A National Study of Childhood Non-offending Contact with Police and Later Adolescent Offending

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Disclaimer

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Abstract

Objectives: A large number of children in Aotearoa New Zealand come into contact with police in a non-offending capacity (i.e., where the child is not considered a suspect in a crime). This study examined if this non-offending police contact in childhood (0-13 years) was associated with later adolescent offending (14-16 years), and the degree to which police administrative data and child demographic characteristics collected at the time of first police contact could predict the probability of later adolescent offending.

Design: Employing national police administrative data and a longitudinal design, the childhood sample consisted of children born between 1999 and 2001 who had contact with New Zealand Police between the time of birth and thirteen years of age. Data on adolescent offending included all adolescents who were fourteen to sixteen years of age between the years of 2013 and 2015.

Methods: Data on childhood police contact included demographic characteristics such as age, gender, and ethnicity. Additional police administrative data included the nature of the event (e.g., incident-exposure or offence-exposure), the child's role at the time of the event (e.g., victim, witness, etc.), the frequency of exposure to non-offending police contact, and police documentation of child protection and family violence circumstances. The analyses were completed in three stages. Stage one explored the descriptive statistics of the childhood dataset to build a descriptive profile of children in contact with police. Stage two examined how individual predictors from the childhood non-offending dataset were associated with later offending in youth (univariate analyses). Stage three examined how the significant predictors from the univariate analyses were collectively associated with later offending in

adolescence (multivariate analyses), and specifically if any of the police administrative factors remained significant predictors after controlling for the sociodemographic variables.

Results: Regardless of childhood exposure to offences or non-offence incidents (e.g., domestic dispute, truancy, etc.), the results showed six variables were consistently associated with later offending. Demographic characteristics included ethnicity, male gender, and age at first contact. Police administrative variables included frequency of police contact, juvenile complaint incidents and violent offences. Against expectations, role categories (e.g., victim or witness) were not associated with later offending in the multivariate analyses. The results have implications for police policy and procedures when working with children and are discussed in light of Developmental Prevention Theory and Developmental Life-Course Criminology Theory.

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Chapter One: Background

1.1 Introduction

Crime is a significant political and social issue, particularly with the resource demand, high cost and life-long impact crime can have on individuals, families, and society as a whole (New Zealand Police, 2015). New Zealand has one of the highest rates of family violence and child abuse of the OECD countries (Biswell, 2016) and the perpetrators of such crimes are more likely to have experienced early childhood trauma and been involved with offending in adolescence (Biswell, 2016). Although youth commit fewer crimes than adults, some youth offenders go on to commit several crimes and a portion become life-course persistent offenders (Moffitt, 1993; Moffitt & Caspi, 2001; New Zealand Police, 2017). Their crimes can include inflicting serious harm on future partners and children (Moffitt, 1993; Moffitt & Caspi, 2001; New Zealand Police, 2017). Therefore, identifying early risk factors that predict later offending is an important part of a crime prevention strategy.

International longitudinal studies such as The Cambridge Study of Delinquent Development (United Kingdom), The Pittsburgh Youth Study (United States), and the Rochester Youth Development Study (United States) are specific to studying the development of criminal trajectories, contributing towards the aetiology of an offender (Beckley et al., 2016; Broidy et al., 2003). New Zealand based long-term longitudinal studies, although not specifically designed to examine criminal trajectories include, 'The Dunedin Multidisciplinary Health and Development Study' (Dunedin Study) and the 'Christchurch Health and Development Study' (Christchurch Study) have also made significant contributions towards literature on criminal behaviour (Broidy et al., 2003; Fergusson, Boden, & Horwood, 2015; Moffitt, 1993). These longitudinal studies have gathered information on a range of different risk and protective factors across multiple developmental domains such as individual, family, peer, school and community, emphasising the

significance of early identification and intervention to prevent criminal offending and the negative outcomes of crimes.

For example, based on data from the Dunedin longitudinal study, Moffitt (1993) proposed two trajectories that lead to offending. Adolescent limited (AL) offenders consist of the majority of youth offenders who primarily engage in limited criminal activity in their adolescent years and taper off as they reach adulthood (Moffitt, 1993; Moffitt & Caspi, 2001; Odgers et al., 2008). Life-course persistent (LCP) offenders consist of a smaller group. These youth offenders start offending at a younger age and continue to commit crime throughout their lives, accounting for a majority of crimes committed by young people (Moffitt, 1993; Moffitt & Caspi, 2001; Odgers et al., 2008). Following a ten-year review of findings from the Dunedin Study, Moffitt (2003) proposed two additional groups, one for the low-level offending group with mental health problems, and a fourth group for the abstainers (Dennison, 2011; Moffitt, 2003). Furthermore, Odgers et al., (2008) found that AL males did not stop offending beyond adolescence, some offending into early and late adulthood, proposing the term adolescent-onset instead of adolescent-limited. Adult-onset offending is less common amongst criminal offenders (Beckley et al., 2016; Moffitt, 1990).

Adult-onset offending does exist; however, it is argued most offenders have engaged in criminal behaviour prior to becoming an adult, either in adolescence or childhood (Beckley et al., 2016; Moffitt, 1990; Murray & Farrington, 2010). For example, in the Dunedin Study, official conviction records showed that across all participants, 13.6% were first convicted of an offence as an adult (aged 20 years or above) in comparison to 28.5% first convicted as an adolescent (<20 years), the remaining sample had no official convictions. However, self-reports of the adult-onset offenders showed antisocial behaviour was evident from childhood, suggesting they may have been outside the age of criminal liability, never apprehended by

police or never successfully prosecuted. In a review of this literature, Beckley et al. (2016) reported this trend was similar across a number of longitudinal studies.

The link between childhood behaviour problems and adolescent offending is well established in literature (Broidy et al., 2003; Farrington, Loeber, & Van Kammen, 1990; Moffitt, 1990; Murray & Farrington, 2010; Raudino, Fergusson, Woodward, & Horwood, 2013; Rivenbark et al., 2018). Broidy, Tremblay, Brame, Fergusson et al., (2003) explored the trajectories of childhood disruptive behaviours and adolescent delinquency across six longitudinal studies completed in New Zealand, Canada, and the United States, specifically focusing on childhood physical aggression and its link to violent and non-violent offending in adolescence. Consistently, data showed continuity in problem behaviour (e.g. physical aggression) from childhood to adolescence across the six reported longitudinal studies (Broidy et al., 2003). Continuity in disruptive behaviours has also been found with other childhood problem behaviour, such as early conduct problems (violation of societal norms) (Broidy et al., 2003; Murray & Farrington, 2010; Piquero, Brame, & Moffitt, 2005; Raudino et al., 2013; Rivenbark et al., 2018). Overall, a majority of longitudinal research has contributed towards understanding the link between childhood behaviour problems and criminal trajectories stemming into adolescence and adulthood. Given that children with behavioural problems are more likely than their peers to have come into contact with police and the wider justice system, evidence suggests that such contact may exacerbate delinquent tendencies (Wiley & Esbensen, 2016). However, an unexplored question in the literature is whether non-offending police contact, such as being a witness or victim, is also predictive of later offending. For the purpose of this thesis *non-offending police* contact refers to all events children hold the role of *victim, witness, complainant*, *informant*, *subject of* or *person at risk* in police events.

Key roles for the New Zealand Police include preventing crime, detecting crime and bringing offenders to account, improving public safety, and maintaining law and order (New Zealand Police, 2011, 2017). In light of these, police are frequently the first authority figures to come into contact with young people. For example, children and youth offenders will be involved with police upon apprehension or when questioned around suspected involvement or knowledge of criminal activity (Ministry of Justice, 2012). Appendix A illustrates the process the New Zealand Justice System follows for a young person behaving antisocially, the first stage being police contact. Initially police have several options: (a) no action, informal warning; (b) referral to youth aid; or (c) charges laid in youth court (Ministry of Justice, 2012). Police contact where action involved 'no action or informal warning' may include the child or young person being linked to a police event as *subject of* instead of suspect or offender. This type of action could be for minor or harmless behaviour such as such as making noise late at night, drinking alcohol, trying marijuana and skipping class at school, which many young people do at some stage (White, 2017). The *subject of* role is used by police when other non-offence events are attended, such as mental health incidents, non-offence domestic dispute events, or when the role is not clearly defined by another role type.

Police officers will also be in contact with children and young people when they have been the *victim* of crime, *witnessed* crime, or reported crime to police (*complainant* or *informant*). For example, family violence has a large demand on police resources with 133,022 reported family harm investigations in 2018, 14.82% of the total phone calls received by police (New Zealand Police, 2019). Physical and sexual abuse can be offences committed within these investigations and children and young people can be included either directly, as a victim, or witness (New Zealand Police, 2019). In serious cases, police will refer children to child protection services (Oranga Tamariki Ministry for Children, 2018). In considering that, police agencies can be the first organisation in a child's life following

harmful life events. Opportunities to identify risk and prevent maladaptive offending trajectories, and the detrimental impact of crime, exist for police officers involved in these investigations. Similar to other research on early offending, the present study considers possibly risk and protective factors that are associated with youth offending. However, unlike previous studies, this study examines predictors of later youth offending through early non-offending police contact.

1.2 Impact of Criminal Activity

1.2.1 Victims and Families

Crime can have vast physical, psychological and financial consequences extending to victims, families, neighbourhoods and wider communities (Feld & Bishop, 2011; Robinson & Keithley, 2000). The level of impact varies according to the types of crime and other factors within the environments that victims live. For example, violent crime can result in long-lasting physical and psychological injuries, dishonesty offences such as burglary and theft can have psychological impacts which can influence on an individual's living circumstances, sexual abuse can also have long-term impacts of health and psychological functioning (Robinson & Keithley, 2000). Additionally, for children and young people, crime can result in them being at risk of harm which can result in separation from immediate whānau and placement in state care (Oranga Tamariki Ministry for Children, 2018).

Being the victim of an offence is associated with depression, low self-esteem, behavioural challenges, and substance abuse (Feld & Bishop, 2011; Robinson & Keithley, 2000). Furthermore, an individual does not need to be directly affected by crime but can be vicariously affected through seeing how crime affects family members, their neighbourhood and wider community (Robinson & Keithley, 2000). Children do not learn in isolation but in the context of socialising with whānau and the community (Bronfrenbrenner, 1979). These

impacts highlight the vast consequences of criminal behaviour which extend to health and community services whose role is to assist and provide treatment or interventions for those affected by crime (Feld & Bishop, 2011; Robinson & Keithley, 2000).

1.2.3 Offenders

Criminal activity is also associated with a variety of negative life outcomes for offenders (Farrington et al., 2006; Odgers et al., 2007; Piquero, Farrington, Shepherd, & Auty, 2014). Data from the Dunedin longitudinal study examined different offending trajectories (e.g., adolescence limited or life-course persistent), and the association with health outcomes in later life (Odgers et al., 2007). Overall rates of physical health and mental health problems were higher for individuals following a life-course persistent pathway in comparison to those who only offended during adolescence. However, regardless of the age a person began committing crime, there were negative health implications for anyone who committed a crime that extended to the participants' early thirties (Odgers et al., 2007).

Farrington, Coid, Harnett, Jolliffe et al., (2006) examined data from the Cambridge longitudinal study exploring life success outcomes at ages 32 and 48 years from a sample who had been followed from age eight. Life success included measures such as satisfactory accommodation, employment, cohabitation, absence of excessive alcohol use and no drug use or convictions. Overall, they found life success improved between ages 32 to 48 years, with men who stopped offending before age 21 reporting similar life success at age 48 as those who were never convicted of an offence. However, those who persisted in committing crime throughout their lifetime were the least successful, across all success domains throughout their life (Farrington et al., 2006). Data from the Cambridge longitudinal study was also used to examine the association between offending and early death with findings reporting the average age of death amongst males who offended was 42 years, in comparison to the non-offenders where life expectancy was 66 years of age (Piquero et al., 2014). Overall these

studies suggest offending has immense negative life outcomes on future living arrangements, substance abuse, relationships, employment, and social services with varying degrees, depending on a person's offending trajectory.

1.2.3 Monetary Cost of Crime

Farrington, Piquero and Jennings (2013) examined the monetary costs of crime from childhood to middle adulthood, aged 10 to 50 years. Longitudinal information from the Cambridge Study in Delinquent Development, (n = 411), was utilised. Farrington, Piquero and Jennings (2013) reported the cost of crime differed according to criminal trajectories. For example, mid-to-late adolescence was found to be the costliest stage of life, with the number of offences peaking in that period. Evidently those in the high-rate chronic offender group, were found to be the costliest offenders with an estimated lifetime cost of £742 per U.K citizen (Piquero, Jennings, & Farrington, 2013). High-rate chronic and high adolescence peak offenders were reported to have committed a similar number of crimes with the high-rate chronic offenders more costly as their offending tended to be person-oriented, a more expensive crime overall.

Roper and Thompson (2006) reported on the cost of crime in New Zealand for the year 2003/04. It was estimated 1.8 million criminal offences occurred that year amounting to an estimated total cost of $9.1 billon. Offences against the person (e.g., violence, sexual offences, robbery) were the most expensive criminal acts, with sexual offences being the costliest subcategory. Offences against property (e.g., burglary, theft and property damage) were the most commonly occurring criminal offences and accounted for 41% of total costs. Of the justice sector departments, including Courts, Police, Justice, Corrections, and Child Youth and Family (now Oranga Tamariki Ministry for Children), the Police had the largest estimated cost at $872 million, the next highest was Corrections at $528 million. In addition, the cost of crime is rising; New Zealand Police, (2011) reporting crime costing an estimated

$11 billion per year, a substantial increase from reports in 2006. Effective crime prevention interventions can provide considerable cost savings to society.

1.3 New Zealand Youth Offending Statistics

The New Zealand Police published a report in 2014 stating that children and young people represent 10% of the New Zealand population; however, they account for 20% of police apprehensions. Although the report stated that crime by youth had decreased by 39% over 5 years to 198 per 10,000 population, in proportion to the New Zealand population, young people aged between 14–16 years old are over-represented as offenders (New Zealand Police, 2014). The majority of youth (80%) who come to police attention offend once or twice (adolescent limited), while the minority (20%) start offending early and continue to offend into adulthood (life-course persistent; (New Zealand Police, 2014; Moffitt, 1993).

Recent reports from the Ministry of Justice (2017) and the New Zealand Police (2017) have identified a number of concerning trends in recent crime data. This includes an increase by 5% in the number of children and youth in court over the last year, with a majority being aged 15 (29%) or 16 (44%) years old. The proportion of youth offenders who identify as Māori had also increased over the last 10 years, from 46% in 2006/7 to 63% in 2016/17. Lastly, the number of females who engage in criminal behaviour had increased to 27% of adolescent offenders with reports that the number of females engaging in violent offences had also risen.

The Ministry of Justice (2017) further reported that youth offending is getting more serious proportionally. In particular, of offences reported to police, a charge of robbery, (theft accompanied by violence), contained the highest proportion of youth offenders (36%), in comparison to other crime types. Other dishonesty crime types such as burglary and theft contained a smaller proportion of youth offenders (8%). Youth charged with robbery offences

had increased the most, 56% since 2016, of all other common youth crime types (i.e. theft and assault). The number of robberies committed by youth is alarming and a cause for concern, particularly due to the harmful impact the offence of robbery can cause to victims and the consequences a charge of robbery can have on the young person's future (The Ministry of Justice, 2017).

1.4 New Zealand Victimisation Statistics

In New Zealand, the 1961 Crimes Act defines a victim as a person against whom an offence is committed and can include a member of the immediate family (Oranga Tamariki Act 1989; Maxwell, 2009). Young people can be indirectly affected by witnessing offences or being linked to individuals involved, if such events have occurred to members of their immediate family, extended family, or acquaintances (Baglivio, Wolff, Piquero, & Epps, 2015; Hartinger-Saunders et al., 2011; Wilson, Stover, & Berkowitz, 2009). In these situations of indirect victimisation, the individual would not be classed as a victim in the policing context but may be classed as a witness or 'subject of'. New Zealand Police (2017) reported on victimisation demographics between January 2017 to December 2017 and showed that children under 9 years old had a lower representation in victimisation statistics in comparison to other age demographics, with fewer than 1000 occurrences in age categories 0-4 and 4-9 years. Children aged 10-14 years had less than 2500 victimisation occurrences, and youth aged 15 – 19 years had over 5000 victimisation occurrences. Males were just as likely to be victimised as females, and 32.2% identified as European, 16.9% identified as Māori, 38.2% did not state their ethnicity, and the remaining were listed as other ethnicities (New Zealand Police 2017). One of the challenges in exploring victimisation data is the estimated under-reporting (Maxwell, 2009; Baglivio et al., 2015). This is considered to be especially high for young people as incidents involving a young person are often reported by professionals or

family members instead of the victims themselves (Maxwell, 2009; Baglivio et al., 2015). If an event is not reported to police, there would be no record of this in the police database.

In Aotearoa New Zealand, the police have identified youth offending as a key target to reduce offending statistics because of their vulnerability and the unique prevention opportunities available (Brainwave Trust Aotearoa, 2017; New Zealand Police, 2015). Non-offending information stored in the police database has the potential to identify markers of risk and protective factors within the child's environment, a key focus of the current study. If offending risks can be identified prior to the occurrence of formal offending behaviour, interventions may be implemented earlier to delay or prevent the issue arising. Exploring these factors can contribute towards the police prevention model and the aetiology of an offender.

Chapter Two: Theory and Predictors of Adolescent Offending

2.1 Introduction

The aim of this chapter is to review and discuss developmental theories and research that provide possible explanations for how early childhood experiences, including contact with the police and policing practices, may account for trajectories in youth offending. There are many theories that attempt to explain how people become engaged in criminal behaviour, particularly in attempts to predict the causes of youth offending. Durrant (2016), and Freiberg and Homel (2011) recommend bringing developmental ecological theories into the study of criminal trajectories. In light of that, developmental and life-course criminology theory (DLCCT; Farrington, 2003; Farrington & Loeber, 2013), and the theory of developmental prevention (Homel & Freiberg, 2017) form the theoretical framework for this thesis. Considering risk and protective factors across a person's developmental system can provide knowledge and deeper understanding of the pathways to committing crime (Farrington, 2003; Farrington & Loeber, 2013). The emergence of the crime-focused field of DLCCT provides a foundation to examine and understand the development of offending, the effects of risk and protective factors and how life events can shape an individual's trajectory into and out of offending (Dennison, 2011). The five domains of risk factors introduced in DLCCT provide a classification system for relevant research examining the predictors of youth offending. Developmental prevention provides a basis for policy makers to establish the implementation of processes from a developmental perspective to enhance the prevention of offending behaviour (Homel & Freiberg, 2017).

2.2 Developmental and Life-Course Criminology Theory

Developmental and Life-Course Criminology Theory (DLCCT) became significant in the early 1990s when scholars began to emphasise the links between early childhood events and later developmental outcomes (Farrington, 2003; Farrington & Loeber, 2013; Sullivan, Piquero, & Cullen, 2012). DLCCT is primarily focused on explaining the development of criminal behaviour from childhood to adulthood, highlighting that risk factors to offending emerge early in life (Cullen, 2012; Farrington & Loeber, 2013). DLCCT works to develop the understanding of the prevalence, onset and desistence of offending patterns which contributes towards theory development for understanding the aetiology of crime (Dennison, 2011; Farrington & Loeber, 2013). Two broad components of DLCCT described by Farrington and Loeber (2013) are (1) the influence of risk and protective factors at different ages, and (2) the influence of life events transitions, turning points, and trajectories. These two components form the foundation of DLCCT and contribute towards the identification of risk factors of youth offending (Farrington, 2003; Farrington & Loeber, 2013; Sullivan et al., 2012).

