aged 60+ made up 3 recruits, a P of 0.001 of those recruited. The majority of gang recruits in prison came from the age group 30-39 (26.9%), followed by 20-24 (26.7%), and 25-29 (22.3%).

Inmates aged 20-24 make up a larger proportion of gang recruits in prison than they do the general prison population (see Figure 4). Inmates aged 30-39 make up a smaller proportion of gang recruits in prison than they do in the general prison population (see Figure 4) but make up a larger proportion of gang recruits in prison than any other age group. This partially supports our hypothesis that identified gang recruits in New Zealand prisons will most likely be younger when compared to the general prison population.

Secondary Analysis

Following the initial analysis, we used ESCI to run a difference of proportion analysis to determine if individual factors or groups of factors were significantly different from others. When there was a significant difference, the larger one would be expected to be the more prototypical factor.

Of particular interest was the combinations which concerned age being paired with other variables to see what age group was most prototypical. This was of particular interest as our primary analysis gave no conclusive indication of which age group is most prototypical for gang recruits in New Zealand prisons. While numerous combinations were analysed in accordance with our methodology, only age group by itself and age group with all other prototypical factors have been reported here as they reflect the relevant information. For further analyses see Appendix B.

Age Group.

We compared the age groups of 20-24, 25-29, and 30-39. 20-24 had a P of .267, with a 95% CI [.249,.286]. 25-29 had a P of .223, with a 95% CI [.207,.241]. The P_{dif} -0.044 95% CI [-0.069,-0.019] shows that 20-24 is significantly more prototypical for gang recruits in New Zealand prisons than 25-29. 20-24 when compared with 30-39, which had a P .270 95%, with a 95% CI [.252,.289], had a P_{dif} 0.003 95% CI [-0.023, 0.028]. This showed that there was no significant difference between 20-24 and 30-39. 25-29 when compared to 30-39 had a P_{dif} 0.047 95% CI [0.022,0.072], which shows that 30-39 is significantly more prototypical for gang recruits in New Zealand prisons than 25-29.

Age, Medium RoC*RoI, High Security, Māori, Violence, and Repeat Offenders.

When looking only at violent, medium RoC*RoI, Māori, repeat offenders in high security units across age group, 20-24 had a P of .284, with a 95% CI [.232, .343], and 25-29 had a P of .244, with a 95% CI [.195, .301] and a P_{dif} -0.040 95% CI [-0.117, 0.037] which shows no significant difference between the two age groups. When 20-24 is compared with 30-39 (P .268 95% CI [.217,

.326]) the $P_{dif} -0.016$ 95% CI [-0.094, 0.062] shows no significant difference between the two age groups. When comparing 25-29 and 30-39, the $P_{dif} 0.024$ 95% CI [-0.052, 0.1] shows no significant difference between the two age groups.

This did not support our hypothesis that the most prototypical gang recruit in New Zealand Prisons will most likely be from non-dominant ethnicities, be held in higher security facilities, have a history of violence, have been incarcerated prior to their current incarceration, have a high risk of recidivism, and be young.

Discussion

Gangs are a long-standing issue in New Zealand. One of the ways to curb the adverse effects of gangs is to slow down their recruitment. In order to slow down recruitment it is crucial to understand the processes that underpin the maintenance of gang communities, what are the attitudes and behaviours gangs are looking for in individuals, and where do they find such people? Prisons offer a partial solution to these issues by providing a controlled environment from which we can observe who is being recruited into gangs, and what common factors they have. Once it is understood whom gangs are recruiting in prisons, targeted interventions could be implemented to curtail that recruitment. Therefore, to identify whom to target for any such intervention, this research posed the question, what is the prototypical gang recruit in New Zealand prisons? To answer this question, we used data from 2,275 incarcerated individuals which had been collected by correctional staff who had provided evidence that each individual had joined a gang during their prison sentence. Through the use of a difference of proportion analysis run through ESCI, we found evidence that the prototypical gang recruit in New Zealand prisons is Māori, repeat offenders, with a medium RoC*RoI, in high security units, with charges for violent crimes, between the ages of 20-39.

Primary Analysis

Upon completing the first analysis of proportion for each of the selected factors, we found that a number of the sub-factors we had expected to be most prominent based on the existing literature, often had a majority greater than 50% in their category. The sub-factors of being an ethnic minority [ethnicity], being in a high security unit [security of unit], being a repeat offender [repeat offender], and being convicted for violent crimes [lead offence] were consistently more significantly common than their counterparts. These results supported our hypotheses regarding these factors.