2.2.1 Risk and Protective factors

DLCCT identifies five domains of risk factors within a person's developmental system, these are individual, family, school, peers, and community domains (Farrington, 2003). The classification of the differing domains is drawn from research on ecological contextualism such as Bronfenbrenner's bioecological model of human development (Bronfenbrenner, 1977, 1979; Tanner-Smith, Wilson, & Lipsey, 2013). The domains are interrelated, bidirectional, and influence a person's development through relational processes occurring within and across the domains (Bronfenbrenner, 1979; Lerner, 2001; Tanner-Smith et al., 2013). Risk factors in any of these domains is said to increase the likelihood of offending

whereas protective factors decrease the likelihood of offending (Dennison, 2011; Tanner-Smith et al., 2013). Few studies explore protective factors (Dennison, 2011). Specific influences within the five domains include biological, psychological, and social factors such as mental health, hyperactivity-impulsivity, child physical abuse, child neglect, parental conflict, delinquent peers and neighbourhood factors (Tanner-Smith et al., 2013). A proportion of youth offenders have backgrounds with the presence of multiple risk factors across all domains throughout their lives, others have no prior adversities and some youth with multiple risk factors do not offend in adolescence (Farrington & Loeber, 2013; Tanner-Smith et al., 2013; Cullen et al, 2012). Even so, research in youth offending has identified multiple risk factors predicting criminal behaviour that can be classified according to these five domains, factors within the individual and family domain specifically relate to this study. The second component of DLCCT addresses the influences of life events.

2.2.2 Life Event Effects

Life events can act as risk or protective factors and consideration needs to be given to the timing, nature, number, absence or presence of these experiences (Farrington & Loeber, 2013; Tanner-Smith et al., 2013; Cullen et al, 2012). Different factors will have different influences depending when they have occurred in an individual's life, and particular periods in development may be more vulnerable to channelling a child toward criminality than others (Farrington, 2003; Thornberry, Ireland, & Smith, 2001). DLCCT refers to life events as trajectories, transitions and turning points (Farrington, 2003; Sampson & Laub, 1995). Sampson and Laud (1995) provide descriptions of these three components and the relationships they can have on the developing individual. Trajectories refers to the long-term developmental pathways or patterns of behaviour over an individual's life span; for example, offending trajectories such as adolescent limited and life-course persistent offenders

(Sampson & Laub, 1995). Transitions refer to life events that are short-term and can take place at any point along an individual's trajectory such as beginning school, joining a gang, or enrolling in an intervention programme (Sampson & Laub, 1995). Turning points refer to the connection between transition and trajectories, and explain specific events or sequence of events that may have a significant impact on the nature and degree of change for an individual's developmental trajectory (Boman & Mowen, 2018; Sampson & Laub, 1995). For example, turning points can include changes to family structure, formation of new relationships, or introduction of prevention and/or intervention strategies. A transition provides the opportunity for a turning point, but by itself is neither sufficient nor necessary for a turning point. DLCCT assumes that family factors, social structure, and culture will impact the influence life events have on an individual's life-course alongside the developmental period these transitions or turning points occur (Boman & Mowen, 2018). There were no New Zealand studies found which attempted to contribute to DLCCT through exploring childhood life events and their relationship to youth offending utilising non-offending police administration data.

DLCCT also considers the impact of more distal organisations on an individual's development such as government agencies, policy, and systems along with the historical time in which they exist (Tanner-Smith et al., 2013; Dennison, 2011). For example, policing processes and policies for events such as family harm may impact on the positive or negative developmental pathways of an individual directly or indirectly by the interactions police officers have with family members, information gathered, risk factors identified, and appropriate referrals made (Cox et al., 2011; Dennison, 2011; Sanden et al., 2017). These experiences all have an ability to influence and shape children's belief, values and attitudes about the justice system, policing and their responsibility to obey the law (Cox et al., 2011; Dennison, 2011; Sanden et al., 2017), and may impact future experiences with police and

later offending behaviour (Dennison, 2011). The following section explores research on the predictors of youth offending classified according to the relevant domains of risk and protective factors introduced by DLCCT.

2.2.3 Individual Domain

A wide range of individual factors are associated with criminal behaviour and offending in adolescence, including biological and psychological factors. It is not practical to cover every individual factor that contributes to criminal offending in adolescence in this study. For example, genetic and neurobiological factors can influence youth offending but go beyond the purpose of this thesis (Beaver, DeLisi, Wright, & Vaughn, 2009; Feld & Bishop, 2011). Factors relevant to the current study will be reviewed including ethnicity, gender, age, and psychological and behavioural issues.

Ethnicity

Internationally, indigenous populations are reported as overrepresented in the criminal justice system (Elers, 2012; Gutierrez, Chadwick, Wanamaker, & Justice, 2018; Marie, Fergusson, & Boden, 2009). Gutierrea, Chadwick and Wanamaker (2018) report on international crime rates according to countries such as Canada, Australia and New Zealand. The over-representation of indigenous peoples within crime statistics is an enduring issue for these countries. For example, 23% of the offender population in Canada represent indigenous peoples (e.g. First Nations, Inuit and Metis) (Gutierrez et al., 2018), yet account for only 4.3% of the total population (Gutierrez et al., 2018). Similarly, 27% of imprisoned offenders in Australia identify as Aboriginal and Torres Strait Islander peoples, and in New Zealand 50% of the prison population identify as Māori or Pacific Islander despite accounting for approximately 22% (15% Māori and 7% Pacific Islanders), of the total population (Gutierrez et al., 2018; Statistics New Zealand, 2014).

Specific to New Zealand, the Ministry of Justice (2018) reports on ethnicity trends in children and youth prosecutions (10-16 years). Ethnicity trends showed that Māori had a higher proportion, (63%) of charges in court prosecutions in comparison to European (22%) and Pacific (9.44%); the remaining were classed as 'other' or 'unknown'. Further reporting of children and youth who identify as Māori increased between 2007–2017 from 46% to 63% (The Ministry of Justice, 2018), suggests individuals who identify with a Māori cultural identity are more likely to be arrested, convicted, and come to police attention than other ethnic groups in New Zealand (Marie et al., 2009; McCreanor et al., 2014).

Bias within the criminal justice system is reported as an explanation for the high number of individuals with a Māori ethnic identity in the crime statistics (Elers, 2012; Gutierrez et al., 2018). For example, research suggests that Māori are at greater risk of being approached by police, arrested and convicted in court in comparison to non-Māori who may have committed the same crime (Elers, 2012; Gutierrez et al., 2018). Ethnic bias was also suggested for the unequal distributions of ethnic minority groups' involvement with the justice system in the United Kingdom, United States and Australia (Gutierrez et al., 2018).

Marie, Fergusson and Boden (2009) reported findings on ethnic identity and criminal offending from the Christchurch Health and Development longitudinal study. They explored the role of Māori cultural identity in predicting criminal offending by examining offending trends amongst three different ethnic groups: non-Māori, sole Māori (identified as Māori only), and Māori/Other cultural identification (identified they belong to other ethnic groups as well). Findings reported cultural identity is not predictive of higher rates of offending alone. For example, sole Māori and Māori/Other cultural identity groups were at higher risk of offending than non-Māori, yet sole Māori were at lower risk than those who identified as Māori/Other. Furthermore, confounding factors such as personal adjustment, family factors and socioeconomic status were found to increase the prediction of offending (Marie et al.,

2009). The more confounding factors present in an individual's environment the more likely they are to offend, particularly if the confounding factors outweigh the protective factors (Gutierrez et al., 2018; Marie et al., 2009). Other confounding factors specific to ethnicity include political marginalization, specific systemic discrimination, and the effects of colonisation (Gutierrez et al., 2018). Strategies have been adopted by the New Zealand government to improve the criminal justice systems response to Māori; for example, staff recruitment and training to increase the number of Māori working within policing and other justice roles, specialised role for Māori staff, and specialty Māori advisors and liaison officers (Elers, 2012; Gutierrez et al., 2018; Marie et al., 2009).

Gender

Males consistently outnumber females in crime statistics (Lim, Lambie, & van Toledo, 2018; Savolainen et al., 2017; Topitzes, Mersky, & Reynolds, 2011). For example, Statistics New Zealand (2018) reported on the gender of youth offenders from June 2017 to June 2018, where 79% of offenders were male, with the remaining (21%) being female. However, there is an increasing rate of female youth offending with their crime types becoming more serious (The Ministry of Justice 2018; Lem et al., 2018). Lim et al., (2018) recommend further research in the female offending trajectory to inform gender specific interventions.

Variations in the trajectories to criminal offending exist across gender (Lim et al., 2018; Topitzes et al., 2011). For example, Topitzes et al., (2011) found child maltreatment was a significant predictor of youth offending for males and even stronger for females (Topitzes et al., 2011). Negative peer associations and externalising behaviour problems in childhood are stronger predictors of youth offending for males, with mental health problems and comorbidity being more prevalent amongst female offenders (Berthelot, McNeal, & Baldwin, 2018; Savolainen et al., 2017; Topitzes et al., 2011).

Age

A link between age and criminality is widely supported in research. Hirschi and Gottfredson (1983) introduced the age-crime curve illustrating the peak age of offending onset being between 8 to 14 years old, with increases in offending occurrences between 15 to 19 years and the peak age of desistance being between 20 to 29 years (Dennison, 2011). The notion of the age-crime curve is reflected in several key longitudinal studies, particularly the notion of increased offending in adolescence from 15 to 19 years (Dennison, 2011).

Sampson and Laub (1995) contributed to the age and crime literature by proposing a general age-graded crime theory. Their findings suggested that the earlier an individual starts to offend, the longer they will persist, associating persistence to informal social controls in both childhood and adulthood (Dennison, 2011; Farrington, 2017; Sampson & Laub, 1995). Desistance was associated with marriage, job stability, new opportunities or routines, and developing strong adult social bonds. Absence of these turning points lead to persistence in criminal offending (Dennison, 2011; Farrington, 2017; Sampson & Laub, 1995). They found in general as age increased, the less likely individuals were to commit crime and continued criminal activity was associated with negative views of institutional authority, supporting the notion of justice system contact potentially exacerbating criminal tendencies (Farrington, 2017; Wiley & Esbensen, 2016).

Existence of risk and protective factors within the individual's ecological context can influence the age a person engages in crime (Dennison, 2011; Farrington & Loeber, 2013; Hawkins et al., 2003; Moffitt & Caspi, 2001; Thornberry, Krohn, Lizotte, Smith, & Porter, 1998). For example, Moffitt and Caspi (2001) describe differing predictors for AL and LCP youth offenders. Specifically, they describe factors for the LCP group consisting of a combination of inadequate parenting, temperament and behavioural problems, early onset of antisocial behaviour, and neurocognitive problems (Mossman, 2010; Moffitt & Caspi, 2001).

In comparison, predictor variables for AL offenders tend to lean towards peer relationships and social pressures (Mossman, 2010; Moffitt & Caspi, 2001). Moffitt and Caspi, (2001) suggest that AL offenders lack a pathological history and this may contribute to their ability to desist offending in adulthood. They also suggest that while LCP offenders attract delinquent peers, AL offenders are more likely to be enticed to and persuaded by delinquent peers such as those following a life-course persistent trajectory (Moffitt & Caspi, 2001).

An earlier age of onset predicting a longer criminal career and a greater number of offences has been found in several longitudinal studies. Hawkins, Smith, Kosterman, Catalano and Abbott (2003) reported on findings from the Seattle Social Development project, a longitudinal study utilising self-reports and surveys relating to crime and violence examining the development of antisocial and prosocial behaviour. The study consisted of 808 consenting multiethnic urban children, whom over the course of the study completed nine interviews. Hawkins et al., (2003) found an earlier age at onset of criminal behaviour predicted an increased number of offences. Furthermore, they reported offending frequency increased with age from 11 to 17 in self-reports but not in court referrals. The questionnaires showed a larger number of self-reported delinquency in comparison to official court data, suggesting that many youths had not been sent to court for the offence, or had not been caught.

Similarly, Thornberry et al., (2003) reported on findings from the Rochester Youth Development Study. Children who began offending earlier continued offending into adulthood at a larger portion then children who started offending later. 39% of children in the study who began offending between 4 and 10 years self-reported offending at age 19 to 22 years. In comparison, almost half that portion (23%) with onset offending at 13 and 14 years old were still offending between 19 to 22 years of age. Nevertheless, even though early offending was much more predictive of later offending, 60% of those who began offending at

or below age 10 were not involved in offending between 19 to 22 years. This suggests that a large portion do not continue offending despite an early age of onset.

To date, studies have not explored how non-offending police contact is associated with later offending. The role of age at first contact with police in a non-offending capacity, such as being a victim or witness to an offence, and associations with later criminal offending, is an open question. Overall, both age and gender are in effect proxy variables or markers, in that they are easy to measure and point to a number of potential hypotheses to test, but in themselves they do not really point to any of the underlying causal processes (Cicchetti & Hinshaw, 2002).

Psychological and behavioural characteristics

Youth offenders are more likely to have psychological and behavioural challenges compared to non-offenders (Fazel, Doll, & Långström, 2008; Fergusson et al., 2015; McArdle & Lambie, 2018; Rucklidge, McLean, & Bateup, 2013). Such challenges can include conduct disorder, impulsivity and hyperactivity, substance abuse, intellectual difficulties, anxiety and depression (Fazel et al., 2008; Fergusson et al., 2015; McArdle & Lambie, 2018; Rucklidge et al., 2013). For example, Fazel, Doll and Langstrom (2008), conducted a meta-analysis utilising international research on psychological issues amongst youth offenders incarcerated in detention and correctional facilities. Youth offenders were reported as more likely to be diagnosed with psychosis, conduct disorder (CD), attention deficit hyperactivity disorder (ADHD), depression and to be at risk for suicide ideation and self-harm in comparison to the general youth population. Fergusson, Boden and Horwood (2015) reported similar findings regarding externalising behaviours from the Christchurch Longitudinal data. They collected behavioural reports exploring externalising behaviours such as ADHD and CD from parents and teachers. Symptoms of ADHD and CD were strongly related to crime and antisocial behaviour in adolescence and adulthood with CD more predictive of offending in comparison

to ADHD and other attention related symptoms (r = .72 for ages 7-9; r =.53 for ages 14-16); (Fergusson et al., 2015).

Similarly, McArdle and Lambie (2018) report findings on the high levels of psychological and behavioural difficulties amongst high-risk recidivist youth offenders. Mental health needs of youth (N = 204) in a New Zealand secure facility were screened using the 'Massachusetts Youth Screening Instrument – Second Version' (MAYSI-2). The participants consisted of high-risk recidivist youth offenders aged between 13–17 years. Results showed 79% of the participants scored above the clinical cut-offs, suggesting high rates of mental health difficulties amongst this cohort. In particular high levels of emotional, psychological, behavioural problems and high rates of substance abuse were present. The two highest scoring scales were substance misuse and the anger-irritability scale followed by depression, anxiety, traumatic stress and suicidal ideation (McArdle & Lambie, 2018).

Adolescent offenders have also been associated with intellectual difficulties (Loeber, Menting, Lynam, & Moffitt, 2012; Rucklidge et al., 2013). For example, Loeber et al., (2012) reported on findings which examined cognitive impulsivity and intelligence amongst participants of the Pittsburgh Longitudinal Youth study. Cognitive impulsivity was defined as the ability to switch, stop, and initiate a sequence of behaviour. Findings stated high cognitive impulsivity and low IQ increased the probability of a young person being charged with an offence. Similarly, Rucklidge et al., (2013) explored criminal offending and learning disabilities in New Zealand youth offenders (n = 60). Information regarding their developmental history was obtained from parents/caregivers and intellectual ability was assessed by using an assessment of general intelligence and assessment of learning difficulties. A risk of reoffending screen measure was used to assess their overall risk for re-offending and police records were obtained for a proportion of the participants four years after the intelligence assessments. Results reported 91.67% (n=55) of the participants had at

least one average score or a composite score below 85 on the learning difficulty test assessing reading, arithmetic or oral language. They reported a majority of the participants scored below the 'normal' mean of 100. Of the participants assessed for reoffending (*n*=51), all except four had reoffended. The study showed a high rate of learning disabilities amongst incarnated youth and identified a predictive link between reading comprehension and future offending. A number of the participants were also found to have significant ADHD symptoms.

Overall, the evidence suggests that youth offenders are more likely to have psychological or behavioural issues concurrently and sequentially, depending on other risk and protective factors occurring within their environment. The above studies reinforce the notion of the vulnerability and the complex nature of children in contact with police. However, not all children with such comorbid conditions commit crime and not all youth who offend have behavioural or psychological issues or are incarcerated (Fazel et al., 2008). It is important to note that the individual factors described above can influence factors within the family domain, and vice-versa. For example, mental health and comorbid conditions are likely to negatively affect peer, family and school relationships. Conversely, family, peer and school factors can affect a youth's mental health (Mallett, 2014).

2.2.4 Family Domain

The dynamics and structure of a child's family setting also contributes to the development of youth offending (Farrington, 2003; Fergusson & Horwood, 1998; Holt, Buckley, & Whelan, 2008; Logan-Greene, Tennyson, Nurius, & Borja, 2017). The family setting is where children internalise basic values, beliefs, attitudes and general patterns of behaviours that give direction to subsequent behaviours (Boshier, 2011; Feld & Bishop, 2011). Key processes in the family domain, such as family harm, illustrate the intergenerational transmission of child

and partner abuse witnessed or experienced in childhood and early adolescence being carried over to relationships in adulthood (Abramovaite, Bandyopadhyay, & Dixon, 2015; Farrington & Loeber, 2013). Family harm can take on different forms and can include intimate partner violence (IPV) and child maltreatment (e.g. child abuse and neglect). The definition of family harm encompasses physical, sexual or emotional abuse and neglect and can vary in severity and frequency. Children and youth can be directly exposed to these events as witnesses, victims or both, and exposure can have detrimental consequences on their developmental trajectories (Fergusson & Horwood, 1998; Holt et al., 2008). Family psychosocial factors such as parenting style and parental mental health also influence a child's developmental trajectory. Two key components within the family domain will be reviewed below, family harm and family psychosocial factors.

Intimate Partner Violence

Intimate partner violence contributes towards adolescent offending (Caspi et al., 2002; Fergusson & Horwood, 1998; Holt et al., 2008; Laurier, Hélie, Pineau-Villeneuve, & Royer, 2016; Logan-Greene et al., 2017; Widom & Maxfield, 2001). For example, Fergusson and Horwood (1998) explored exposure to intimate partner violence in childhood and psychosocial adjustment in young adulthood using data from the Christchurch Longitudinal study. The participants were questioned about their adolescent offending behaviour between 17 to 18 years; in particular violent and property offences were explored. Retrospective reports examining the participants' experience of interparental violence was obtained alongside assessments on psychosocial adjustments such as mental health, criminal offending and substance abuse. Findings showed increased rates of adjustment issues, including criminal offending at 18 years. In particular, they found father-initiated violence was associated with increased risk of property crime, conduct disorder and anxiety, in comparison to mother-initiated violence which was more associated with substance abuse. Fergusson and

Horwood (1998) also reported on the role of the wider social mechanism within the family context. Participants with high rates of interparental violence in their family had a wide range of other adverse factors such as socioeconomic disadvantages, parental adjustment issues, child abuse and parental separation. They concluded that interparental violence was often characterised by dysfunction, child abuse, and social disadvantage. This finding was further supported by Holt et al., (2008), who completed a meta-analysis on family violence exposure. Their review found children and adolescents exposed to intimate partner violence were at higher risk of directly experiencing other adversities such as physical, sexual and emotional abuse, putting them at risk of developing psychological and behavioural issues. When considered at the individual level, exposure to intimate partner violence is also linked to offending in adolescence (Fazel et al., 2008; Holt et al., 2008; Loeber et al., 2012; McArdle & Lambie, 2018).

Child Maltreatment

Child maltreatment can have detrimental consequences on a child's developmental trajectory, including offending in adolescence (Farrington & Loeber, 2013; Laurier et al., 2016; Logan-Greene et al., 2017; Mallett, 2014). For example, studies report psychological factors such as depression, PTSD, anxiety and behavioural challenges, as described in the individual domain, can be outcomes of child maltreatment (Logan-Greene et al., 2017; Mallett, 2014). Changed family environments, including children entering state care, have been associated with child maltreatment (Farrington, 2017; Sogar, 2017; White, 2017). Laurier et al., (2016) reported on the impacts of the duration of maltreated children referred to a care and protection service and youth offending. Findings showed persistent maltreatment from childhood through to adolescence increased the probability of youth offending, as opposed to children who mostly suffer maltreatment in childhood alone (Laurier, et al., 2016).

Furthermore, Mallett, (2014) and Logan-Greene et al., (2017) report on the impact of family violence exposure and direct victimisation on an individual's ability to cope. They report children exposed to such adversity early in life may not develop adequate coping mechanisms, which increases vulnerability to subsequent stressors throughout their lifespan. Reporting child maltreatment has the potential to alter physiological and behavioural responses to subsequent stress which can increase risk for mood and anxiety disorders (Logan-Greene et al., 2017; Mallett, 2014). Overall, the impact of exposure to family violence and victimisation is diverse and indicative of other confounding factors within a child's environment.

Multiple Familial Adverse Experiences

Research incorporating the Adverse Childhood Experience (ACE's) questionnaire has further added to our understanding of the environmental complexities youth offenders can be exposed to in their family environment (Baglivio et al., 2015; Felitti, 1998; Logan-Greene et al., 2017). The ACE questionnaire gathers information about the multiple stressors in individuals' households instead of examining one stressor such as intimate partner violence or child maltreatment. Categories on the ACE questionnaire include sexual, physical and emotional abuse, household substance abuse, household mental illness, witnessing violence in the home, having a member of the household incarcerated, parental separation or divorce and neglect. Baglivio, Wolff, Piquero and Epps, (2015) examined the relationship between ACEs and juvenile offending trajectories. Their sample consisted of 64,000 juveniles referred to the Florida Department of Juvenile Justice who? completed the ACE questionnaire. The results showed juveniles were over four times more likely to have experienced four or more ACEs. A higher number of ACEs was associated with an earlier age at first arrest and a greater likelihood of arrest from childhood through late adolescence (Baglivio et al., 2015). ACE research tends to focus more on the presence of the adversity; the current study explores

type of contact with police (e.g. exposure to violence or sexual offending) and unlike ACE research, is able to explore frequency and timing from the first recorded police event.

Research more often reports on exposure to family harm offences in comparison to minor types of offending. A child is more likely to be spoken to by police and child protective services if they are exposed to family harm as a witness or victim in the family context, compared to a parent coming home with a stolen car, other stolen property or cultivating cannabis (Herbert & MacKenzie, 2014; Laurier et al., 2016). These types of offending can occur in the family environment without family harm episodes and are likely to influence youth offending. However, links between early childhood exposure to dishonesty and other offending categories are less explored in literature.

Family Psychosocial Factors

A child's development can be negatively affected by parent psychosocial factors such as parenting styles, parental adjustment (e.g., divorce, health, or low-income), and mental health issues (Feld & Bishop, 2011; Harris-McKoy, 2016; Sogar, 2017). For example, McCord (1979) found that at age ten, the strongest predictor of later criminal convictions for violent offending was parenting style (aggression and poor supervision) and parental conflict. Research has replicated these findings, particularly Derzon (2010), who conducted a meta-analysis exploring family features and problem criminal and violent behaviour. The meta-analysis examined prospective longitudinal studies selecting 21 family constructs associated to violent and criminal behaviour. The constructs included several psychosocial factors such as parental separation, child-rearing skills, discipline, discord and stability, family stress, family size, socioeconomic factors and parental psychopathology. Derzon (2010) concluded that family characteristics were highly predictive of antisocial behaviour, in particular parental separation and parental psychopathology were strongly predictive of violent behaviour.

Other studies have also reported significant associations between family characteristics and youth offending (Feld & Bishop, 2011; Loeber et al., 2005). In the Pittsburgh Youth Survey, exposure to parental separation was the strongest predictor of homicide offending (Farrington, Loeber, Stallings, & Homish, 2008; Loeber et al., 2005). Furthermore, marital discord, divorce, single-parent families, large family size, and sibling conflict have all been associated with an increased risk of youth offending (Feld & Bishop, 2011; Huijsmans, Eichelsheim, Weerman, Branje, & Meeus, 2018; Sogar, 2017). Having positive support from the wider family and community are deemed as protective factors reducing the likelihood of youth offending.

2.2.5 Peer Domain

The family domain is more heavily weighted towards risk factors associated to victimisation and exposure to harm and subsequent youth offending, whereas the peer domain's focus is on delinquent peers (Farrington & Loeber, 2013). Peer relationships become more significant in an individual's life in adolescence in comparison to childhood (Farrington & Loeber, 2013), and a majority of offences committed by youth are committed with associates (Dennison, 2011; Fine et al., 2016; Haynie & Osgood, 2005). For example, marijuana and alcohol use, and property related offending, such as burglary and wilful damage, are more likely to be committed in an adolescent group rather than individually and are common occurrences amongst youth offenders (Feld & Bishop, 2011; Warr, 1993). Explanations for this socially related increase in offending for adolescents is their heightened sensitivity toward peer pressure for fear of being rejected, a desire to experience new things, and efforts to gain independence from parents (Stolzenberg & D'Alessio, 2008). Female youth delinquency has been associated with having a male as a best friend, mixed gender peer groups, and attending a mixed gender school (Berthelot et al., 2018; Johnson, 2004). Furthermore, romantic peer

relationships are associated to youth offending for females in particular (Berthelot et al., 2018).

Ideas about policing and the justice system are formed vicariously through peers' interactions with the justice system (Fine et al., 2016). Fine and colleagues reported that adolescents who had friends arrested by police reported more negative attitudes towards police and the justice system compared to those who did not have friends arrested. Having a sense of injustice is associated with undermining the responsibility to obey the laws and can lead to offending. In contrast, peers can also act as a protective factor for youth struggling with family or mental health challenges (Farrington & Loeber, 2013).

As per DLCCT, the adolescent years can also consist of turning points and transitions to deter a criminal trajectory, or vice versa. Risk factors in the peer domain are significant to note; however, this thesis does not explicitly explore peer associations in childhood and criminality. Police do record crimes and incidents that are more likely to involve multiple peer groups for example, burglary, wilful damage, or truancy. Specifically, role categories of "person of interest" or "complainant" when connected with certain types of offences or incidents are more suggestive of peer affiliations.

2.2.6 Summary

DLCCT provides a foundation to understand the predictors of youth offending from an ecological perspective (Dennison, 2011; Farrington, 2003; Farrington & Loeber, 2013; Feld & Bishop, 2011). Predictors of criminal offending are evident early in an individual's life-course across multiple domains: individual, family, peer, school and community. Bi-directional and reciprocal processes occur across each domain influencing the individual's development of criminal tendencies (Dennison, 2011; Farrington, 2003; Farrington & Loeber, 2013; Feld & Bishop, 2011). Risk domains closer in proximity to the individual have greater

influence on their developmental processes. Police attend a number of events related to the individual and family domain, including antisocial behavioural tendencies, mental health episodes, intimate partner violence and child maltreatment (New Zealand Police, 2011). In light of that, risk factors within the individual and family domains such as demographics, type of police event and whether the event was related to family violence are the primary variables explored in this thesis. The remaining risk domains, although constituting important contexts go beyond the scope of this study. The next section introduces the theory of developmental prevention.

2.3 Developmental Prevention

Developmental prevention refers to the implementation of policy and interventions to prevent the development of criminal potentials in individuals (Boyes, Hornick, & Ogden, 2010). This theory began to gain momentum in the late 1990s, similar to DLCCT where the considerations of the direct ecological relationships individuals have in childhood and the multiple contexts in which the relationships occur facilitate optimal development or maladaptive development (Boyes et al., 2010; Farrington, 2017; Welsh & Farrington, 2015). The majority of crime prevention programs focus on youth offenders, young adults, and adults with a primary aim of preventing recidivism as opposed to preventing the onset of criminal behaviour (Manning, Smith, & Homel, 2013; Tremblay & Craig, 1995). In 1999, the Australian National Crime Prevention Consortium published a report highlighting the need for a developmental approach to preventing criminal behaviour, emphasising the significance of early childhood interventions. This report highlighted a key aim of developmental prevention which is to challenge conditions that give rise to antisocial behaviour, child maltreatment, and crime, before these issues arise or they become entrenched (Prevention, 1999).

With the rise in developmental science, the last decade has seen a number of developmental prevention programs implemented in families, schools, preschools, and other contexts in Australia and New Zealand, to strengthen protective factors and decrease risk factors in child development which can prevent criminal behaviour (Farrington, Gaffney, Lösel, & Ttofi, 2017). For example, Farrington et al., (2017) reviewed 50 systemic reviews of community developmental prevention programs targeted at children and adolescents. Included in their review were evaluations exploring the outcomes of early intervention on offending, delinquency, bullying, aggression and violence. They found that all types of programs, whether community, family, individual or school-based were effective at preventing antisocial behaviour and concluded developmental prevention is effective and increased investment justified. Similar results have also been found in earlier reviews of developmental prevention programs (de Vries et al., 2015; Manning, Homel, Smith, & Review, 2010; Suter, Bruns, & review, 2009). Interventions aimed at young adults and adults have also seen promising results, although preventive interventions early in life targeting the most vulnerable have demonstrated positive returns on investment across the life-course for both individuals and wider society (Farrington et al., 2017; Manning et al., 2013).

Overall, developmental prevention is about strengthening developmental systems, highlighting the role of institutions within the domains of development, such as the police, to implement policies, processes, and practices to confront the conditions that give rise to a maladaptive developmental pathway including criminal behaviour (Boyes et al., 2010; Dennison, 2011; Farrington, et al., 2017; Homel & Freiberg, 2017; Welsh & Farrington, 2015). Ultimately developmental prevention aims to reduce the number of children and young people who are committing crime and in doing so reduce later offending and victimisation (Dennison, 2011; Homel & Freiberg, 2017).

The previous section highlighted the diverse range of ecological factors and early life-course experiences that are associated with adolescent offending. Police attend a number of these adversities (New Zealand Police, 2011). Developmental prevention highlights the significant role police can have in implementing policies and processes from a developmental prevention perspective particularly when dealing with children and adolescents to prevent crime and victimisation (New Zealand Police, 2011). This suggests that police have the ability to identify risk and protective factors early, even when dealing with minor events or with children or youth in non-offending capacities. As police are often the first agency in contact with a child or young person experiencing adversity or challenging life events (New Zealand Police, 2011; Wiley & Esbensen, 2016), this logically suggests that police could have an important role in flagging these risk factors that could then be targeted by social service and community interventions. For example, part of standard police process is to make referrals to child protective services when children are identified at risk of sexual or physical abuse or neglect.

2.4 Application to Current Project

Developmental theories provide a multifaceted foundation to explore the diverse nature of criminal offending across different social domains in children and young people's ecological systems (Farrington, 2003; Farrington & Loeber, 2013). Furthermore, they provide an opportunity to explore and understand institutional roles in developmental prevention, such as the police (Homel & Freiberg, 2017; Dennison, 2011). Chapter two was a literature review on two developmental theories, DLCCT and developmental prevention. These two theories assist in setting the context for exploring childhood non-offending police contact and youth offending and provide a basis for contributing towards the notion that police agencies have a role in prevention initiatives. A variety of events police attend can include the presence of a child or young person, including family harm incidents, these events can be explored in this

study which may provide further information on offending trajectories. The current study is not able to measure psychosocial factors but is able to explore children's exposure to events such as family violence or child maltreatment, where research indicates the potential presence of other confounding factors. The following chapter introduces systems within the New Zealand Police agency.

Chapter Three: Police Model

3.1 Introduction

The role of the New Zealand Police includes preventing crime, enforcing the law and maintaining order in the community (New Zealand Police, 2011, 2017). Police are intimately involved in juvenile justice issues. Rather obviously, juvenile offenders will be involved with the police upon apprehension or when questioned around suspected involvement or knowledge of criminal activity. For those youth who have been victimised or whose welfare is at risk, they are also likely to be referred to police, often for their own protection. Thus, for both juvenile offenders and victims, local police are often their first contact with juvenile justice authorities, and regardless of whether a youth is a lawbreaker, a victim, or a witness, New Zealand law empowers the police to decide what the next step is (Martin, 2005). The aim of this chapter is to discuss the New Zealand Police 'Prevention First National Operating Model' and literature around the impact of contact with police. As mentioned earlier, Appendix A illustrates the youth justice process in New Zealand from apprehension to conviction for young people suspected of criminal activity.

3.2 The Prevention First National Operating Model

The Prevention First National Operating Model was implemented by New Zealand Police in 2011 (New Zealand Police, 2011). In a report issued by the New Zealand Police (2011) the style of policing at that time was described as unsustainable due to changes in technology, increased cost of crime, changes in public expectation of criminal legislation, and increasing demands for police services. For example, the cost of crime was estimated to be 11 billion dollars a year, police were experiencing a higher number of calls, and the time at each case was increasing (New Zealand Police, 2011; 2017). Therefore, the 'Prevention First National Operating Model' was proposed to counter these factors and utilise resources more

efficiently. The Prevention Model moved away from the traditional deterrent approach and amended objectives to focus on reducing crime by preventing victimisation and offending (New Zealand Police, 2011). Increasing police presence in high crime areas, improving prioritisation and triaging processes, being aware of community services for vulnerable people, and prioritising high-risk offenders were some suggested methods to achieve the objectives in the prevention model. Alongside these practical approaches, understanding the drivers of demand (families, youth, alcohol, road policing, organised crime and drugs) and attending to the needs of victims were emphasised as significant factors to consider (New Zealand Police, 2011). Drivers of demand are viewed as the frequent events police attend which are not criminal but which may provide opportunities for prevention (New Zealand Police, 2018). They appear to encompass risk factors within the five domains of risk proposed by DLCCT. For example, organised crime and gangs reflect factors within the peer domain, alcohol problems represent the individual domain, and road policing represents community and neighbourhood domains. The five demands cannot be viewed in isolation; often they co-occur again corresponding to DLCCT and the bidirectional interrelated relationships between risk factors or in this case 'demands' (New Zealand Police, 2018).

Youth are viewed as one of the drivers of demand and are prioritised under the Prevention Model (New Zealand Police, 2011). This corresponds to the individual domain and the age-crime curve; understanding that offending behaviour peaks during adolescence, but also that youth are vulnerable to being victimised and exposed to other drivers of demand, such as family or peer factors that may involve police attendance (Baglivio et al., 2015; Dennison, 2011; Farrington & Loeber, 2013). New Zealand Police (2011) highlighted several proposals for keeping children and youth safe in attempting to decrease the number of young people appearing in the criminal justice system. This included prioritising responses to children and young people subjected to or exposed to neglect, family harm, and child abuse;

to ensure at risk youth are identified early and prioritised for intervention and development programmes and to ensure youth offenders are responded to and dealt with swiftly and the use of alternative action encouraged (New Zealand Police, 2011; 2017). Actions to achieve this include: community constables working with schools and the community to promote and educate youth at risk around the consequences of abusing alcohol and drugs, and to promote healthy relationships. Other actions include completing risk assessments at family harm incidents and when youth are displaying antisocial behaviour (New Zealand Police, 2011; 2017; 2018).

The Minister of Social Development (2013) released a report on youth crime in New Zealand proposing the 'Youth Crime Action Plan' (YCAP). This report highlighted the trend of the number of children and young people (CYP) charged in court from 1992 to 2012. In 1992, 82 per 10,000 of CYP population were charged in court (*n*=2,990). This gradually increased, peaking in 2007 to 100 per 10,000 of the CYP (*n* = 5,063). Between 2007 and 2012 there was a significant decrease, with 74 per 10,000 of the CYP population charged in court in 2012, (*n*= 3016).

In 2014, the New Zealand Police released their annual summary 'Safer Communities Together' and reported on the progress of the Prevention First model. The report noted that Youth Crime was showing a downward trend. Youth court appearances for 14 to 16 years olds had dropped by 39%, down to 125 appearances per 10,000 of the population over five years (New Zealand Police, 2014). A contributing factor to a decrease in youth court appearances may be the encouragement of the use of alternative action for youth (The Ministry of Justice, 2013). Alternative action is aimed at those youth who are responsible for fewer crimes; it is a diversionary scheme in which youth offenders on their first or second offence are eligible to be diverted from the justice system, with an intervention plan in place with their parents/caregivers (New Zealand Police, 2018). As outlined in Appendix A, police

have several options before a young person is formally charged, suggesting that before a young person is prosecuted, they have had prior involvement with police, either as an offender or in a non-offending capacity. Few youth offenders have no prior history with police (Broidy et al., 2003; Raudino et al., 2013; Rivenbark et al., 2018). This implies the current system attempts to divert youth after they are already behaving antisocially and have been exposed to risk factors that contribute towards criminal tendencies.

3.2.1 Youth Crime Action Plan (YCAP)

The Youth Crime Action Plan (YCAP) is a strategy underneath the umbrella of the prevention model, to further reduce youth offending and decrease the number of youth appearances in court (The Ministry of Justice, 2013). The YCAP seeks to work together with other agencies and initiatives to reduce youth offending through a community approach that emphasises inclusion of school, health, family, and the greater community to build effective culturally responsive interventions (The Ministry of Justice, 2013). Other prevention initiatives include 'Crash Prevention' and 'The Turning of the Tide - Whānau Ora Crime'. A particular focus of YCAP, is reducing the gap between Māori and Non-Māori offending. Acknowledging a young person's past and obtaining a full scope of their development may provide significant insight into their current motives for offending and assist in intervention and resolution methods (Brainwave Trust Aotearoa, 2013; Maxwell, 2009; Asquith et al., 2017). The needs and vulnerability of a youth offending is considered and a significant number of these individuals are held accountable for their offending outside of the formal justice system, applying to the adolescent limited offenders but not the chronic persistent youth offenders (The Ministry of Justice, 2013).

New Zealand Police (2018) reported that 75% of children and young people are diverted from the justice system; however, the current system struggles to change the criminal behaviours of the chronic and persistent youth offenders, 63% of whom have a

Māori cultural identity (New Zealand Police, 2018). If we apply these statistics to a developmental taxonomy, it would seem that young people who fall into the adolescent onset/limited trajectory are being diverted (Moffitt & Caspi, 2001; New Zealand Police 2018; Odgers et al., 2008). This also suggests that the reduction in youth offending statistics may not be the result of behaviour change, but rather, may represent changes in the way young people are processed through the justice system, resulting in fewer court appearances and prosecutions for their offending (New Zealand Police, 2018). In contrast, this strategy may not have altered the trajectories of the chronic life-course persistent offenders who are likely to continue offending at a similar rate and are responsible for a number of youth offending incidents (New Zealand Police, 2018; Odgers et al., 2008).

3.2.2 Youth Offending Risk Screening Measure

The prevention model emphasises the importance of understanding and identifying risk of offending early. New Zealand Police utilise the 'Youth Offender Risk Screening Tool' (YORST) to assess risk of offending or reoffending in youth. The YORST was influenced by the 'General Personality and Cognitive Social Learning (GPCSL) theory' of criminal conduct introduced by Andrews, Bonta and Hoge (1990). The GPCSL points to multiple routes to engagement in criminal behaviour and emphasises that criminal behaviour is learned by the interactions in an individual's ecological context, similar to DLCCT. GPCSL highlights eight risk factors correlated to criminal behaviour including: criminal history, pro-criminal attitudes, pro-criminal associates, antisocial personality patterns, family/marital circumstances, school/work circumstances, substance abuse, and leisure/recreation factors (Andrews & Bonta, 2017). The YORST is used by youth aid officers when children (aged 10-13) and youth (14-16) come to the attention of the police due to offending (Mossman, 2010). The purpose of the YORST is to identify a young person's risk of reoffending and the most appropriate response. However, the YORST is not always filled out by police at second event

youth encounters for either offending, missing person, or truancy occurrences (New Zealand Police, 2017). Often it is only completed for a youth offender when they go to a family group conference and sometimes the young person has been in contact with police multiple times before then.

Other risk assessments are completed for children and young people in family harm incidents, when attending police officers have concerns for the care and protection of the child, or when a child has been involved in an offence involving physical or sexual abuse or neglect and a referral is made to the Oranga Tamariki - Ministry of Children. In this regard, risk assessments are either focused on the link between prior antisocial behaviour and future antisocial behaviour or care and protection concerns. Both DLCCT and Developmental Prevention theory imply that earlier risk assessments may be more successful at identifying future criminal behaviour.