The most common subfactor for the RoC*RoI was a medium score, having greater than a 50% majority, this was however at odds with our hypothesis that a high RoC*RoI score would be the

most common. The factor of age presented some interesting findings in that there was neither a strong majority and that the largest group was not what we had hypothesised.

Despite whether the findings from our primary analysis were expected or not, each proportional analysis offers interesting comparisons when compared to the general prison population. Where proportions of gang recruits are similar to that of the general prison population, we may only be seeing the effects of the participant pool rather than highlighting prototypical factors. Similarly, when considering larger differences between recruits and the general prison population these could be indicative of a greater effect.

Ethnicity.

While Māori made up 51.7% of the general prison population, they made up 62.8% of prison gang recruits in our study. This could be in part due to the way in which new prisoners are divided within the prison. Due to the violence that occurs between gangs, incarcerated individuals are often split up by affiliation. Suppose a new prisoner has even a small connection to a gang. In that case, whether it be through a friend or family member, even if they themselves are not affiliated, they will be placed with others who are affiliated or even active members of that same gang (Meek, 1992). A key part of Māori culture is the concept of whanaungatanga, the close connection between people or kinship. In many settings, this is a great strength for Māori people by connecting them to wider networks of support. However, within a prison setting, whanaungatanga is in some ways turned against Māori. With a cultural tendency to connect with their kin paired with the already disproportionate number of incarcerated Māori individuals, the problem becomes compounded. With increased opportunities for connection, comes increased chances of being connected to a gang member or a gang affiliate. These tenuous connections can result in these newly incarcerated Māori individuals placed in an area with a higher concentration of gang members, offering more opportunities for gang recruitment by the sheer weight of exposure.

At an institutional level, this is problematic. While whanaungatanga may be playing a role in potentially connecting gang members with non-members, increasing rates of recruitment, whanaungatanga is also an excellent tool for rehabilitation (Huriwai et al., 2001). Attempting to undermine the part this element may be playing in gang recruitment may only serve to further alienate indigenous peoples from their culture, an outcome that nobody wishes to see.

High Security.

While high security incarcerated individuals made up 16.2% of the general prison population, they made up 56.7% of prison gang recruits in our study. Based on the existing literature, this is not a surprising find. High security units tend to be the most chaotic and violent units. This is in part because of the people found in high security units, primarily, younger people moving up from medium or low security units who are looking to make a name for themselves within the prison, and older more experienced criminals moving down from maximum security units which make for excellent targets for the younger ones to prove themselves against. The violence and disruption found more commonly within the high security units lend itself more to the control of gangs to create more stability and predictability within the unit so that incarcerated individuals can have a more comfortable stay. These gangs typically use a collection of push and pull motivators to help maintain order (Frey & Jegen, 2001). Because of these groups' internal power, particularly in the more unpredictable high security settings, newly incarcerated individuals are much more likely to join a gang to have more peace and stability in their term. Furthermore, those placed in high security are much more likely to be convicted of violent crimes, making them more desirable candidates for the gangs than incarcerated individuals in other units as they have effectively signalled to the gangs their suitability (Pizzini-Gambetta & Hamill 2011; Zahavi, 1975). For this same reason, it is unsurprising that 5.3% of gang recruits come from maximum security units, despite them making up only 1.6% of the general prison population.

Further stratification of security classifications could potentially aid in undermining this element of gang recruitment in prisons. By separating out those in high security units into smaller groups, some conflict may be avoided. This lessened level of conflict would impact the desirability of joining a gang and offer gang members less opportunity to witness signalling behaviours.

Violent Offender.

While violent offenders made up 38.6% of the general prison population, they made up 53.9% of prison gang recruits in our study. This result was expected based on our existing literature, particularly when considering the signalling theory approach to gang recruitment. By being convicted of violent crimes, incarcerated individuals have already effectively signalled to gangs their own suitability.