3.3 Application to Current Study

This chapter introduces current police strategies and processes for young people in Aotearoa New Zealand. The Prevention First National Operating Model provides a basis for focusing on the prevention of victimisation and offending before it arises. Police administration data records information connected to the individual and family domains, introduced by DLCCT. Exploring the types of offences and incidents that first bring children into contact with police, alongside the various roles that children occupy at the time of police contact, may help to identify the various ways that children come into contact with police and which of these (if any) is associated with later youth offending.

Chapter Four: Present study

4.1 Introduction

Childhood victimisation and youth offending can have long-lasting detrimental impacts. These impacts extend beyond victims and offenders, to their families, neighbourhoods, communities, and government. Consequences can be pervasive including psychosocial, behavioural, and psychological factors (Bernburg, Krohn, & Rivera, 2006; Farrington, 1977; Wiley & Esbensen, 2016). This chapter reflects on potential negative impacts of police contact, the role of covariates, and introduces the objectives of the current study.

4.2 Police Contact

Although police have the potential to prevent future crime and victimisation, literature on the impact of police contact addresses a number of risks associated with having contact with police, increased criminal identity being a primary concern. Labelling theory proposes that police contact can have a negative impact on the attitudes and behaviours of young people (Bernburg, Krohn, & Rivera, 2006; Farrington, 1977; Schaefer, Mazerolle, & Kapnoulla, 2017). Historically, the criminal justice system, including the police, functioned under the deterrence principle, which hypothesised that contact with the justice system will reduce subsequent criminal behaviour (Ward et al., 2014). However, labelling theory challenges the notion of deterrence by hypothesising that contact with the justice system, including the police, is more likely to increase a deviant self-concept, which leads to further criminal behaviour (Ward et al., 2014; Farrington, 1977).

Ward, Krohn, and Gibson (2014) examined the effects of police contact on trajectories of violence utilising a life-course framework. They analysed nine waves of data from the Rochester Youth development longitudinal study and identified three violent

trajectory groups: high offenders, low offenders, and non-offenders. When examining whether participants increased or decreased their offending after contact with police, the findings showed a small and statistically significant treatment effect for contact with police on violent crime, particularly for those in the low offender group. This study was not able to restrict the dataset to initial police contact as they specifically looked at contact with police following a violent event. Thus, the subjects may have already had multiple police contacts prior to the violent event (Ward et al., 2014).

Wiley and Esbensen (2016) also examined the effect of police contact examining the deterrence hypothesis. The participants for their study were gathered from the 'National Evaluation of the Gang Resistance Education and Training Program' (GREAT; n= 3820). Of the sample 79.7% had never been stopped by police, 14% had been, and 6% had previously been arrested. Those who had had previous contact with police scored higher on measures of delinquent behaviour and attitudes, including higher commitment to delinquent peers, less anticipated feelings of guilt and higher levels of delinquent behaviour. Wiley and Esbensen concluded the results supported labelling theory and the notion of police contact amplifying deviance opposed to deterring it. There were no noted discrepancies in this study between the different offending trajectories.

Individuals may feel that police target them, as opposed to serving justice, and this mindset may contribute to continued engagement in criminal behaviour (Ward et al., 2014). However, continued criminal engagement is not just a potential impact of police contact but the justice system as a whole (Veysey & Rivera, 2017). Veysey and Rivera (2017) reported findings that had implications for persistence and desistance in criminal behaviour for participants who had previous involvement with the justice system. The study explored the relationship between implicit criminal identity (ICI) and explicit criminal identity (ECI) through self-reports. ICI refers to automatic processes that can be activated outside a person's

conscious awareness, lack of motivational control and an inability to self-reflect; whereas ECI refers to processes founded in self-reflection, conscious awareness, and motivational control (Veysey & Rivera, 2017). The sample consisted of 106 community participants, 39% of whom had had previous involvement with the justice system through arrests, incarceration or/and convictions. Findings revealed both types of criminal identities were associated with justice involvement. ICI increased with age, whereas ECI decreased with age. Overall the study found persons with justice experience were more likely to label themselves as criminal and have a stronger ICI, forming damaging self-identities. Veysey and Rivera suggested an ICI could relate to a risk or vulnerability of persistent criminal behaviour, particularly with exposure to specific networks or contexts.

4.3 Contextual Factors

In considering DLCCT and Developmental Prevention, there are a number of influences that may be responsible for offending behaviour which contribute to further police contact and an offending trajectory aside from police contact alone. For example, a person's antisocial behaviour could be deterred or amplified depending on an individual's development and life-course context such as exposure to adverse events, delinquent peers and antisocial family members (Baglivio & Epps, 2016; Farrington, 2003; Farrington & Loeber, 2013; Schaefer et al., 2017). Individuals who have multiple contact with police may have exposure to a greater number of risk factors within their family and ecological contexts (Farrington & Loeber, 2013). This would increase a young person's probability of contact with police and other negative developmental consequences, which highlights the opportunity police have to identify risk and early intervention potentials.

Walton, Li, Barnes, and Newcombe, (2017) conducted a New Zealand-based study examining whether prior contact with police reduced the likelihood of suicide among

working aged men. Information on prior contact with police relating to domestic disputes, mental health, and threatened/attempted suicide was gathered (Walton et al., 2017). Although previous incidents relating to threatened or attempted suicide were the strongest predictors of suicide, the three types of police contact along with age and ethnicity all independently predicted suicide. Walton et al., reported that the main effects suggested police have a role in preventing suicide, primarily by way of identifying early intervention opportunities for people who are at-risk. The current study applies a similar logic in the exploration of how non-offending police contact in childhood may be associated with later offending in adolescence.

4.4 Current Study

As reflected in DLCCT, there can be multiple pathways to criminal offending. Risks for offending are apparent as individual characteristics and in the domains of family, peers, school, and the community, and include exposure to a range of adverse childhood experiences. Police attend a number of events that implicate the types of adverse childhood events and risk domains that are identified in the literature. Exploring police administration data for trends and patterns in childhood non-offending police contact has the potential to provide insight into youth offending trajectories and the timing of prevention and intervention efforts.

In New Zealand there is no research examining police data that explores the relationship between childhood non-offending police contact in childhood and later criminal behaviour in mid-adolescence (aged 14-16). A large amount of offending research explores childhood antisocial behaviour and youth offending. In light of the DLCCT, the identification of domains of risk and research on adverse childhood experiences, it is possible children may have significant exposure to police prior to any offending or deviant behaviour where the

child has been a victim, witness, informant, complainant, or 'subject of'. This may provide further understanding to the patterns and trends youth offenders are experiencing in childhood (0-13), specifically considering the child's role, category of police event, frequency of childhood police contact, timing, and the severity of the offence or incident that they are exposed to. Examining these patterns and trends may contribute to the DLCCT and the aetiology of youth offending.

Prospectively, the study will explore the nature of the relationship between non-offending police contact in childhood till age 14 and later police contact as an offender (14-16years). The term non-offending police contact is used to identify situations involving a young person, where an offence may have occurred, for which the young person is not the primary suspect or offender, but their role is a victim, witness, complainant, informant, 'subject of' or 'person at risk', these roles will be described further in the next section. The objectives of this study include the following:

Objective 1: (a) To develop a descriptive profile of children in contact with police in non-offending roles according to demographic characteristics and police factors including the category of police event, child's role type, frequency of contact with police throughout childhood, family violence exposure, and care and protection concerns.

(b) To extend this descriptive profile by comparing and contrasting the demographic characteristics and police administrative variables across those that went on to offend in adolescence with those who did not subsequently offend.

Objective 2: To determine which of the police administrative variables and child sociodemographic characteristics are independently associated with later offending in adolescence.

Objective 3: To determine how police administrative variables and sociodemographic characteristics collectively predict later offending in adolescence, and if police administrative variables continue to account for later offending after controlling for significant sociodemographic characteristics.

Chapter Five: Method

5.1 Study Design

To address the objectives of this study, national administrative data from the New Zealand Police Database were employed. This study took a longitudinal approach and selected children born in 1999, 2000 and 2001 who came into contact with police between the ages of 0-13 years as a victim, witness, informant, complainant, subject of, or person at risk, along with several measures recorded by police at the time of their recorded occurrence. A second data file included information about adolescent offenders and the nature of their crime(s) from 2013, 2014, and 2015 when the young people were between the ages of 14-16 years.

5.2 Data Availability and Extraction

The Research Review and Access Committee (RRAC) is a committee within the New Zealand Police which attends to requests for police data for research purposes. The RRAC hold the rights to the datasets used for the statistical analysis as part of this research. Applications to use police data must be made through the RRAC, which is responsible for extracting information from the police national database if ethics approval is obtained and data is available. An application was made to the RRAC for data to answer the proposed research objectives in this thesis. Both datasets were anonymised; all identifying information, such as the person's name and address, was removed prior to the data being released by the RRAC.

5.3 Police National Database

New Zealand Police has a national occurrence database on which are recorded all events reported to or discovered by police. Each person is assigned a unique numeric identifier code at the first contact with the organisation, which is termed a 'person identity number'. They

retain the same person identity number for each subsequent contact thereafter. An occurrence refers to all the events which have been reported to or discovered by police. When the event is recorded in the Police National Database, it is recorded as an occurrence and is provided with a unique occurrence identity number. The occurrence identity number is associated to a person's identity number if they are involved in the event in any capacity recorded by responding police. The details recorded for each person who is a subject of a police occurrence include the person's name, date of birth, gender, ethnicity, age at the time of the occurrence, category and description of event type, family violence indicator (yes or no), and the subject's role to the event such as victim, witness, informant, complainant, 'subject of', person at risk, suspect or offender.

5.3.1 Role Types

Police roles of suspect and offender were not used for the data drawn from the childhood dataset as the purpose of this thesis is to explore non-offending police contact in childhood (0-13) and offending in adolescence (14-16). Information relating to offender role was obtained for the youth offender dataset. Suspect role implies the individual may be a person of interest in relation to the offence, but they have not been proven as the offender, or there may be a lack of sufficient evidence. Offender role implies that a person committed the offence and there is sufficient evidence linking the person to the crime. As we are examining police data and not youth justice data, it is important to acknowledge for this study that even if the youth has an offender link it is possible, they were not formally charged through court or were found 'not guilty' at court. Even though they may not be charged formally or found guilty of the offence, they are still youth in contact with police. Exploring predictors of this type of contact from childhood is still important to consider, particularly from a developmental prevention perspective. Police employees who have the role of creating occurrences include frontline police officers and administration employees. They choose the

appropriate role at the time the occurrence is entered into the Police National Database. Generally, a single role category is identified, although it is possible for individuals to be assigned to multiple role categories for a single occurrence.

There are six non-offender role categories including victim, witness, informant, complainant, subject of, and person at risk. The *victim* role means that a crime has been committed against the individual. If the crime includes the death of a significant family member or serious harm rendering a person incapable, family members can be included as victims. A *witness* describes a person who has observed an offence or incident occur. An *informant* is someone who has reported an event to police and may also be a witness; and a *complainant* is the person who is making the complaint and may be a victim or informant. Where a non-offence incident has been recorded in the system, particular roles may not be available such as witness or victim, therefore they can be linked to the occurrence as the '*subject of'*. The '*subject of*' role may also be used if at the time the occurrence is entered a person's role is unknown or the child or young person is associated to the people involved but not present at the occurrence. '*Subject of*' role can also imply the person is the focus of the occurrence. The role category of *person at risk,* implying that the person may be at risk of harm, is commonly used in family harm occurrences. This role type is not frequently used. Each non-offender role described above will be included in the statistical analyses to determine which (if any) of these non-offending role types in childhood and early adolescence (0-13) is associated with later offending in adolescence.

5.3.2 Offences versus Incidents

Specific codes exist depending on the type of event attended, reported, or discovered by police. These codes are also entered alongside the occurrence describing the type and category of event. Codes are available for events that involve the commission of an offence, classed as 'offence' codes. Table 5.1 illustrates examples of offence codes under the coding

structure. Offence codes include occurrences such as burglary, assaults, drugs and antisocial behaviour where a crime has been committed and a person may be eligible for arrest and prosecution through the court. There are also codes for occurrences police attend or report where a criminal offence has not taken place. These occurrences are defined as non-offence incidents and can include events such as child protection referral, domestic dispute without offence, and mental health events. Table 5.2 shows examples of incident codes and categories.

Table 5. 1: Illustration of Offence Codes via the Category and Subcategory Structure.

Code & Description	*Class Code & Description*	*Type Code and Description*	*Full Code and Description*	*Code*
1000 - Violence	1500 – Serious Assaults	1530 – Assaults on Child (under 14 years)	1533 – Assaults Child (manually)	1533
1000 - Violence	1500 – Serious Assaults	1540 - Assaults by Male on Female	1543 – Male Assaults Female (manually)	1543
1000 - Violence	1400 – Grievous Assault	1420 - Injuring with Intent	1425 - Injures intent to injure (other weapon)	1425
4000 – Dishonesty	4300 – Theft	4370 General Thefts (no drugs)	4379 – Other Theft	4379
4000 – Dishonesty	4100 – Burglary	4120 Burglary (other property)	4122 – Burgles (other property between $500 - $5000) by day	4122

Seven primary offence code categories exist: *Violence, Sexual, Dishonesty, Drugs and Antisocial Behaviour, Property Abuse* (e.g. wilful trespass, offensive language, disturbing use of telephone), *Property Damage* (e.g. wilful damage, arson, graffiti) and *Administrative* (e.g. owner fails to control dog, false statement, escapes custody). These are the broad offence categories which can be further narrowed down across four subcategories to the numerical

offence code which defines the exact offence (as illustrated in Table 5.1 above; and Appendix B illustrates precise offences of the broader primary offence categories). For example, the primary category *Violence* has a main subcategory of *Serious Assaults*, which can be further narrowed to *Assaults Child*, and then refined even more with *Assaults Child (manually)*, which is given the four digit code 1533. Another option may be *Assaults Child (other weapon)* with an offence code of 1532. The four-digit offence code constitutes the most precise offence for the occurrence, the first three digits act to group the categories of offences (Curtis-Ham & Walton, 2017). Each numeric value portrays the specific category and subsequent subcategories (e.g., 1 represents the *Violence* category, 5 the *Serious Assaults* subcategory, 3 *Assaults on a Child* and the final digit the most precise offence of *Assaults Child (manually))*.

Table 5. 2: Illustration of Incident Codes via the Category and Subcategory Structure.

Incidents		
Type Code and Description	*Code and Description*	*Code*
01AZ - Incidents	1D – Domestic Dispute	1D
01AZ - Incidents	6C – Child Protection Report	6C
01AZ - Incidents	1V – Vehicle Collision	1V

When a child is present for an offence occurrence there can be an associated incident. An offence of *Assaults Child* may also have an incident code of a *Child Protection Referral* (6C). Likewise a family harm event may have an offence of *Male Assaults Female*, an

incident code of *Domestic Dispute* (1D) and if a child was present a *Child Protection Referral* (6C) may be present. Incidents may not always include an offence; in fact a large number of events police attend are non-offence related incidents, specifically for children and youth, incidents may include *Truancy* (1T), *Juvenile Complaints* (1J) or *Missing Persons* (2M). Incident categorisation is similar to the offence code structure except the first three subcategories have less differentiation in comparison to the offence codes. Codes for incidents are represented by one digit and one letter to describe the type of incident; for example, the code for Child Protection Referral is '6C', (see column three Table 5.2).

A police occurrence can involve an offence or an incident or both, and some occurrences can have multiple offences or incidents for one occurrence. For the purposes of this study, a decision was made to analyse separately the children who only had incident occurrences with police throughout their childhood from those who had offence or offence and incident occurrences. The offence categories utilised for the statistical analysis were taken from the seven primary offence categories (subcategory one illustrated by the first *code and description* column 1 in table 5.1), rather than the very specific distinctions made by the four-digit codes. The primary incident subcategory was also utilised for the statistical analysis and more common specific incidents were taken from the *code* column, (column 3 in table 5.2). Where a child or young person's first recorded police contact included an offence and an incident, the offence code was used as the most descriptive code representing the event. An additional binary variable was added to pick up the associated incident code if present (i.e. 6C included? Yes =1, no=0).

5.3.3 Family Violence Indicator

The Police National Database has an indicator for family violence. This is an administrative tool to identify whether an occurrence was family violence related or not and is recorded in binary fashion (yes =1, no = 0). Domestic dispute incident (1D) also refers to a family related

event however does not always involve an offence. The family violence indicator can be applied to any event (incident or offence related) including those not obviously associated to family violence (e.g. offence of wilful damage, common assault, and trespass) and is a more reliable factor for measuring overall family violence events for the current study. Events indicated as family violence are flagged in the police database for further follow-up or referral.

5.3.4 Frequency of Contact

Participants' unique person identity number was used to differentiate each participant and ascertain repeated contacts with police. A sizeable proportion of the sample (>40%) came into contact with police multiple times during their childhood, and growth curve analyses exploring these repeated police contacts was outside the scope of this study. While over half of the sample had only a single police occurrence (56.20% *n*=19,637), the maximum number of police occurrences experienced by one child was 56. However, given that the mean was rather small (*M*=2.21, *SD*= 2.34), and only a small percentage of children (1.49% *n*= 521) had over ten recorded occurrences with police, a decision was made to cap the measure of police contact at 10, to avoid problems with outliers in the analyses. For reporting purposes, frequency of contact was categorised into five bands (1, 2, 3-5, 6-10, 10+ contacts) to illustrate the distribution.

5.3.5 Child Protection Concerns

Concerns about the care and protection of the child are indicated by the incident occurrence of *Child Protection Protocol* (CPP) or 6C. These incidents can be independent or associated to other police events such as an offence of *assaults child*. On the attendance of child protection events, police refer the matter to the police Child Protection team responsible for investigating crimes against children and Oranga Tamariki - Ministry for Children, for their follow up. Usually a CPP indicates the child may be at risk of further harm such as physical, sexual abuse

or neglect. An additional binary variable was added to the childhood dataset to pick up whether a child protection incident was associated to an offence or other incident, (Yes =1, no=0), enabling further exploration of this factor.

5.4 Sample

The original dataset for police contact between 0 to 13 years contained 79,780 unique occurrences for the sample. A decision was made to remove all participants identified as the victim in a death occurrence, such as 'murder' or 'manslaughter', and participants identified as a 'subject of' or 'victim' to an incident code of 'sudden death' (*n*= 119). These codes suggest that the child died and thus would not be available for comparison in adolescence (14-16). Bail breach occurrences (categorised as a 6D; *n*= 180) were also removed from the childhood dataset as the roles represented were not clear. After data cleaning the total occurrences reduced to 79,481, with the final sample including 34,941 participants who had their first contact with police between 0 to 13 years of age. The sample represents approximately 20.62% of the total number of children born alive in the years 1999, 2000, and 2001 according to Statistics New Zealand (2017).

5.4.1 Ethnicity

Table 5.3 reports the demographic proportions of the sample. Ethnicity was classified according to New Zealand Statistics level 1 (Statistics New Zealand, 2005). Seven ethnic identities were included such as European, Māori , Pacific Peoples, Asian, Middle Eastern/Latin American/African (MELAA), Other Ethnicity (open ended category/ ethnicity not on form) and Residual Category (e.g. not further defined, don't know, not stated). Residual category will be referred to as 'Unknown' for clarity. Collectively, over 80% of the sample identified as European, Māori, or Unknown. The proportion of children who identified as Māori (*n*= 10,505) represented approximately 5.19% of the total number of children (0-14) who identified as Māori in the 2013 New Zealand census (*n*= 202,328)

(Statistics New Zealand, 2014), in comparison to Pacific peoples in the sample who represented approximately 3.5% of their national population, and European who represented 2.40% of their national population. This suggests that children who identify as Māori are overrepresented when compared with the total population in comparison to European children.

5.4.1 Gender and Age

The gender proportion of males and females who had contact with police between 0-13 years was similar, with males (52.49%) being slightly more exposed to police contact than females (47.34%). A large proportion of the sample (>40%) was the age group 8 to 11 years at first police contact, (*M*=9.78 *SD*= 2.95). Children aged 12 and 13 were also a large group: 37.07%, with the remaining sample being under the age of 8.

Table 5. 3: Demographic Characteristics of the Total Childhood Dataset Including Age at First Contact with Police in Childhood (0-13)

Demographics	(*n*= 34,941)	*n*(%)
Ethnicity		
European	10,979	31.42
Māori	10,505	30.06
Pacific Peoples	3,192	9.13
Asian	1,113	3.18
MELAA	274	0.78
Other Ethnicity	3	0.008
Unknown	8,875	29.40
Gender		
Male	18,341	52.49
Female	16,542	47.34
Unknown	58	0.16
Age at first police contact		
12-13	12,954	37.07
8-11	14,365	41.11
4-7	6,343	18.15
0-3	1,279	3.66

Note: MELAA = Middle Eastern Latin American African.

5.5 Predictor Variables

Eight variables from the childhood dataset (0-13 years) were included in the analyses to test for associations with later offending in adolescence. Each of these predictors was taken from the individuals' first recorded police contact between 0 to13 years. The predictors included: (1) Gender, (2) Ethnicity, (3) Age at first contact with police, (4) Role (e.g., victim, witness, complainant, etc), (5) Category of police event (offence exposed or incident exposed), (6) Frequency of police contact between 0 to 13 years, (7) Family Harm Indicator (scored as 1 = yes, 0 = no) and (8) Child protection concerns (scored as 1 = yes, 0 = no).

5.6 Youth Offenders

The outcome measure of the current study is the proportion of children who had non-offender contact with police between 0 to13 years and subsequently offended as a youth (14 – 16). The second data file provided by RRAC contained 52,349 police occurrences and 13,326 unique person identity numbers of youth offenders who had been born in 1999, 2000, and 2001. Table 5.4 illustrates the demographics of the youth offending cohort. Approximately 80% identify with a European or Māori ethnic identity; the proportion of Unknown ethnicity dropped below 10%. A higher proportion of youth who identify as Māori is present in this cohort in comparison to other ethnic identities. The proportion of Māori ethnicity is also much higher for the youth offending cohort in comparison to the childhood cohort (45.31% vs 30.06%, respectively). The proportion of European ethnic identity in the youth offending sample is slightly higher in comparison to the childhood sample (35.22% vs 31.42%, respectively). There is a greater proportion of males in the youth offender dataset in comparison to females (67.27% vs 32.66%), and a higher proportion of youth aged 14 years at the time of their first offence with police in adolescence (14-16), in comparison to 15 or 16 years (45.98%), where the proportions decreased as age increased.

A variable labelled ‘Offender’ (1 = yes, 0 = no) was added to the childhood data-set to identify the participants with police contact in childhood who later offended in youth between 14–16 years (*n*= 6,562), matched by person identity number. Prospectively (looking forward in time), of the 34,941 individuals who had police contact in childhood, 6,562 (18.75%) committed an offence in adolescence. Retrospectively, of the 13,326 youth who committed one or more offences in adolescence, 49.24% had childhood non-offender contact with police between 0-13 years.

Table 5. 4: Demographics of the Total Youth Offender Dataset.

Demographics	(*n*= 13,326)	*n*(%)
Ethnicity		
European	4,694	35.22
Māori	6,038	45.31
Pacific Peoples	1,200	9.00
Asian	206	1.54
MELAA	74	0.55
Other Ethnicity	1	0.007
Unknown	1,113	8.35
Gender		
Male	8,964	67.27
Female	4,353	32.66
Unknown	9	0.07
Age at first youth offence		
14	6,127	45.98
15	4,042	30.33
16	3,157	23.70

Note: *MELAA = Middle Eastern Latin American African*.

5.7 Statistical Analysis

The data was analysed with the ‘R studio’ statistics software, version 3.4. To answer the key objectives of this study the statistical analyses were completed in three stages. The first stage explored the descriptive statistics of the childhood dataset in order to build a descriptive

profile of the children who have contact with police, the nature of their contact, and differences based on comparisons across demographic and police administrative variables (e.g., the distributions of ethnicity, gender, or age depending on the type of offence or incident exposed to). Initially, these types of comparisons were analysed with simple inferential statistics such as chi-square for categorical comparisons, or t-tests for comparisons of continuous variables (e.g., analysing differences in age of first contact or frequency of contact across genders exposed to certain types of offences or incidents). However, due to the large sample size, all of these analyses were highly statistically significant but with very small effect sizes. As the descriptive profile was just the first step in the analytic process, these supplementary analyses are not reported as they would detract from the main focus of this study.

Stage two of the analysis examined how each individual predictor from the childhood non-offending dataset described above is associated with later offending in youth (univariate analyses). Stage three of the analysis examined how the significant predictors from the univariate analyses were collectively associated with later offending in adolescence (multivariate analyses), and specifically if any of the police administrative factors remained significant predictors after controlling for the sociodemographic variables. Thus, the univariate analyses assisted in determining which factors to include in the multivariate analyses.

To complete stage two and three of the analyses a Generalised Linear Model (GLM), capable of working with a binomial distribution, within 'R' was used. GLM is a form of logistic regression belonging to a group of regression methods for describing relationships between explanatory variables and a discrete response variable. Binomial logistic regression is suitable for analysing the key factors within the current study, where there is one or more independent variables (e.g. ethnicity, gender, role, police event type) and the outcome

measure is binary (i.e., they either offended in adolescence (yes= 1) or did not offend in adolescence (no= 0); Fox, 2008).

The coefficient output of a logistic regression model is a 'log of the odds' (logit), the odds being the probability of the outcome measure (youth offending) occurring divided by the probability that it does not happen. Interpreting the 'log of the odds' can be difficult to understand and adds little meaning to the output (Fox, 2008). Therefore, the logit was then transformed by taking the exponential of the coefficient, producing the odds ratio (Fox, 2008). The 'odds ratio' estimates the likelihood that the outcome measure occurs as a function of a predictor (e.g., the odds a child will offend in adolescence having been exposed to domestic violence).

Lastly, a decision was made to set alpha for statistical significance to $p \leq 0.005$ for the study's statistical analysis due to the very large sample size and in line with recommendations by Mudge, Baker, Edge, and Houlahan (2012). With a very large sample size, as in the current study, there is the potential to find very small effect sizes, substantially reducing what is commonly known as a type II error. However, such small effect sizes may not have any practical implications, especially when interpreting the results from the odds ratios. Adjusting the alpha level to $p \leq 0.005$ seems to strike a good balance between the threat of both Type I and Type II errors.

5.8 Approvals and Ethics

The study was approved by the Human Ethics Committee at the University of Canterbury. Approval for release of the data was granted by the Research Review and Access Committee (RRAC) of the New Zealand Police. Consultation with Māori research advisors at the University of Canterbury was also completed due to the significant portion of the sample who identified as Māori. The methods and reported results of this thesis were carried out in accordance with the relevant regulations and guidelines.

Chapter Six: Results

6.1 Children Exposed to Contact with Police in a Non-Offending Role

Of the total childhood sample (*n*= 34,941) almost twice as many children were exposed to offences (*n*=23,083, 66.06%) than non-offence incidents, (*n*=11,858, 33.94%). Table 6.1 illustrates the type of childhood police contact and the portion who subsequently went on to offend in adolescence. A significantly higher number of children who experienced an offence in childhood became an adolescent offender (20.99%), in comparison to those who experienced an incident (14.48%) although this difference was a small effect size (phi = .08; see Table 6.1).

Table 6**. 1: **Type of childhood police contact and frequency of later offending in adolescence

	First contact with police	
Youth Offender	Incident related	Offence related
Yes	1,717 (14.48%)	4,845 (20.99%)
No	10,141 (85.52%)	18,238 (79.01%)

6.1.1 Category of Police Event

Table 6.2 shows the number of children who were exposed to police contact by the category of offences and incidents. Of the seven different offence categories, exposure to violence, sexual, dishonesty, drugs and antisocial offending contained the largest proportion of children, with exposure to violent offences containing over half of the total subsample (51.63%). In the following sections, children exposed to the remaining offence categories of *Property Damage, Property Abuse, and Administrative* will be grouped together under an 'Other' category due to their low frequencies.

Table 6. 2: Primary Offence Exposure and Incident Exposure Categories for Children's First Police Contact

Category of Offence	*n*	*%*	*Incident Category*	*n*	*%*
Violence	11,996	51.97	Domestic dispute (1D)	5739	38.40
Sexual	3,529	15.29	Child protection (6C)	1659	13.99
Dishonesty	3,503	15.17	Juvenile complaints (1J)	1215	10.24
Drugs and Antisocial	2,401	10.40	Suspicious activity (1C)	915	7.71
Property Damage	955	4.14	Vehicle collisions (1V)	839	7.07
Property Abuse	628	2.72	Other Incident (1Z)	550	4.64
Administrative	71	0.31	Truancy (1T)	424	3.57
			Attempted suicide (1X)	123	1.04
			Mental health (1M)	76	0.64
			Remaining	318	2.68

Note: *Offence exposed subsample n= 23,083; Incident exposed subsample n = 11,858*

In comparison to the offence categories, there were 27 incident categories observed in the subsample of children exposed to police contact. The first nine incident categories, containing the largest number of children are listed in Table 6.2, in descending order. The '*Remaining'* category includes those categories not included in the top nine incident codes, such as vehicle complaints (e.g. manner of driving), and intoxication. The '*Remaining'* incidents contained a small portion of children (<1%) per incident category. The '*Other Incident'* is an actual police category used for any event that does not come under any other specific category, not to be confused with the '*Remaining'* category. Together, domestic dispute, child protection, and juvenile complaint incidents accounted for well over half of all incident events (62.63%). Several police non-offence incidents involve events where the child may be behaving antisocially such as juvenile complaints, truancy, and suspicious

activity; however, due to the nature of the event and the age of the child at the time of the occurrence, there may be no criminal liability for a formal charge. Although there was only a small portion of children involved in truancy, threatens/attempts suicide, and mental health incidents, these three incidents are retained alongside domestic disputes, child protection, juvenile complaint and suspicious activity due to their relevance in the youth offending literature (McArdle & Lambie, 2018; Sutherland, 2011).

6.1.2 Demographics

Table 6.3 displays the frequencies of demographic characteristics according to ethnicity, gender, and age at first contact with police according to the two childhood subsamples, children exposed to offences and children exposed to incidents. Similar demographic patterns are reflected in each subsample as in the main data set reported in Table 5.4. Reference will also be made to Table 6.4 which shows the demographic proportions according to particular offence categories, violence, sexual, dishonesty and drugs and antisocial offences. Similarly, Table 6.5 and Table 6.6 show the demographic proportions according to the selected incident variables, domestic disputes, child protection referrals, juvenile complaints, suspicious activity, truancy, attempts suicide, and mental health. The most notable demographic findings observed in the tables are described below.

Table 6. 3: Demographics of Total Childhood Sample According to those Exposed to an Offence and those Exposed to an Incident

Demographics	Total Offence Exposed Subsample (*n*= 23,083, 66.06%)		Total Incident Exposed Subsample (*n*= 11,858, 33.94%)	
	n	*%*	*n*	*%*
Ethnicity				
European	7,731	33.49	3,248	27.39
Māori	7,139	30.93	3,366	28.28
Unknown	5,273	22.84	3,602	30.37
Pacific Peoples	2,043	8.85	1,149	9.69
Asian	721	3.12	392	3.30
MELAA	173	0.75	101	0.85
Other Ethnicity	3	0.01	0	0
Gender				
Male	11,971	51.86	6,370	53.72
Female	11,077	47.99	5,465	46.08
Unknown	35	0.15	23	0.19
Age				
12-13	7,971	34.53	4,983	42.02
8-11	9,730	42.15	4,635	39.09
4-7	4,375	18.95	1,968	16.60
0-3	1,007	4.36	272	2.29

Note: *MELAA = Middle Eastern Latin American African.*

Table 6. 4: Demographics for Childhood Offence Exposed Subsample According to Offence Subcategories

Demographics	Violence		Sexual		Dishonesty		Drugs and Antisocial	
	n= 11,996	51.97%	*n*= 3,529	15.29%	*n*= 3,503	15.17%	*n*=2,401	10.40%
Ethnicity								
European	3765	31.38	1385	39.25	1216	34.71	778	32.40
Māori	4181	34.85	914	25.90	635	18.13	844	35.15
Unknown	2262	18.85	909	25.75	1349	38.51	433	18.03
Pacific Peoples	1298	10.82	236	6.68	128	3.65	244	10.16
Asian	387	3.22	66	1.87	153	4.37	87	3.62
MELAA	101	0.84	18	0.51	22	0.63	15	0.62
Other Ethnicity	2	0.01	1	0.02	0	0	0	0
Gender								
Male	6,630	55.26	863	24.45	2348	67.03	1223	50.94
Female	5,349	44.59	2664	75.49	1148	32.77	1172	48.81
Unknown	17	0.14	2	0.05	7	0.19	6	0.25
Age								
12-13	4000	33.34	1041	29.50	1905	54.28	534	22.24
8-11	5,241	43.69	1156	32.76	1395	39.82	1142	47.56
4-7	2,241	18.68	1067	30.23	166	4.73	591	24.61
0-3	514	4.28	265	7.51	37	1.05	134	5.58

Note: *MELAA= Middle Eastern Latin American African*

Table 6. 5: Demographics of Childhood Incident Exposed Subsample According to Selected Incident Categories, Domestic Disputes, Child Protection Referrals, Juvenile Complaints and Suspicious Activity

Demographics	Domestic Disputes (1D)		Child Protection Referrals (6C)		Juvenile Complaints (1J)		Suspicious Activity (1C)	
	n= 5739	48.40%	*n*= 1659	13.99%	*n*= 1215	10.25%	*n*= 915	7.71%
Ethnicity								
European	1474	25.68	326	19.65	360	29.62	362	39.56
Māori	1846	32.16	393	23.69	441	36.29	137	14.97
Unknown	1479	25.77	735	44.30	286	23.54	326	35.62
Pacific Peoples	633	11.03	153	9.22	101	8.31	66	7.21
Asian	243	4.23	37	2.23	21	1.72	19	2.07
MELAA	64	1.11	15	0.90	6	0.49	5	0.54
Other Ethnicity	0	0	0	0	0	0	0	0
Gender								
Male	3029	52.78	838	50.51	827	68.06	350	38.25
Female	2702	47.08	816	49.18	385	31.69	565	61.75
Unknown	8	0.14	5	0.30	3	0.24	0	0
Age								
12-13	1726	30.07	940	56.66	738	60.74	449	49.07
8-11	2329	40.58	693	41.77	396	32.59	393	42.95
4-7	1460	25.44	17	1.02	71	5.84	71	7.76
0-3	224	3.90	9	0.54	10	0.82	2	0.21

Note: *No one in this cohort represented 'Other Ethnicity' category.*

Table 6. 6: Demographics of Childhood Incident Exposed Subsample According to Selected Incident Categories, Truancy, Attempted Suicide, and Mental Health.

Demographics	Truancy (1T)		Attempts Suicide (1X)		Mental Health (1M)	
	n= 424	3.57%	*n*= 123	1.03%	*n*= 76	0.64%
Ethnicity						
European	51	12.03	53	43.09	35	46.05
Māori	227	53.54	21	17.07	11	14.47
Unknown	74	17.45	36	29.27	23	30.26
Pacific Peoples	64	15.09	10	8.13	6	7.89
Asian	8	1.88	2	1.62	1	1.31
MELAA	0	0	1	0.81	0	0
Other Ethnicity	0	0	0	0	0	0
Gender						
Male	253	59.67	62	50.40	41	53.94
Female	171	40.33	61	49.59	34	44.73
Unknown	0	0	0	0	1	1.31
Age						
12-13	316	74.53	83	67.48	29	38.16
8-11	76	17.92	26	21.14	35	46.05
4-7	31	7.31	14	11.38	10	13.16
0-3	NA	NA	0	0	2	2.63

Note: *NA = Not Applicable, NA is present for truancy aged 0-3 as it is not possible for children that age to be truant.*

Ethnicity

Table 6.3 illustrates the ethnic identities of European, Māori, and the Unknown category as the highest proportions in each of the childhood subsamples. The remaining ethnic identities, Pacific, Asian and MELAA were represented consistently throughout the subsamples by a small proportion. There are slight variations amongst ethnicity according to different subsamples and types of police events. For children exposed to an offence, the European ethnicity represented the largest group. In contrast, the Unknown ethnicity group had the largest (slightly) proportion for children exposed to an incident. This suggests that police are often unable to record the ethnicity for children who have contact with police for a non-offence incident; the less harmful police contact type. This seemed to be especially true for incidents involving child protection referrals, where almost half of the children (44.30%) were classified in the Unknown category (See Table 6.5, column 2).

Table 6.4 illustrates the ethnic proportions across the different offence categories. Salient points here include exposure to sexual offences were more common among children who identified as European. In comparison, a slightly larger number of violence and drugs and antisocial offences involved children who identified as Māori. A larger number of children exposed to dishonesty offences had an Unknown ethnicity (38.51%) in comparison to the other offence categories, reiterating the notion that children exposed to less severe offences such as theft or non-offence incidents are less likely to have their ethnicity confirmed or reported to police.

In comparison Table 6.5 and Table 6.6 illustrates the ethnic portions according to the selected incident types. Incidents of suspicious activity, mental health and attempted suicide were more common among children who identified as European. In contrast, a larger number of domestic disputes, juvenile complaints, and truancy incidents involved children who identified as Māori. Particularly, truancy incidents contained over 50% of children

identifying as Māori, suggesting these students may not be well engaged with their learning. Interestingly, children with a Pacific ethnic identity spiked for truancy incidents to 15.09% whereas for the other incidents Pasifika children accounted for approximately 10% or less of the total. This spike is also observed for Pasifika children exposed to violent offences (Table 6.4, column 2).

Gender

Overall, the gender proportion, illustrated in Table 6.3, was similar between males and females across both childhood subsamples with a slightly higher number of males than females particularly in the subsample of children exposed to an incident. However, larger gender differences were observed when exploring offence and incident categories. Table 6.4 shows that gender is more unevenly distributed across the specific offence categories. For example, males were slightly more exposed to violence offences than females (10% difference) but were two times more likely to be exposed to dishonesty offences. In contrast, females were three times more likely to be exposed to sexual offences than males. There was only a 2% gender difference for the drugs and antisocial offence category. In comparison Table 6.5 and Table 6.6 illustrates the gender variation according to selected incidents. Males consistently outnumbered females in the childhood incident exposed subsample, except for incidents of suspicious activity where females outnumbered males by approximately 20%. The largest gender differences observed for incidents involved juvenile complaints and truancy where males are approximately two times more likely to be involved, suggesting males are more likely to behave antisocially in childhood in comparison to females. In summary, although there is a similar proportion of males to females exposed to offences and incidents overall, when offence and incident subcategories are examined, there are considerable gender differences apparent.

Age

Table 6.3 also illustrates the age at which the children first came into contact with police. Age at first police contact varied across police event types and the two different childhood subsamples. The mean age of first police contact for children exposed to offences (*M*=9.60, *SD*= 3.01) was significantly younger in comparison to children exposed to a non-offence incident (*M*=10.12), suggesting children in the offence subsample are not only exposed to more harmful events, but are exposed at a younger age in comparison to children who have police contact for non-offence incidents. In addition, as displayed in Table 6.4, children who were exposed to sexual offences and antisocial/drug related offences were younger in comparison to the other reported offence categories. In Table 6.5, children exposed to domestic dispute incidents were also younger on average in comparison to the other incident categories in Table 6.5 and Table 6.6.

6.1.3 Police Administration Characteristics

Table 6.7 below shows the different roles that children were assigned to by police, the frequency of police contact, family violence indicator and child protection referrals for the total childhood subsample according to whether they were exposed to an incident or offence. This can be compared to Table 6.8 which provides the same type of data for children who had their first contact with police as the result of selected offence related occurrences and similarly to Table 6.9 and Table 6.10 which provides the same data for children exposed to selected police related incidents.