Sexual offenders, on the other hand, while they made up 19.3% of the general population made up only 7.1% of gang recruits. This difference was expected due to the lack of respect afforded sexual offenders, making them less desirable recruits. That sexual offenders were still recruited despite the largely negative way they are perceived suggests that this may be a factor that gangs consider less important when selecting recruits. Alternatively, the negative view of sexual offenders could be a motivating factor for them to seek out recruitment in order to attain an element of protection. If this were the case, then the numbers that we found would suggest that gangs will be more selective when sexual offending is involved, only taking a small portion of those that may seek to join.

Repeat Offender.

Our research showed that 82.9% of prison gang recruits were repeat offenders. This finding was consistent with our hypothesis. While this is the only category that we addressed that is split into only two subcategories, repeat offenders nonetheless make up the most significant factor overall for gang recruits in prison. Based on the existing literature, our theory that repeat offenders

would be more desirable for gang recruitment due to their evidencing a commitment to criminal attitudes could easily explain this trend from a signalling theory perspective (Pizzini-Gambetta & Hamill 2011).

However, as we do not know the actual number of repeat offenders held in custody, it is possible that the numbers we found are merely a reflection of the general prison population.

RoC*RoI.

One of the interesting findings from our primary analyses was that recruits with a medium RoC*RoI and not high RoC*RoI were significantly more common, with medium having a majority higher than 50%. This was at odds with our hypothesis. The RoC*RoI was created to measure the likelihood someone would re-offend and then be convicted and incarcerated for that offence. To this end, the RoC*RoI is calculated with a number of factors, making it difficult to pin down precisely what factor or factors caused this unexpected result. However, for the factors we did consider that are relevant to the RoC*RoI, age was much more varied than expected. As an individual gets older, their RoC*RoI lowers in accordance with the age-criminal curve (Loeber & Farrington, 2014). We have already seen that the general prison population has a majority of 30-39 year old, and our primary analysis showed that 30-39 were also the most recruited age group. This unexpected skew in the age distribution is likely the primary cause of RoC*RoI's skew. What is surprising about this finding however is that violent offending is typically related to a higher RoC*RoI, but we do not see a comparative relationship between the number of violent offenders being recruited and high RoC*RoI recruits. A counter explanation for the discrepancy between our hypothesis and our findings is that those with high RoC*RoI could already be gang members. Gang membership increases both frequency and intensity of criminal behaviour and therefore, would also increase RoC*RoI (Decker et al., 2007; Fleisher & Decker, 2001; Nadesu, 2009). As our data was made up of people who had been recruited in prison, gang membership would not have affected their RoC*RoI when it was calculated. Therefore, while we would expect gang membership to increase RoC*RoI

scores, the population we examined would not have been gang members at the point of incarceration, potentially leading them to have a lower score than the average gang member.

Age.

Similarly to what we found with the RoC*RoI, our results regarding age distribution were unexpected. The most common age group was that of 30-39, though this was not significantly different from 20-24. Both, however, were significantly more common than those aged 25-29. This bimodal distribution was at odds with our hypothesis as the literature suggests that gang recruits are much more likely to come from younger age groups. Even if 20-24 and 25-29 were amalgamated into a single ten-year group 20-29 to match other groups, it would still be less than a majority of the data (0.490) as was seen with other significant factors (e.g. repeat offenders). One of the possible explanations for this data is that while age does tend to be a predictive factor for gang recruitment, prison populations are unique in that most people who are likely to join a gang, are likely to have done so before coming to prison. Consequently, older incarcerated individuals may be more desirable as they have shown they are more likely to be life-course-persistent offenders and be more experienced than their younger counterparts. Another explanation could be that corrections have chosen to split people into age groups of ten years because of the age-crime curve, except for ages 20-29, which are split into two smaller groups of five years. When combining the groups of 20-24 and 25-29, the resulting group of 20-29 has a proportion of 0.490, significantly higher than that of the 30-39 group. Furthermore, after combining these groups, not only do we lose the bimodal distribution, but also begin to see a curve representative of the expected age-crime curve as well. Therefore, it is likely that the unexpected bimodal distribution is a result of having divided the most common group into two smaller ones. Another explanation, however, could be a result of the age make up of the general prison population, which is more representative of a normal curve (see Figure 4), with the age group of 30-39 being the most common. By virtue of being the largest group, the age group of 30-39 inevitably generates more recruits than other age groups due to the much

larger proportion of them. In reality, it is likely that all three of these explanations play a roll in creating the bimodal distribution that we see.

Secondary Analysis

Upon completing the secondary analysis of proportion for each of the selected factors, we found that regardless of how the factors were combined, the factors of being Māori, being in a high security unit, being a repeat offender, having a medium RoC*RoI score, and being convicted for violent crimes were consistently more significantly common than their counterparts. This was unsurprising given each of these were highlighted during the primary analysis as being the most significant category for their respective factors.

As we combined factors, we saw no change in which of the subfactors were making up the most significant groups with the only exception being the age that people were when recruited into a gang in prison. At the most extreme end we found that when combining the groups of repeat offender, ethnicity, security level, RoC*RoI, and type of offence, the most significant group was the Māori, repeat offenders, with medium RoC*RoI, violent offence, in high security units. This suggests that this is the most prototypical gang recruit in prisons when not taking into account age.

Age presented an interesting change to this pattern. As more factors were added, the difference between the age groups of 20-24, 25-29, and 30-39 became insignificant. When comparing age groups across violent offenders, the only significant difference was between age 20-24 and 25-29, while neither was significantly different from the group 30-39. When considering violent offenders in high security units by age group, 20-24 were more significant than both 25-29 and 30-39, which were each no more significant than the other. This shows us that when looking at a broader category age group can make a difference in prison gang recruits' prototype. When looking at high security, violent, repeat offenders across age groups, the only significant difference was between 20-24 (who were more common) and 30-39, while neither group was significantly different from 25-29. When ethnicity is considered with that same group, there is no significant difference

between the age groups at all. This suggests that as more factors are considered, the age group becomes an increasingly less important factor between the ages of 20-39. This trend continued so that whenever age was compared with any group of four or more other common factors, there was no significant difference between those aged 20-39. This is what led to the conceptualisation of a prototypical prison gang recruit being on the broader age group of 20-39, rather than one of the smaller groups typically utilised by corrections.

Collectively our findings provide a new account for prototypical gang recruits in prison. Previously, the only available prototype was one that relied on data concerning who is recruited in general rather than in a specific setting. This prototype reflected the most common risk factors of; negative life events, antisocial tendencies, delinquent beliefs, lack of parental supervision, peer network beliefs, and peer delinquent behaviours (Esbensen et al., 2010; Hautala et al., 2016; Hill et al., 1999; Klein & Maxson, 2006; Pyrooz & Densley, 2015; Thornberry et al., 2003). This generalised prototype, problematically, encompassed a large proportion of the prison population and failed to be truly representative of who was being recruited in this setting. What our research suggests therefore is that prototypicality for gang recruits is something that varies across setting.

Limitations

Of course, there are some obvious caveats to our conclusions. This research aimed to investigate the patterns of gang recruitment in prison, using the available data to select specific groups of people for interviews about the process of recruitment within prison. However, due to the effects of Covid-19 during the course of this research, our initial plans had to be altered as we could not get into the prisons to conduct interviews. Future research could look into the patterns of recruitment within prisons, in particular, looking at how patterns of recruitment may vary across age groups in response to this study's findings around the broad age range for those recruited.

The research was subsequently altered to look into prototypical gang recruits in prison as an alternative path that could best utilise the resources available. Data was collected by correctional

employees, not explicitly trained to take detailed information (as was seen in the coding phase). While care was taken to exclude any data that was vague or unclear, it cannot be guaranteed that what we were left with had been accurately reported by staff. However, this method is par for the course for corrections and offers a great deal of information with minimal effort allowing for such research as ours to be efficiently conducted. The research was further limited by the nature of the data, particularly the RoC*RoI which was given as a nominal data rather than continuous data, limiting how specific we could be in our conclusions. Further research could address this issue by using the data that we found, and conducting more standardised interviews with incarcerated individuals to determine if they have or have not been recruited into a gang in prison, and what common factors typical gang recruits have.

At many stages throughout this study, we have highlighted the importance of knowing who is being recruited so that we can curb gang recruitment. The next logical step as far as research is concerned is to study the process of recruitment for these people so that target interventions can be created to stop or interrupt this process.

Implications

Our findings have both theoretical and practical implications. On the practical side of things, by knowing who is most likely to be recruited, correctional facilities are able to implement targeted early intervention programmes to help reduce gang recruitment. By reducing gang numbers in this way, we should see a lower recidivism rate from those who are released from prison, lower adverse outcomes for those who avoid recruitment as they are more able to avoid the recurring trauma that comes with gang membership and lower rates of crime.