Roles

For children exposed to an offence, Table 6.7 shows that more than half (56.94%) had the role of a *victim,* followed by one in five who were in the *subject of* role; in contrast to the incident exposed cohort where the majority of the subsample (74.37%) had the role of

'*subject of*' and less than 10% were in a *victim* role. This suggests that when children come into police contact as the result of an offence, they are much more likely to be the target of harm. Table 6.8 shows that the *victim* role occurrence was even higher for children exposed to sexual offences (81%) and dishonesty offences (e.g. victim of theft of bicycle; 72%). Although the *victim* role was the most common for three of the four offence categories, children were also frequently in the role of *witness* and *subject of* for violence and drugs/antisocial offences.

Table 6. 7: Frequency of Police Administration Factors (Role, Frequency of Police Contact, and Family Violence Indicators) for Children Exposed to Police Contact

Variables	Total Offence Exposed Subsample		Total Incident Exposed Subsample	
	n= 23,083,	66.06%	*n*= 11,858	33.94%
Role				
Victim	13,145	56.94	785	6.62
Subject of	5,154	22.32	8603	72.55
Witness	3,997	17.31	1910	16.10
Complainant	517	2.24	260	2.91
Informant	237	1.02	218	1.83
P at Risk*	33	0.14	82	0.69
Frequency				
1	10,103	43.77	9534	80.40
2	5,156	22.34	1568	13.22
3 - 5	4468	19.35	665	5.61
6 - 10	1543	6.68	79	0.66
10 +	509	2.20	12	0.10
FVI				
Yes	12,356	53.53	6613	55.77
CPP				
Yes	3,278	14.20	-	-

Note: *P at Risk = Person at risk; FVI = Family Violence Indicator; CPP = Child Protection Protocol*

Table 6.7 illustrates the role of *witness* was the second most common role category for children exposed to incidents, this was especially true for domestic disputes (Table 6.9), mental health problems, and suicide attempts (Table 6.10). There were very few victims in the total incident subsample, although that is expected given a victim role is not generally suitable for a 'non-offence' occurrence. The remaining role types also had very small proportions. Table 6.9 and Table 6.10 shows the number of children in the selected police administration variables according to the reported incident categories. Similar role trends can be observed across the specific incident categories as described from Table 6.7, in that the role of *subject of* is consistently the more common role children have when exposed to police incidents. There is some slight variation amongst incident types and role of witness and victim, otherwise the role proportions are fairly consistent.

Frequency of Contact

Table 6.7 illustrates the key trends observed for the frequency of police contact in childhood. For children exposed to an offence, more than half had two or more contacts with police (56.23%), suggesting that this subsample was not only exposed to events of a more devious nature, younger in age, but also exposed more frequently (*M*= 2.67, *SD*=2.70). This contrasts sharply to the incident cohort where the majority of the subsample (>70%; *M*= 1.32, *SD*= 0.88) had only one police contact in childhood. Table 6.8 shows the frequency of contact patterns amongst the selected offence categories. A key observation is the larger number of children who have contact with police once for exposure to dishonesty related offences, and as mentioned above, are also much more likely to be a victim. In comparison, of the children exposed to violence or sexual offences, over one in three of these children is exposed three or more times, reiterating the earlier suggestion that children who are exposed to more devious crime are also exposed more frequently.

Table 6. 8: Number of Children Exposed to Offences in Childhood by Role, Frequency of Police Contact, Family Violence and Child Protection Concerns According to Offence Categories.

Police contact Factors	*Violence*		*Sexual*		*Dishonesty*		*Drugs and Antisocial*	
	n= 11,996	51.97%	*n*= 3,529	15.29%	*n*= 3,503	15.17%	*n*=2,401	10.40%
Roles								
Victim	6680	55.68	2,874	81.44	2,541	72.54	717	29.86
Subject of	2605	21.71	273	7.73	432	12.33	1116	46.48
Witness	2497	20.81	247	7.00	266	7.59	476	19.82
Complainant	143	1.19	108	3.06	188	5.36	45	1.87
Informant	58	0.48	21	0.59	75	2.14	37	1.54
Person at Risk	13	0.10	6	0.17	1	0.02	10	0.42
Frequency of contact								
1	4,502	37.53	1109	31.42	2,589	73.90	1075	44.77
2	2,907	24.23	1003	28.42	434	12.39	462	19.24
3 - 5	3,174	26.46	1017	28.81	333	9.50	570	23.74
5 - 10	1,122	9.35	311	8.81	112	3.19	235	9.79
10 +	291	2.42	89	2.52	35	0.99	59	2.46
FVI								
Yes	8625	71.90	1229	34.82	4	1.14	1561	65.01
Child Protection								
Yes	1,829	15.24	1373	38.90	2	0.05	66	2.75

Note: FVI = Family Violence Indicator

Table 6. 9: Number of Children Exposed to Incidents in Childhood by Other Selected Variables and Specific Incident Categories

Police contact Factors	Domestic Disputes (1D)		Child Protection Referrals (6C)		Juvenile Complaints (1J)		Suspicious Activity (1C)	
	n= 5739	48.40%	*n*= 1659	13.99%	*n*= 1659	10.25%	*n*= 915	7.71%
Role								
Subject Of	3445	60.02	1,539	92.76	1156	95.14	558	60.98
Witness	1689	29.43	21	1.26	11	0.90	57	6.22
Victim	305	5.31	94	5.66	34	2.90	120	13.11
Informant	55	0.98	2	0.12	7	0.57	128	13.98
Complainant	172	2.99	1	0.06	6	0.49	49	5.35
P at Risk*	73	1.27	2	0.12	1	0.08	3	0.32
Frequency								
1	4,444	77.43	1326	79.92	920	75.72	834	91.14
2	856	14.91	255	14.37	188	15.47	59	6.44
3 - 5	388	6.76	71	4.28	89	7.32	21	2.29
6 - 10	43	0.75	7	0.42	17	1.40	1	0.11
10 +	10	0.14	0	0	1	0.08	0	0
FVI								
Yes	5705	99.40	693	41.77	34	2.79	4	0.43

Note: Family violence indicator (FVI), P at Risk = Person at Risk.

Table 6. 10: Number of Children Exposed to Incidents in Childhood by Other Selected Variables and Specific Incident Categories

Police contact Factors	Truancy (1T)		Attempts Suicide (1X)		Mental Health (1M)	
	n= 424	3.57%	*n*= 123	1.03%	*n*= 76	0.64%
Role						
Subject of	424	100	96	78.04	57	72.37
Witness	0	0	19	15.44	13	17.10
Victim	NA	NA	3	2.44	4	5.26
Informant	NA	NA	4	3.25	3	3.94
Complainant	NA	NA	0	0	1	1.31
P at Risk*	NA	NA	1	0.81	0	0
Frequency						
1	327	77.12	105	85.36	57	75.00
2	51	12.02	15	11.38	11	14.47
3 - 5	44	10.37	2	1.62	5	6.58
6 - 10	2	0.47	2	1.62	2	2.63
10 +	0	0	0	0	1	1.31
FVI						
Yes	0	0	53	43.09	53	69.73

Note: Family violence indicator (FVI), NA = Not Applicable, P at Risk = Person at Risk.

Table 6.9 and Table 6.10 displays the frequencies for the selected incident categories. As reported above, the majority of the incident exposed subsample had one police contact, this trend is consistent across the reported incident categories, with over 75% of the children exposed to the selected incident categories having only one contact with police. This proportion was even higher in the children exposed to the *suspicious activity* incidents with over 90% having one police contact. A larger percentage of children involved in a truancy incident (10.37%) had between 3-5 police contacts in childhood in comparison to the other incident categories (higher by approximately 3%) suggesting a slightly larger number of children who have school difficulties have multiple police contact.

Family Violence Indicator

According to Table 6.7 approximately half of the total childhood sample, involved family violence occurrences. This proportion was reflected across the children exposed to offences and incidents. Of the childhood offence types, Table 6.8 shows that police recorded a family violence occurrence much more often for children exposed to violence and drugs and antisocial offences, compared to those exposed to a dishonesty offence. In addition, approximately one third of sexual offences was family violence related. In comparison, Table 6.9 and Table 6.10 show the number of incidents that were associated with family violence according to the selected incident categories. Obviously, domestic violence incidents were family violence related. In addition, child protection, attempted suicide and mental health incidents had a larger proportion indicating family violence in comparison to the other selected incidents. Mental health had almost 70% of its occurrences related to family violence; child protection and attempted suicide had approximately 40% family violence related, suggesting a large portion of children's contacts with police across offence and incident categories involve the family.

Child Protection Concerns

Child protection occurrences usually relate to concerns about the care and protection of the child particularly around physical abuse, sexual abuse, and neglect. In Table 6.8, the number of child protection occurrences that were associated with offences was surprisingly small. Given that a large percentage of children were either *victims, witnesses*, or the *subject of* for offences that included violence, sexual, and antisocial/drug crimes, it seems odd that there were not a much higher number of child protection protocols issued. For example, children exposed to violence had a small proportion of child protection referrals recorded (15.24%), despite the high number of family violence referrals associated with these offences (71.90%), the high proportion of victims (55.68%) and witnesses (20.81%), and the potential severity of harm from the offence. Across the four offence categories, there was a larger number (approximately 23% more) of children who were exposed to a sexual offence who had a child protection referral, but even this is surprisingly low when considering the high frequency of victims and their tendency to be younger. For the incident subsample, child protection referrals are included as a separate category (a column) and additional referrals were not found alongside the other incident categories.

6.1.4 Summary

Overall, a considerable proportion (20.62%) of the total population of children born in the years 1999, 2000, and 2001 had contact with police at least once before the age of 14 years in relationship to a criminal offence or an incident serious enough to warrant a police response. Demographic characteristics seemed to shift slightly depending on the nature of the police contact, especially when examined according to the offence or incident subcategories. Children identifying as European were more likely to be exposed to sexual offences and mental health incidents. In comparison, children identifying as Māori were more likely to be exposed to violent offences, and incidents of juvenile complaints and truancy. Furthermore,

there was a greater number of females exposed to sexual offences then males, whereas males outnumbered females in exposure to dishonesty offences, juvenile complaints, and truancy incidents. A large portion of the children in the dataset had their first police contact between the age of 8 to 13 years, this was consistent across the offence and incident police events. Children who had contact with police were more likely to be the victim of harm or the person of interest (subject of), rather than other roles types such as complainant or informant. In terms of the frequency of police contact, a large majority had only one contact with police, except for those exposed to violence and sexual offences. Family violence incidents accounted for a large percentage of the expected offence and incident categories (e.g., violent offences, domestic disputes, mental health issues), but also featured prominently for drugs and antisocial offences. Finally, a surprisingly small portion of offences and incidents involved care and protection referrals.

6.2 Extending the Descriptive Profile of Children Exposed to Police Contact between those who did and did not offend in adolescence

The second part of the first objective for this study was to extend the descriptive profile of children who are exposed to police contact in childhood by comparing characteristics of childhood police contact between those who offended in adolescence and those who did not offend in adolescence. Of the total childhood subsample (*n*= 34,941) over one in six, (*n*= 6, 562, 18.78%), had contact with police in adolescence as an offender, the remaining sample do not appear in the youth offending dataset. The same police factors employed to describe the childhood sample above will also be utilised to compare and contrast those who did and did not go on to offend in adolescence. Table 6.11 illustrates the demographic characteristics across the four corresponding subsamples (offence versus incident exposed and youth

offended versus non-offender) and Table 6.12 illustrates the selected police administration variables according to the same subsamples.

6.2.1 Demographics

Ethnicity

The proportions of the subsamples based on ethnicity shown in Table 6.11 show an important distinction between the non-offending and offending groups that extends to both children exposed to offences and incidents. For example, comparing between the Youth Non-offenders and the Youth Offenders for children exposed to an offence, shows that a higher rate of children who identified as Māori offended in adolescence in comparison to any other ethnicity. In the childhood offence exposed non-offender subsample there was a larger group for European ethnicity and similar, smaller, portions of Unknown and Māori ethnic identity. Similar trends are observed for the subsample of children exposed to an incident with a large proportion identifying as Māori who go on to offend in adolescence and a larger portion of unknown ethnicity in the non-offender subsample.

Gender

As per the literature (Lim et al., 2018; Savolainen et al., 2017; Topitzes et al., 2011), Table 6.11 shows that a greater number of males went on to become youth offenders for both subsamples of children (offence exposed and incident exposed). This effect was somewhat stronger for children exposed to an incident with almost three quarters of the youth offenders being male (compared to just over 60% for those exposed to an offence in childhood). This trend is reflective of the types of incident categories these children were exposed to (i.e., juvenile complaints and truancy had a higher portion of males) and suggests that the early rebellious behaviour of males exposed to an incident in childhood could be channelling them toward antisocial behaviour. The portion of females who go on to offend is almost 10% more

in the childhood offence exposed subsample, in comparison to the childhood incident exposed subsample, suggesting females exposed to more harmful police events in childhood are at greater risk of offending in adolescence. There is a similar rate of males and females in the youth non-offender subsamples.

Age

Table 6.11 shows no real differences in the age of first contact between youth offenders and non-offenders for those exposed to offence. In contrast, for those who were exposed to an incident in childhood, over half (53.23%) who offended in adolescence were aged between 12 and 13 years, whereas the non-offending incident exposed group were slightly younger in their first contact with police.

6.2.2 Police Administration Characteristics

Table 6.12 displays the frequencies of children across the four subsamples according to the selected police administration factors (role type, frequency of contact, family violence indicator, child protection indicator). When comparing the frequency that children occupied different roles (e.g., victim, witness, etc.) between Table 6.7 (above) and Table 6.12 below, it is apparent that the proportions are largely similar. Furthermore, the only notable distinction between the non-offending and offending groups was for children who were exposed to an incident with even higher rates of being a *subject of* and lower rates of being a *witness* among youth offenders. Thus, based on these descriptive statistics, it seems that being exposed to an incident or offence is related to role status, but role status may not be related to later offending. Furthermore, Table 6.12 illustrates the rate of events related to family violence and child protection incidents is similar to rates reported in Table 6.7. With slight differences observed for family violence incidents between children exposed to incidents and whether they offended in adolescence or not.

Table 6. 11: Demographic Proportion of Childhood Dataset According to Exposure to Police Related Incidents or Offences and Subsequent Police Offending in Adolescence.

Demographics	Childhood Offence Exposed subsample (*n*= 23,083)				Childhood Incident Exposed Subsample *(n= 11,858)*			
	Youth Non-Offender		Youth Offender		Youth Non-Offender		Youth Offender	
	n= 18,238	*79.01%*	*n= 4,845*	*20.99 %*	*n*= 10,141	85.52%	*n*= 1,717	14.48%
Ethnicity								
European	6073	33.30	1658	34.22	2715	26.77	533	31.04
Māori	4484	24.58	2655	54.80	2450	24.15	916	53.35
Unknown	5152	28.25	121	2.49	3521	34.72	81	4.72
Pacific Peoples	1689	9.26	354	7.30	985	9.71	164	9.55
Asian	684	3.75	37	0.76	380	3.75	12	0.69
MELAA	153	0.83	20	0.41	90	0.88	11	0.64
Other	3	0.01	0	0	0	0	0	0
Gender								
Male	8886	48.72	3085	63.67	5123	50.51	1247	72.62
Female	9317	51.08	1760	36.33	4995	49.25	470	27.37
Unknown	35	0.19	1	0	23	0.22	0	0
Age								
12-13	6,292	34.50	1679	34.65	4069	40.12	914	53.23
8-11	7600	41.67	2130	43.96	4051	39.95	584	34.01
4-7	3489	19.13	886	18.28	1768	17.43	200	11.64
0-3	857	4.70	150	3.09	253	2.49	19	1.10

A smaller portion of children exposed to incidents linked to the family (44.55%) offended in youth in comparison to those who did not offend, suggesting family related incidents reduced the likelihood of offending in adolescence, or those who went on to offend were more likely to be exposed to or participating in deviant behaviour that was outside the family context.

Frequency of Police Contact

Table 6.12 illustrates the differences in frequency of contact amongst children exposed to offences and incidents and those who went on to offend in adolescence and those who did not. There are notable differences between the number of police contacts and the different subsamples, suggesting the number of police contacts in childhood is related to youth offending. Children exposed to offences who did not offend in adolescence had fewer contacts with police (*M*= 2.20, *SD*= 1.93) in comparison to children exposed to offences and who offended in adolescence, (*M*= 4.44, *SD*= 4.08). In the offence exposed youth offender, subsample only 20.85% had one police contact. The remaining sample had two or more contacts with police in childhood. Of the children exposed to an incident in the youth non-offender subsample over 80% (*M*= 1.24, *SD*= 0.72), only had one contact with police. In comparison, children exposed to an incident who offended in youth had a slightly larger number of police contacts in childhood (*M*= 1.77, *SD*= 1.43) with a slight (10%) increase in the proportion of children who had between 3–5 contacts with police in childhood and offended in adolescence in comparison to those who did not offend in youth.

6.2.3 Summary

The purpose of this section was to explore the nature of childhood police contact differentiating between those who offended in adolescence and those who did not. In summary, approximately one in six children exposed to contact with police went on to offend in adolescence. Demographically larger discrepancies emerged between the youth offending

and non-offending groups. Specifically, over half of the children exposed to police contact who later offended in adolescence identified as Māori. Males were also far more likely to offend in adolescence then females, particularly the portion of males exposed to incidents who offended in adolescence was greater than those exposed to offences. One of the most notable trends relates to frequency of police contact in childhood. Those with a greater number of police contacts in childhood contained a larger portion of children who offended in adolescence in comparison to those with one or two police contacts in childhood. This was especially true for children exposed to an offence, the more harmful police occurrence.

Table 6. 12: Total Childhood Dataset by Police Administration Variables According to Exposure to Police Incident or Offence and Whether they Offended in Adolescence (Youth Offenders) or not (Youth Non-Offenders)

Variables	Childhood Offence Exposed Subsample (*n*= 27, 954)				Childhood Incident Exposed Subsample *(n= 11,858*)			
	Youth Non-Offenders		Youth Offenders		Youth Non-Offenders		Youth Offenders	
	n=22,017	78.76%	*n*= 5,937	21.24%	*n*= 10,141	85.52%	*n*=1,717	14.48%
Roles/Link Types								
Victim	10,442	57.25	2,703	55.79	707	6.97	78	4.54
Subject of	4,007	21.97	1,147	23.67	7,209	71.08	2201	81.19
Witness	3,151	17.28	846	17.46	1,733	17.09	226	10.31
Complainant	433	2.37	84	1.73	225	2.22	35	2.04
Informant	177	0.97	60	1.23	193	1.90	33	1.45
Person at Risk	28	0.15	5	0.10	74	0.73	11	0.47
Frequency of contact								
1	9,093	49.85	1,010	20.85	8,467	83.49	1389	62.14
2	4,240	23.25	916	18.90	1,215	11.98	563	20.56
3 - 5	3,805	20.86	1,608	33.19	418	4.12	247	14.38
6 - 10	958	5.25	944	19.48	35	0.34	44	2.56
10 +	142	0.77	367	7.57	6	0.05	6	0.35
FVI								
Yes	9,710	53.24	2,646	54.61	5,848	57.66	1033	44.55
Child Protection Referrals								
Yes	2,513	13.78	765	15.79	1,434	14.14	334	13.10

6.3 Generalised Linear Models

Table 6.13 (offence exposed subsample) and Table 6.14 (incident exposed subsample) below display the results of the univariate and multivariate logistic regression analyses. In each table, the frequency of participants for each variable is in the second column from the left, followed by the percentage of youth offenders for that variable. Under Model 1, the odds ratio (OR) coefficients and confidence intervals (CI) from the univariate binomial logistic regression models are provided. The factors found to be significant in the univariate models were then included in the multivariate models. For the offence exposed subsample (Table 6.13), there were three multivariate models, one each for the *violence, sexual* and *dishonesty,* offences. For the incident exposed subsample (Table 6.14), separate models were tested (multivariate models 1 – 4) for *domestic disputes, juvenile complaints, suspicious activity,* and *truancy* incidents. For the multivariate analyses a decision was made to include *frequency of contact* and *age at first contact* as continuous variables as opposed to the discrete categories. A decision was also made to include the four role types of *victim, subject of, witness* and *complainant* in the adjusted models, as these key roles were important in addressing the major aims of this study concerning police administrative data.