On the theoretical side, this research has implications for how we look at who is being recruited into gangs. Prisons have offered a unique setting in which many of its occupants already meet many of the risk factors commonly associated with joining a gang outside of prison, and so to be more selective, a new prototype has emerged in this setting.

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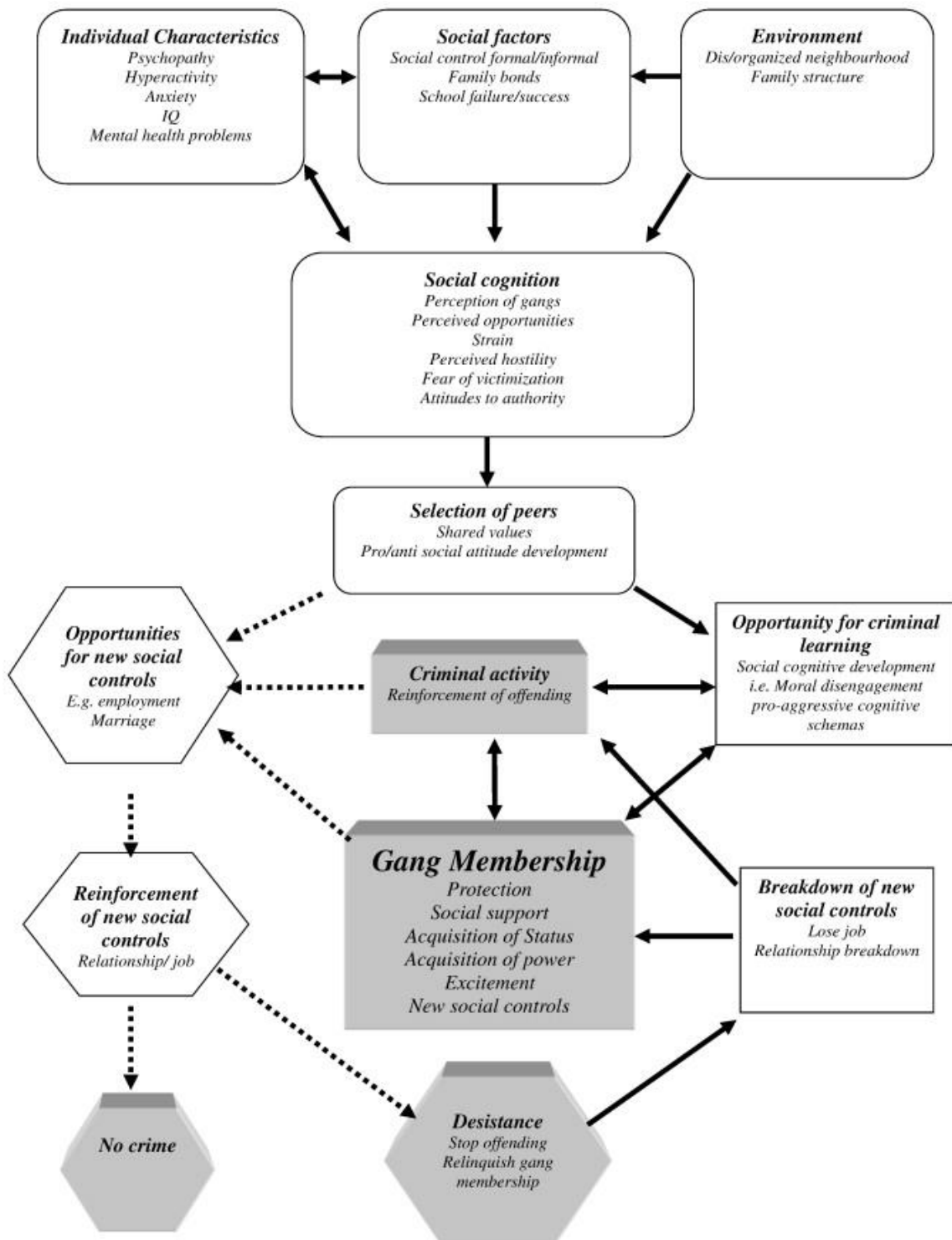
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Appendix A

The Integrated Model of Gang Recruitment



Taken from Wood & Alleyne (2010).

Appendix B

Supplemental Secondary Analyses

Security of Unit.