6.3.1 Childhood Offence Exposed Subsample and Youth Offending

Univariate Model

The odds ratio (OR) coefficients show a number of variables collected by police on children are independently predictive of later offending when exposed to an offence requiring police attendance in childhood. For example, exposure to violent offences in childhood significantly increased the odds of offending in adolescence. In contrast, sexual and dishonesty related offences independently reduced the odds of offending, suggesting children who are exposed to these offences are less likely to offend in adolescence. Independently, children who

identify with Māori ethnicity are three times more likely to offend in adolescence in comparison to other ethnicities. Having police contact in childhood and identifying with 'Other' ethnic identities (Pacific, Asian and MELAA) significantly reduced the odds of offending in adolescence. In relation to gender, males were almost two times more likely to offend in adolescence in comparison to female.

For age at first contact with police as a continuous measure, there was a very small but significant trend for offending in adolescence to increase when children were older at the time of their first contact with police. When tested as discrete categories, the children who were 8-11 years old at their first contact with police were slightly more likely to offend in adolescence, but in contrast, those who were 0-3 years old, were much less likely to go on to youth offending. An additional analysis with age was completed with only two categories, 0-7 years and 8-13 years. Children who had their first contact with police between 8-13 years were at significantly increased odds of adolescent offending (OR= 1.15, 95% CI= 10.06 – 1.24), in comparison to children aged 0-7, who had significantly reduced odds of later offending (OR= 0.86, 95% CI= 0.80 – 0.93).

Role status at first police contact when exposed to an offence was not associated with later offending in adolescence. As a continuous measure on its own, risk of offending in adolescence increased when children had additional police contacts. For every added police contact, the odds of later youth offending increased by 40%. When tested as discrete categories, the children who had three or more police contacts in childhood were more likely to offend in adolescence, but in contrast, those who had one or two police contacts in childhood, were much less likely to go on to youth offending. A child exposed to police contact ten times in childhood is ten times more likely to offend in adolescence in comparison to children with fewer than ten police contacts. Finally, for the children exposed to offences, referrals to child protection services significantly increased the odds of offending

in adolescence, whereas offences identified as indicators of family violence were not associated with offending in adolescence.

Multivariate Model

As can be seen in Table 6.13, when the relevant significant independent variables were included in the multivariate models, the results across each of the three models were very similar. In light of this, I will describe the findings across Models 1–3 together rather than separately. The results showed that there were some slight adjustments in the odds ratio compared to the univariate analyses in Model 1; however, for children exposed to an offence in childhood, five variables remained significant at increasing the likelihood of adolescent offending. These include exposure to violent offences, Māori ethnicity, male gender, age at first contact and frequency of police contact. In particular, in the multivariate models, Māori ethnicity and male gender each doubled the odds of offending in adolescence. Although the association with gender increased from the univariate to the multivariate analyses, the other variables were reduced in their association with adolescent offending when combined with the other variables, yet most still remained highly significant. Interestingly, on there own, child protection referrals associated with the event were significant at increasing the odds of offending yet were no longer significantly associated with offending when combined with other factors.

Three to five variables (depending on the analysis) remained significant at reducing the odds of adolescent offending when combined with other factors. Across all three models, those children who were identified as an *unknown* ethnicity were 89% less likely to offend in adolescence, while those classified as *other* ethnicities were 35% less likely to offend in adolescence. Although the family violence indicator was not a significant predictor in the univariate models, in the multivariate models it was a protective factor against later adolescent offending, reducing the risk between 28% (for *sexual* offences) to 32% (for

violence offences). Finally, exposure to dishonesty related offences (Model 3) reduced the risk of offending by 23%.

6.3.2 Childhood Incident Exposed and Youth Offending

Univariate Model

Table 6.14 displays the results of the logistic regression models for children exposed to various types of incidents. Column 4 and Model 1 provides the odds ratios for the univariate analyses. In terms of incident categories, juvenile complaints and truancy incidents in childhood significantly increased the odds of offending in adolescence. In particular a child exposed to a juvenile complaint is three times more likely to offend in adolescence in comparison to other incident types. Interestingly, exposure to a domestic dispute incident and suspicious activity was significant at reducing the odds of offending in adolescence. The results of the analyses with the demographic characteristics and frequency of police contact variable were very similar to the childhood offence exposed subsample. Once again, ethnicity, age at first police contact, and frequency of police contact in childhood were each significantly associated with later offending. As with the offence exposed group, age shifts from a protective factor to a risk factor. This shift is older for the incident exposed group where 12-13 years is a risk factor; in comparison 8-11 years is a risk factor in the offence exposed subsample.

In contrast to the childhood offence exposed subsample, two role status types had significant independent relationships to offending. The role *subject of* for an incident was significantly associated with increasing the odds of offending in adolescence; whereas the *witness* role significantly decreased the odds of adolescent offending. As in the offence exposed subsample, no other role type showed a significant relationship to youth offending.

Finally, when police identified incidents as indicators of family violence, this significantly reduced the odds for adolescent offending.

Multivariate Model

For children exposed to incidents, five variables remained significant at increasing the likelihood of adolescent offending in the multivariate analyses (Table 6.14 Columns 5, 6, and 7). These include juvenile complaints, Māori ethnicity, male gender, age at first contact and frequency of police contact. The significance of juvenile complaints to youth offending when combined with other factors highlights the link between childhood antisocial behaviour and offending in adolescence. A child subject of juvenile complaint is almost two times more likely to offend in adolescence. Compared to the univariate models, in the multivariate models incidents of juvenile complaints and truancy reduced by at least one unit in predicting adolescent offending when combined with other factors. Juvenile complaints remained significantly associated with later offending, yet interestingly, truancy was no longer a significant predictor. Domestic dispute incidents were no longer significant at decreasing the odds of offending when combined with other factors.

Being Māori and male, each doubled the odds of offending in adolescence also when exposed to an incident. Although the association with gender increased from the univariate to the multivariate analyses, the other variables were reduced in their association with adolescent offending when combined with the other variables, yet most still remained highly significant. Age remained a significant predictor of offending when combined with other factors, as age increased the risk to offending increased significantly. These demographic trends were also observed for the offence exposed subsample. When combined with other factors, no role status was associated with offending including the role *subject of* and *witness* which were no longer significantly associated with offending in adolescence.

Four variables (depending on the analysis) remained significant at reducing the odds of adolescent offending when combined with other factors. For example, those children exposed to a suspicious activity were 36% less likely to offend in adolescence. Furthermore, across all four models, those children who identified as *unknown* ethnicity were 87% less likely to offend in adolescence, while those classified as *other* ethnicities were 28% less likely to offend in adolescence. Finally, the family violence indicator remained a protective factor from the univariate model to all four multivariate models, reducing the risk for later offending between 23% (juvenile complaints) and 41% (suspicious activity).

Trends observed in the childhood offence exposed multivariate models above (Table 6.13) are generally similar for the subsample of children exposed to incidents (Table 6.14), this is especially true for the demographic factors and frequency of police contact with slight variations. For example, children exposed to multiple incidents are 50% more likely to offend in adolescence compared to 30% for children exposed to multiple offences. Interestingly, as illustrated by Table 6.14 juvenile complaints increased the odds of adolescent offending more so than exposure to a violence offence illustrated in Table 6.13.

6.3.3 Interaction Effects

As there were variables from different domains that were significant predictors of adolescent offending (e.g., gender from the demographic variables and frequency of contact from the police administrative variables), it was important to examine possible interaction effects across the significant predictors. However, across the possible interactions between the two primary subsamples, offence versus incident exposed, there was only one interaction effect that was significant out of 20. For example, the interaction between exposure to violence offences and age of first contact was not significant (OR= 1.01, 95% CI= 0.98 - 1.03, p.= <0.003) and the same with the interaction between exposure to violent offences and Māori

ethnicity (OR= 0.88, 95% CI= 0.76 - 1.01, p.=0.08). However, the interaction between exposure to violent offences and frequency of police contact was found to be significant (OR= 0.95, 95% CI=0.92 – 0.98, p. 0.003), suggesting as frequency of police contact increases, the odds of violence leading to youth offending decreases.

6.3.4 Summary

To answer Objectives two and three of this thesis, binomial logistic regression models were utilised to determine the extent to which childhood police contact predicts youth offending. Across the two childhood subsamples there are six key factors from police contact in childhood that serve as predictors of youth offending independently and when several factors are combined. These factors included exposure to violent offences, exposure to juvenile complaint incidents, Māori ethnicity, male gender, age at first police contact, and frequency of police contact. In addition, several variables served to decrease the probability of adolescent offending and had a protective effect. These included children exposed to dishonesty offences, suspicious activity, ethnic identity was unknown or other, and family violence indicator. Against expectations, role type in childhood had little association to youth offending. These key findings will now be discussed in reference to related research and developmental life-course criminality theory (DLCCT) and developmental prevention theory.

Table 6. 13: Rates and Odds Ratios of Univariate and Multivariate Models According to the Childhood Offence Subsample (n = 23,083)

Factors	*n*	*% Offenders*	*Model 1 OR (95% CI)*	*Multivariate Model 1 OR (95% CI)*	*Multivariate Model 2 OR (95% CI)*	*Multivariate Model 3 OR (95% CI)*
Category of Offence						
Violence	11,996	23.31	1.34 (1.26 - 1.43)*	1.18 (1.09 - 1.28)*	-	-
Sexual	3,529	15.95	0.76 (0.69 - 0.84)*	-	0.88 (0.78 – 0.99)	-
Dishonesty	3,503	17.61	0.68 (0.62 - 0.75)*	-	-	0.77 (0.68 - 0.87)*
D and A	2,401	21.45	1.03 (0.92 - 1.14)	-	-	-
Prop. Damage	955	23.56	1.16 (1.00 - 1.35)	-	-	-
Prop. Abuse	628	18.95	0.87 (0.71 - 1.06)	-	-	-
Administrative	71	14.08	0.61 (0.29 -1.14)	-	-	-
Ethnicity						
European	7,731	21.45	1.04 (0.97 - 1.11)	-	-	-
Māori	7,139	37.19	3.71 (3.48 - 3.97)*	2.06 (1.91 - 2.24)*	2.07 (1.91 - 2.24)*	2.07 (1.91 - 2.24)*
Unknown	5,273	2.29	0.06 (0.05 - 0.07)*	0.11 (0.09 - 0.13)*	0.11 (0.09 - 0.13)*	0.11 (0.09 0.14)*
Other	2,940	13.98	0.57 (0.51 – 0.64)*	0.64 (0.57 - 0.73)*	0.65 (0.57 - 0.73)*	0.65 (0.57 - 0.73)*
Gender						
Male	11,971	25.77	1.84 (1.72 - 1.96)*	2.07 (1.92 – 2.23)*	2.07 (1.92 - 2.23)*	2.14 (1.98 - 2.30)*
Female	11,077	15.89	0.54 (0.51 - 0.58)*	-	-	-
Age			1.02 (1.01 - 1.03)*	1.07 (1.05 – 1.08)*	1.07 (1.05 - 1.08)*	1.08 (1.06 - 1.09)*
12-13	7,971	21.06	1.05 (0.99 - 1.12)	-	-	-
8-11	9,730	21.89	1.09 (1.03 - 1.17)*	-	-	-

4-7	4,375	20.25	0.94 (0.87 - 1.02)	-	-	-
0-3	1,007	14.90	0.64 (0.54 - 0.77)*	-	-	-
Childhood Role						
Victim	13,145	20.56	0.94 (0.88 - 1.00)	0.83 (0.61 – 1.16)	0.86 (0.63 - 1.20)	0.86 (0.63 - 1.20)
Subject of	5,154	22.25	1.10 (1.02 - 1.18)	0.82 (0.59 - 1.12)	0.83 (0.60 - 1.16)	0.83 (0.60 - 1.17)
Witness	3,997	21.16	1.01 (0.93 - 1.10)	0.73 (0.52 - 1.03)	0.75 (0.54 - 1.05)	0.74 (0.53 - 1.04)
Complainant	517	16.25	0.72 (0.56 - 0.91)	0.76 (0.50 – 1.16)	0.77 (0.51 - 1.17)	0.79 (0.52 - 1.20)
Informant	237	25.32	1.27 (0.94 - 1.70)	-	-	-
Person at Risk	33	15.15	0.67 (0.22 - 1.59)	-	-	-
Frequency			1.40 (1.38 - 1.42)*	1.30 (1.27 - 1.33)*	1.36 (1.34 - 1.38)*	1.35 (1.33 - 1.38)*
1	10,103	9.99	0.26 (0.24 – 0.28)*	-	-	-
2	5,156	17.77	0.76 (0.71 0.83)*	-	-	-
3 – 5	4468	35.99	1.88 (1.75 – 2.01)*	-	-	-
5 – 10	1543	61.18	4.36 (3.96 – 4.80)*	-	-	-
10 +	509	73.10	10.44 (8.60 -12.74)*	-	-	-
CPP	3,278	23.34	1.17 (1.07 - 1.28)*	0.87 (0.78 – 0.97)	0.91 (0.81 - 1.03)	0.85 (0.76 - 0.95)
FVI (Yes)	12,356	21.41	1.05 (0.99 -1.12)	0.68 (0.62 – 0.74)*	0.72 (0.66 - 0.78)*	0.69 (0.64 - 0.75)*

Note: Significant. codes: '*' < .005. Abbreviations: CPP = Child Protection Protocol, FVI = Family Violence Indicator (FVI), D and A = Drugs and Antisocial offences, Prop = Property.

Table 6. 14: Rates and Odds Ratios of Univariate and Multivariate Models According to the Childhood Incident Subsample (n= 11,858)

Variables	*n=* 11,858	*% Offenders*	*Univariate Model 1 OR(95% CI)*	*Multivariate Model 1 OR(95% CI)*	*Multivariate Model 2 OR(95% CI)*	*Multivariate Model 3 OR(95% CI)*	*Multivariate Model 4 OR(95% CI)*
Category of Incident							
Domestic Dispute	5739	11.48	0.62 (0.55 - 0.68)*	1.20 (0.79 - 1.27)	-	-	-
CPP	1659	13.56	0.91 (0.78 - 1.06)	-	-	-	-
Juvenile Complaint	1215	23.63	3.34 (2.92 - 3.82)*	-	1.93 (1.63 - 2.28)*	-	-
Suspicious Activity	915	10.05	0.64 (0.51 – 0.79)*	-	-	0.64 (0.50 – 0.82)*	-
Truancy	424	31.60	2.87 (2.32 - 3.54)*	-	-	-	1.30 (1.01 - 1.66)
Attempted Suicide	123	20.87	1.07 (0.64 - 1.72)	-	-	-	-
Mental Health	76	9.21	0.59 (0.24 - 1.21)	-	-	-	-
Ethnicity							
European	3,248	16.41	1.04 (0.97 - 1.11)	-	-	-	-
Māori	3,366	27.21	3.71 (3.48 - 3.97)*	2.05 (1.80 - 2.33)*	2.00 (1.76 - 2.27)*	2.01 (1.77 – 2.29)*	2.01 (1.77 - 2.29)*
Unknown	3,602	2.25	0.09 (0.07 - 0.11)*	0.13 (0.10 - 0.16)*	0.13 (0.10 - 0.17)*	0.12 (0.10 – 0.16)*	0.13 (0.10 - 0.16)*
Other	1,642	17.48	0.72 (0.61 - 0.85)*	0.72 (0.59 - 0.86)*	0.72 (0.59 - 0.86)*	0.71 (0.59 – 0.85)*	0.71 (0.58 - 0.85)*
Gender							
Male	6,370	19.56	1.79 (1.70 – 1.90)*	2.47 (2.19 - 2.79)*	2.39 (2.12 - 2.70)*	2.43 (2.15 – 2.74)*	2.47 (2.19 - 2.79)*
Female	5,465	8.60	0.38 (0.34 - 0.43)*	-	-	-	-

Age			1.11 (1.09 - 1.13)*	1.14 (1.11 - 1.17)*	1.13 (1.10 - 1.16)*	1.14 (1.11 – 1.16)*	1.13 (1.11 - 1.16)*
12-13	4,983	18.34	1.69 (1.53 - 1.88)*	-	-	-	-
8-11	4,635	12.60	0.77 (0.69 - 0.86)*	-	-	-	-
4-7	1,968	10.16	0.62 (0.53 - 0.72)*	-	-	-	-
0-3	272	6.98	0.43 (0.26 - 0.67)*	-	-	-	-
Childhood Role							
Subject of	8603	25.58	1.75 (1.54 - 1.99)*	1.14 (0.87 - 1.53)	1.06 (0.80 - 1.41)	1.01 (0.76 – 1.36)	1.12 (0.85 - 1.50)
Witness	1910	11.83	0.55 (0.47 - 0.65)*	0.71 (0.51 - 0.98)	0.68 (0.49 - 0.94)	0.64 (0.46 – 0.89)	0.70 (0.51 - 0.98)
Victim	785	9.93	0.94 (0.88 - 1.00)	0.98 (0.67 - 1.42)	0.97 (0.67 - 1.41)	0.90 (0.62 – 1.31)	0.97 (0.67 - 1.42)
Informant	218	15.14	0.76 (0.48 - 1.13)	-	-	-	-
Complainant	260	13.46	0.91 (0.62 - 1.29)	-	-	-	-
Person at Risk	82	13.41	0.63 (0.28 - 1.24)	-	-	-	-
Frequency			1.66 (1.57 - 1.74)*	1.51 (1.43 - 1.60)*	1.50 (1.42 - 1.58)*	1.51 (1.43 – 1.59)*	1.51 (1.43 - 1.60)*
1	9534	14.57	0.32 (0.29 - 0.36)*	-	-	-	-
2	1568	35.90	1.90 (1.66 - 2.13)*	-	-	-	-
3 - 5	665	72.93	3.90 (3.30 - 4.61)*	-	-	-	-
5 - 10	79	55.69	7.59 (4.86 - 11.93)*	-	-	-	-
10 +	12	50.00	5.92 (1.85 - 18.95)*	-	-	-	-
FVI (Yes)	6613	15.62	0.58 (0.53 - 0.65)*	0.63 (0.50 - 0.79)*	0.77 (0.67 - 0.88)*	0.59 (0.52 – 0.68)*	0.65 (0.57 - 0.74)*

Note: Significant. codes: '*' < .005. Abbreviations: CPP = Child Protection Protocol, FVI = Family Violence Indicator.

Chapter Seven: Discussion

7.1 Introduction

Police attend a large number of traumatic events (both offence and non-offence related) and are often the first agency involved in a vulnerable child's life when significant life events have occurred (New Zealand Police, 2015). Police have both an opportunity and a responsibility to identify key issues about children's welfare and their caregiving environments (New Zealand Police, 2015; Martin, 2005). Subsequently, the police, in collaboration with care and protection agencies, make decisions that have the potential to change the life-course trajectory of children. Research has considered how the role of adverse childhood experiences (Baglivio et al., 2015; Fazel et al., 2008; Holt et al., 2008; Patricia Logan-Greene, 2017), together with early developmental behavioural problems (Fazel et al., 2008; Fergusson et al., 2015; Loeber et al., 2012), is associated with an increased probability of criminal offending. In contrast, this study sought to extend the research in this area by examining the links between children's non-offending police contact and later adolescent offending. Perhaps it is possible to identify these vulnerable children who are at risk of later offending at the time of their first contact with police.

Central to this thesis is the notion of the need to examine potential risk and protective factors before the issue of youth offending arises. In light of that, the first research objective was to establish a descriptive profile of children in contact with police and then extend that profile to the differences in the nature of police contact between those who offended in adolescence and those who did not offend in adolescence. The final two aims were to establish which police contact dimensions are related to adolescent offending independently (Objective two) and when combined with multiple factors (Objective three), and particularly if police administrative variables could predict adolescent offending over and above demographic variables.