First, we compared the two highest security of unit proportions, High security and low medium security. High security units had a P of .567, with a 95% CI [.547,.587], and low medium a P of .358, with a 95% CI [.334,.373]. The P_{dif} -0.214, 95% CI [-0.242,-0.185] between the two showed that recruits in high security units were significantly more prototypical for gang recruits in New Zealand prisons than those in low medium security units.

Lead Offence.

We compared violence to burglary, burglary to drugs, and drugs to sexual offences. Violence had a P of .539, with a 95% CI [.519,.560]. Burglary had a P of .159, with a 95% CI [.519,.560]. The P_{dif} 0.017, 95% CI [0.052,0.09] between the two showed that violence was significantly more prototypical for gang recruits in New Zealand prisons than burglary. Drugs had a P of .088, with a 95% CI [.077,.100]. Compared to burglary which had a P of .159, with a 95% CI [.519,.560], the P_{dif} 0.017, 95% CI [0.052,0.09] showed that burglary was significantly more prototypical for gang recruits in New Zealand prisons than drugs. Drugs had a P of .088, with a 95% CI [.077,.100] compared with sexual which had a P of .071, with a 95% CI [.061,.082] the P_{dif} -0.017 95% CI [-0.033,-0.001] shows that drugs were significantly more prototypical for gang recruits in New Zealand prisons than sexual.

Violence and Security Level.

When looking at only violent offenders in high and low medium security units, high security units had a P of .550, with a 95% CI [.522,.578]. Low medium had a P of .355, with a 95% CI [.329,.383]. When compared the P_{dif} -0.195 95% CI [-0.233, -0.156] showed that violent offenders in high security units are significantly more prototypical for gang recruits in New Zealand prisons than violent offenders in low security units.

Violence and Age Group.

When looking at only violent offenders across age groups, 20-24 had a P of .296, with a 95% CI [.271,.322], 25-29 had a P of .218, with a 95% CI [.196,.242], with a P_{dif} -0.077 95% CI [-0.112, -0.043] showing that violent offenders in the age group of 20-24 were significantly more prototypical for gang recruits in New Zealand prisons than violent offenders in the age group 25-29. When 20-24 were compared to 30-39 (P .240 95% CI [.217,.265]) the P_{dif} -0.055 95% CI [-0.090, 0.020] showed no significant difference. When comparing 25-29 and 30-39, the P_{dif} 0.022 95% CI [-0.011, 0.055] showed no significant difference.

High Security, Violence and Age Group.

When looking only at violent offenders in high security units across age group, 20-24 had a P of .307, with a 95% CI [.273,.342], and 25-29 had a P of .233, with a 95% CI [.202,.266] and a P_{dif} -0.074 95% CI [-0.121, -0.027] which shows that violent high security recruits aged 20-24 are significantly more prototypical for gang recruits in New Zealand prisons than those aged 25-29. When 20-24 is compared with 30-39 (P .217 95% CI [.190,.252]) the P_{dif} -0.087 95% CI [-0.134, -0.040] shows that violent high security recruits aged 20-24 are more prototypical for gang recruits in New Zealand prisons than those aged 30-39. When comparing 25-29 and 30-39, the P_{dif} -0.013 95% CI [-0.058, 0.031] shows no significant difference between the two age groups.

High Security, Violence, and Repeat Offenders.

When looking at only high security violent offenders, those who are repeat offenders had a P of .876, with a 95% CI [.849, .898], while those who were not repeat offenders had a P .124, with a CI of 95% [.102, .151]. When compared the P_{dif} -0.751 95% CI [-0.783, -0.713] showed that high security violent offenders who were repeat offenders were significantly more prototypical for gang recruits in New Zealand prisons than those who were not repeat offenders.

High Security, Violent, Repeat Offenders, and Age Group.

When looking only at violent, repeat offenders in high security units across age group, 20-24 had a P of .380, with a 95% CI [.337,.425], and 25-29 had a P of .325, with a 95% CI [.284,.368] and a P_{dif} -0.055 95% CI [-0.116, 0.006] which shows no significant difference between the two age groups. When 20-24 is compared with 30-39 (P .295 95% CI [.256,.338]) the P_{dif} -0.085 95% CI [-0.144, -0.025] shows that violent, repeat offender, high security recruits aged 20-24 are more prototypical for gang recruits in New Zealand prisons than those aged 30-39. When comparing 25-29 and 30-39, the P_{dif} -0.030 95% CI [-0.088, 0.029] shows no significant difference between the two age groups.

High Security, Violence, Repeat Offenders, and Ethnicity.

When looking only at violent, repeat offenders in high security units across ethnicity, Māori had a P of .733, with a 95% CI [.696, .767], and Pasifika has a P of .135, with a 95% CI [.110, .165] with their P_{dif} -0.597 95% CI [-0.640, -0.550] showing that violent, repeat offender, high security, Māori recruits are significantly more prototypical for gang recruits in New Zealand prisons than those who are Pasifika. When Pasifika is compared with Europeans (P .127 95% CI [.102, .156]), there is a P_{dif} -0.008 95% CI [-0.047, 0.030] which shows that there is no significant difference between the two.

High Security, Violent, Māori, Repeat Offenders, and Age Group.

When looking only at violent, Māori, repeat offenders in high security units across age group, 20-24 had a P of .359, with a 95% CI [.310, .412], and 25-29 had a P of .323, with a 95% CI [.276, .323] and a P_{dif} -0.036 95% CI [-0.107, 0.036] which shows no significant difference between the two age groups. When 20-24 is compared with 30-39 (P .318 95% CI [.270,.318]) the P_{dif} -0.042 95% CI [-0.112, 0.030] shows no significant difference. When comparing 25-29 and 30-39, the P_{dif} -0.006 95% CI [-0.076, 0.064] shows no significant difference between the two age groups.

RoC*RoI.

When looking at RoC*RoI, medium RoC*RoI had a P of .607, with a 95% CI [.587, .627] and high RoC*RoI had a P of .333, with a 95% CI [.314, .353] with a P_{dif} -0.274 95% CI [-0.302, -0.246] showing that medium RoC*RoI was significantly more prototypical for gang recruits in New Zealand prisons than high RoC*RoI.

RoC*RoI and High Security.

When looking at RoC*RoI across high security, medium RoC*RoI had a P of .585, with a 95% CI [.558, .612] and high RoC*RoI had a P of .371, with a 95% CI [.345, .398] with a P_{dif} -0.214 95% CI [-0.251, -0.176] showing that medium RoC*RoI was significantly more prototypical for gang recruits in New Zealand prisons than high RoC*RoI.

RoC*RoI, High Security, and Violence.

When looking at RoC*RoI across high security, violent offenders, medium RoC*RoI had a P of .594, with a 95% CI [.557, .630] and high RoC*RoI had a P of .369, with a 95% CI [.333, .406] with a P_{dif} -0.225 95% CI [-0.276, -0.172] showing that medium RoC*RoI was significantly more prototypical for gang recruits in New Zealand prisons than high RoC*RoI.

Age, Medium RoC*RoI, High Security, and Violence.

When looking only at violent, medium RoC*RoI offenders in high security units across age group, 20-24 had a P of .319, with a 95% CI [.275, .366], and 25-29 had a P of .234, with a 95% CI [.196, .278] and a P_{dif} -0.085 95% CI [-0.146, -0.023] which shows that those aged 20-24 are significantly more prototypical for gang recruits in New Zealand prisons than those aged 24-29. When 20-24 is compared with 30-39 (P .232 95% CI [.193, .276]) the P_{dif} -0.087 95% CI [-0.148, -0.025] shows that those aged 20-24 are significantly more prototypical for gang recruits in New Zealand prisons than those aged 30-39. When comparing 25-29 and 30-39, the P_{dif} -0.002 95% CI [-0.061, 0.056] shows no significant difference between the two age groups.

Age, Medium RoC*RoI, High Security, Violence, and Repeat Offenders.

When looking only at violent, medium RoC*RoI, repeat offenders in high security units across age group, 20-24 had a P of .307, with a 95% CI [.261, .357], and 25-29 had a P of .261, with a 95% CI [.218, .310] and a P_{dif} -0.045 95% CI [-0.112, 0.021] which shows no significant difference between the two age groups. When 20-24 is compared with 30-39 (P .250 95% CI [.208, .298]) the P_{dif} -0.057 95% CI [-0.122, 0.009] shows no significant difference between the two age groups. When comparing 25-29 and 30-39, the P_{dif} -0.011 95% CI [-0.076, 0.053] shows no significant difference between the two age groups.