Developmental Life-Course Criminology Theory and Developmental Prevention theory provide a theoretical framework to examine and understand offending trajectories, the effects of risk and protective factors and the importance of prevention. In using police administration data, labelling theory was also considered, given the notion that contact with police may amplify deviance instead of preventing it (Wiley & Esbensen, 2016). Although the results of the current study cannot address the deviance amplification hypothesis by way of labelling theory, the current results suggest that police contact in some contexts could be a protective factor (e.g., when children are spoken to in the context of suspicious activity, or dishonesty offences), whereas in other contexts it is a risk factor (e.g., when children are exposed to a violent offence or are the subject of a juvenile complaint).

7.2. A Descriptive Profile of New Zealand Children in Contact with Police

The children in the current study represented 20% of the total New Zealand population of children born between 1999-2001, that is, one in every five children has contact with the police in New Zealand. This seems to be a high number considering New Zealand Police (2017) reported low rates of childhood victimisations statistics with children aged 0-9 years old representing less than 1000 occurrences and children aged between 10-14 less than 2500 victimisation occurrences in 2017. The high number represented in the current study may be due to the inclusion of all events and non-offending roles children may be exposed to, not just events where the child has been a victim. In fact, this is the first New Zealand study to examine all non-offending role types (including *subject of* and *person at risk*) where children are in contact with police and highlights the high number of children in contact with police. Consideration also needs to be given to the age of the dataset, with these children coming into contact with police between 1999-2013, recording processes may have changed which may impact the portion of children in contact with police. The first objective of this study was to

answer the questions: who are these children, how are they coming into contact with the police, and what are the differences, if any, between childhood police contact experiences and those who offended in adolescence?

7.2.1 Children Exposed to Offences verses Incidents.

When police are called to an event, it can be recorded either as a criminal offence, or an incident, which involves non-offence related events or where there is not sufficient criminal activity for a suspect to be charged. Within these two broad categories are a wide range of events that children may be exposed to, some more harmful than others.

Offence Exposure

Children's exposure to offences consisted of a number of notable features. Children in the dataset were twice as likely to be exposed to a criminal offence at their first contact with police than exposed to a non-offence incident. This was unexpected given the base rate of activity is contact with the public where no offence is identified, for example 67% of family harm events are incident only with no offence identified (New Zealand Police, 2011, 2017). Is this finding because police contact with children is more likely to be recorded when it is serious, or they are directly related to the event? Given policing core duties include enforcing the law and investigating crime this finding may represent an 'offence-detection' culture of policing (New Zealand Police, 2011, 2017).

Furthermore, children were exposed to a number of different offences across seven different categories, including violence, sexual, dishonesty, drugs and antisocial behaviour, property abuse, property damage and administrative offences (Appendix B provides examples of precise offences within these categories). The most common offence exposure was violence, including over half of the offence subsample (51.63%), followed by sexual offences. Together these two offence categories accounted for 70% of children exposed to

offences. This is concerning given they are considered the more harmful offences (Robinson & Keithley, 2000). This portrays the vulnerability of the children in contact with police. Lastly, exposure to dishonesty and drugs and antisocial offences accounted for 25% of the offence exposed subsample and the remaining offences consisted of very small portions.

In terms of ethnicity, roughly one third of children exposed to an offence were either European or Māori. This is concerning considering that individuals who identify as Māori represent only 15% of the national population (Statistics New Zealand, 2014). The other major ethnic group were children labelled as "unknown". There could be multiple reasons why police do not identify children's ethnicity when dealing with an offence. For example, they are likely to focus on those individuals occupying more severe events, the most relevant roles of suspect or victim, or perhaps ethnicity is likely to be confirmed with children at greater risk and who have been in contact with police frequently. In relation to specific offences, European children were more likely, 13.35% difference, to be exposed to sexual related offences in comparison to Māori children, who were exposed to sexual offences at a similar rate of children whose ethnic identities were unknown (between 25–26%). Minor offences such as dishonesty had a higher portion of children with an unknown ethnicity in comparison to European or Māori. This supports the idea children exposed to minor offences are less likely to have their ethnicities confirmed or reported to police.

In general, there was a similar portion of males and females exposed to an offence. This suggests that childhood adverse conditions can be exposed to both males and females at a similar rate. Similar trends have been reported by Oranga Tamariki - Ministry for Children (MCOT; 2019) who released data showing similar male (53%) and female (47%) trends for children in their service. However, in the current study, gender was unevenly distributed across specific offence categories. For example, males were exposed to violence at a greater rate than females and females were three times more likely exposed to sexual offences. This

finding is in line with literature reporting on the gender ratio of exposure to sexual abuse (Fergusson et al., 2013; Finkelhor, 1994). Consideration needs to be given to the possibility of males underreporting sexual abuse (Finkelhor, 1994).

The results showed that, on average, children were first exposed to police contact at the age of nine years old. This outcome is reflected in the New Zealand Police (2017) report stating children under nine years old had a lower representation in victimisation statistics. The average age of nine remained across the reported offences except for sexual offences where the average age was slightly younger (8 years) in comparison to other age groups, similar to findings reported by Finkelhor (1994). There are a number of reasons for the increased number of children over the age of eight in contact with police. For example, the underreporting effect applies to the age factor. Children under the age of eight may be exposed to offences at a similar rate as older children, however due to their age they are more reliant on adults or significant others in their environment to report the offence or incident to police (Maxwell, 2009). Furthermore, children over the age of eight have greater independence, cognitive and emotional understanding, and therefore have greater understanding of the event, and are more likely to disclose events to other adults who are likely to report events to police. They may also report the event to police themselves (Maxwell, 2009; McDevitt & Ormrod, 2010).

The remaining police administrative factors also show key features of the children exposed to offences. Of the role statuses, children exposed to offences were more likely to be the direct *victim* of the offence, with over half of the cohort (56.94%; 13,145 children; Table 6.7) being a *victim*. *Witness* and *subject of* roles were also common (approx. 20%) amongst those exposed to offences although to a much lesser degree than the *victim* role, the remaining roles (*complainant*, *informant* and *person at risk*), accounted for a very small portion of children exposed to offences. Research more often explores the role of a victim in

comparison to other role types due to the detrimental impacts of victimisation (Logan-Greene et al., 2017; Mallet, 2014; Robinson & Keithley, 2000). However, children can be directly or indirectly effected by adversity, therefore those exposed to events in other role statuses also have the potential for negative outcomes (Robinson & Keithley, 2000; Holt et al., 2008). The range of role types highlights, again, the vulnerabilities of the children in contact with police for offence related events. Frequent contact with police was also a common occurrence amongst children exposed to offences, with over half of the cohort having two or more contacts with police in non-offending roles in childhood, showing these children not only come into contact with police for harmful events but do so more often.

Furthermore, family violence was indicated for over half of the offence's children were exposed to, especially for violent crime, drugs and antisocial behaviour. Family violence, present for over half the first police contact event, may influence the high frequency of police contact in childhood for children exposed to offences. Research indicates children exposed to family violence are at greater risk of physical, sexual and psychological abuse, and neglect, and other confounding factors present in the home environment (Holt et al., 2008; Logan-Greene et al., 2017; Widom & Maxfield, 2001), which may lead to an increased number of police events. Rates of child protection referrals associated with a first police contact were smaller than anticipated, particularly given the harmful impacts of violence and sexual offence exposure, (Davies, Jones, & medicine, 2013; Hartinger-Saunders et al., 2011; Holt et al., 2008). Perhaps child protection referrals are less likely to be filled out for first police contact unless the offence exposed meets certain criteria or is of a harmful nature.

Incident Exposure

Children's exposure to incidents also consisted of a number of notable features. Firstly, this subsample illustrates the large number of non-offence incidents police attend, generally viewed as less harmful than offences as they do not involve a crime. Out of 27 possible

incident types for this subsample, there were three common categories which contained over half (62.63%) of the children in this subsample. These were incidents of domestic disputes, child protection referrals, and juvenile complaints. The remaining categories contained much smaller portions. Some of these incidents illustrate dynamic factors, factors which can be changed. For example, truancy, mental health, and family situation can serve as targets for intervention (McKinlay et al., 2015). Domestic disputes and child protection incidents are indicative of the child potentially being exposed to family violence and risk of physical, sexual abuse or neglect, whereas juvenile complaints indicate the child has potentially engaged in antisocial behaviour. Psychosocial factors of domestic disputes, child protection and juvenile complaints have been linked to youth offending, especially antisocial behaviour which has a firm foundation in the youth offending literature (Fergusson et al., 2015; Tanner-Smith et al., 2013).

In terms of ethnicity, roughly one third of children exposed to an incident were either "Unknown" or Māori. Again the prevalence of Māori is concerning given their representation of the total national population. The large portion of children labelled as "Unknown" ethnicity in the incident subsample supports the notion of police being less likely to confirm ethnicity for minor events or events where a person is not involved as one of the more serious roles (e.g. suspect/offender or victim). Children of European ethnicity consisted of a larger group within incidents of suspicious activity, mental health and attempted suicide. This finding is different to reports by the Mental Health Foundation of New Zealand (2018), which found Māori are overrepresented in suicide and mental health statistics. In a collective culture Māori may have other opportunities to address mental health challenges through the hapū or iwi as compared with Pākehā, therefore police may not attend as many mental health incidents involving Māori (Rochford, 2004).

In comparison, numbers of children of Māori ethnicity exposed to police incidents were higher for incidents of domestic disputes, juvenile complaints, and truancy. This finding indicates Māori children were not only more likely to be exposed to potential harmful familial violence, but were more likely to display childhood antisocial behaviour. These findings are in line with other New Zealand research reporting on the high portion of Māori children exposed to violence and likely to display childhood antisocial behaviour in comparison to other New Zealand ethnicities (Marie et al., 2009). Furthermore the portion of children who identified as Pacific ethnicity and were involved with a truancy incident was concerning, particularly for the small portion (13%) of Pacific Island children in the total national population of New Zealand (Statistics New Zealand, 2013).

Males and females were represented similarly although males contained a slightly higher portion in comparison to females. This trend was portrayed across the different incident types especially for juvenile complaints where the male effect was even larger. An exception to the male effect within police incidents was for incidents of suspicious activity where females represented a larger group (23% difference). One speculative explanation for this difference is that incidents of suspicious activity may include events that have a sexual innuendo with no other evidence to indicate a precise criminal offence. For example, an unknown adult male inviting a young female into a vehicle, which is then reported to police may not point to the female participating in suspicious activity, but being the subject of suspicious activity (potential victim).

The average age a child was exposed to an incident was 10.12 years and the largest group consisted of children aged 12–13 years. This suggests children who come to police attention for incidents are older and about to transition to adolescence. This is in line with literature which reports children within this age category are gaining independence and have a greater level of emotional and cognitive understanding, (G. M. Maxwell, 2009; McDevitt &

Ormrod, 2010). Furthermore the age-crime curve suggests common age of onset for those who are likely to offend is between the ages of 8-14 years. Given the higher number of potential antisocial (but not criminal) events in the incident events (e.g., juvenile complaints and truancy) it is likely these children are already displaying antisocial tendencies (Dennison, 2011).

Children exposed to incidents were much more likely to have the role of *subject of* (>70%). This role type was consistent across the incident types explored and is expected, given the non-offence nature of the events. Children exposed to incidents were more likely to come to police attention once, with average frequency being less than twice. Lastly, family violence was indicated for approximately half of all incidents. Family violence is associated with a number of negative factors including increased likelihood for emotional, physical and sexual abuse, and neglect (Davies et al., 2013; Hartinger-Saunders et al., 2011; Holt et al., 2008). This highlights the vulnerability of children in contact with police.

Similarities between the incident and offence exposed cohorts

Early in the process of cleaning the data, a decision was made to separate the two cohorts (offence exposed and incident exposed) and analyse their data separately. A follow-up question is, was this a good idea? And, how different are the two groups actually? There are several similarities between the offence exposed and incident exposed subsample. For example, the demographic trends are similar in nature. In both subsamples ethnicities of European, Māori and Unknown represent the largest categories. There was a similar distribution across gender in the two subsamples, as similarly reported by Oranga Tamariki - Ministry for Children (MCOT; 2019). Furthermore, family violence represented a similar proportion across those children exposed to offences and incidents, suggesting that family events bring a large number of children in contact with police. This is similar to research which also highlights the unique vulnerabilities children have due to family dynamics; for

example, parental separation, socioeconomic disadvantage and parental adjustment issues have all been associated with family violence (Fergusson & Horwood, 1998). This also shows the diverse nature of family harm events being offence and non-offence related and a high demand of police resources.

Differences between the incident and offence exposed cohorts

There were also several differences between the offence exposed and incident exposed subsample. For example, role status was different across the two subsample. Primarily this is because for non-offence incidents it is not expected that there would be any victims, and a large majority of that sample were categorised into the *subject of* role. Whereas, expectantly, there was a larger portion of *victims* in the offence exposed subsample. The incident exposed subsample contained fewer variations in role status. For example with over 72.55% of children being associated with an incident as *subject of*, this leaves only 27.45% for the remaining five role types (Table 6.7). In comparison, victims of offences comprised 56.94% of the cohort, leaving 43.06% to account for the remaining roles; therefore there was also a moderate number of children who *witnessed* an offence and who were *subject of* to an offence (Table 6.7). Lastly, children exposed to offences were more likely to come in to contact with police twice or more in comparison to those exposed to an incident, where children averaged police contact approximately 1.5 times. This suggests that children exposed to more harmful events are at increased risk of having multiple police contacts. This is in line with research which reports children exposed to events such as family harm are more likely at risk of other adverse factors as described above (Davies et al., 2013; Hartinger-Saunders et al., 2011; Holt et al., 2008). Thus, in terms of demographic characteristics it seems that the two cohorts (offence exposed and incident exposed) are more similar than different, but for the police administrative data including frequency of contact, the two

groups are quite different; but that may be a function of how police record data once an event is judged as one of the two categories.

7.2.2 Children Exposed to Offences versus Incidents and Adolescent Offending

Of the childhood dataset, one in six children (18.78%) who had non-offending contact with police came to police attention as an adolescent offender. This is a high number, and although a larger number of children did not go on to offend in adolescence this outcome highlights the importance of recognising non-offending police contact as a marker for offending in adolescence. Proportions between childhood police factors and the youth non-offender versus youth offender subsamples showed relatively similar trends across the offence exposed and incident exposed subsample. A slightly larger proportion of children exposed to offences (20.99%) versus incidents (14.48%) offended in adolescence. This section will describe notable similarities and differences between the youth offenders exposed to offences versus incidents in childhood; key factors are also portrayed in the final analysis and will be explored further in the multivariate section.

Similarities and Differences

Several similarities were observed between children who offended in adolescence when comparing their prior police exposure to either an offence or an incident. In particular, similar trends were evident for ethnicity, general role status, and child protection referrals, and much of this reflects the similarities already identified above for the overall cohorts. For this reason, only one further observation is included here. In terms of ethnicity, for children exposed to offences and incidents, over half of the youth offenders were Māori, followed by European ethnicity, with approximately a 20% difference. This trend is in line with youth offending literature in New Zealand which reports of the high proportion of Māori ethnicity in criminal justice statistics (Elers, 2012; Gutierres et al., 2018; Marie et al., 2009).

There were several notable differences between youth offenders who were either exposed to an offence as their first contact with police, or exposed to an incident. Particularly, differences were observed within gender, age factor, specific role status, family violence and frequency of police contact. For example, gender overall appeared to display similar trends in both subsamples; particularly the male effect was strongest in the offending subsamples of those exposed to both incidents and offences. This trend was expected, given the vast amount of national and international literature that reports the high representation of males committing crime in comparison to females (Savolainen et al., 2017; Topitzes, Mersky, & Reynolds, 2011). However, upon closer examination, the male effect was larger (by approximately 10%, Table 6.11) in the incident exposed subsample, in the offence exposed subsample a larger portion (10%) of females went on to offend in adolescence in comparison to those females exposed to an incident. This is in line with another New Zealand study by Lim et al., (2018) which describes risk factors of female youth offenders as coming from backgrounds involving maltreatment; and Topitzes et al., (2011) reported child maltreatment increased the risk of youth offending in both males and females, but more so for females.

When it came to age, children exposed to offences were more likely to commit crime when first exposed to an offence between the ages of 8 to 11 years, in comparison children exposed to incidents who were more likely to commit crime in adolescence if first exposure to police was between 12-13years. This is a relatively unique finding in New Zealand literature, given these comparisons have not been completed between children exposed to police offences versus police incidents. Given incidents contained a high number of events associated with antisocial behaviour (e.g. juvenile complaints and truancy), the children aged between 12-13 years may be those children who are displaying signs of antisocial behaviour of a minor nature and who police officers take no formal action against apart from recording the event in the database.

Specific to each subsample *victims* contained a larger group of youth offenders from those exposed to offences, in comparison, the *subject of* role contained a larger group of youth offenders of the children exposed to incidents. This was expected given the high portion of *victims* in the offence exposed subsample and the high portion of *subject of* in the incident exposed subsample. However there was a larger group of *subject of* (>80%) in the incident exposed youth offending category in comparison to victims in the offence exposed youth offending category (55%) (Table 6.12). This suggests the role of *subject of* may have a stronger association with adolescent offending in comparison to *victim* roles.

The differences relating to frequency of police contact was identified in the previous section and continues to be observed in the youth offending cohort. Youth offenders, exposed to offences in childhood, had a greater number of contacts with police in childhood; half had over five police contacts. In comparison, a higher portion (60%) of youth offenders exposed to incidents in childhood had one contact with police in childhood. Similarly, a New Zealand study by McKinlay, James and Grace (2015), reported a higher frequency of police contact predicted recidivism in youth offenders.

Despite family violence occurring at a similar rate between children exposed to offences versus incidents, family violence was 10% higher for youth offenders who had been exposed to offences in childhood, in comparison to youth offenders exposed to incidents. This suggests family violence for children exposed to offences is more likely to contribute towards offending in adolescence, in comparison to exposure to non-offence incidents. This outcome is logical given that offences are more harmful and therefore likely to have more of a psychological or behavioural impact (Holt et al, 2008; Davies et al., 2013).

7.3 Independent Predictors Associated with Adolescent Offending:

The main purpose of the univariate analysis was to identify which factors were independently associated with youth offending. From this, those that indicated a significant association were selected for the multivariate analysis. Nevertheless, there were several interesting points identified on the completion of the univariate analysis; these will be mentioned here.

Offence Exposed

For the children exposed to offences, it was not expected sexual offences would independently reduce the likelihood of youth offending significantly, given the harmful effect these offences can have on an individual, some of which are linked to adolescent offending (e.g. substance abuse, and mental health) (Amado et al., 2015; Finkelhor, 1994; Smith et al., 2005). However, there can be several reasons for this; a higher number of child protection referrals were associated with sexual offences suggesting the protective nature of child protection referrals, and females were represented highly amongst sexual offence events. Research suggests females are more likely to internalise the negative impacts of trauma displayed through mental health challenges instead of criminal behaviour (Amado, Arce, & Herraiz, 2015; Fergusson, McLeod, & Horwood, 2013; Finkelhor, 1994). Furthermore, Smith, Ireland and Thornberry, (2005) proposed the 'sleeper effect', suggesting sexual abuse in childhood can be related to offending but the onset is delayed until adulthood.

It was anticipated that role types, such as *victim,* would have a more consistent association with later offending, due to child maltreatment literature often exploring child roles of victims and witnesses and their association to negative outcomes such as offending (Holt et al., 2008; Logan-Greene et al., 2017; Mallet, 2014; Widom & Maxwell, 2001). However, the results of this study found role type on its own, for children exposed to offences, was not independently significantly associated with youth offending. The results

suggest other factors are more predictive of adolescent offending (e.g. frequency of contact) and police contact alone can contribute towards offending despite role status.

Unexpectedly, child protection reports, when tested by themselves, were found to be significant at increasing the odds of youth offending, suggesting child protection reports associated with an offence independently increase the risk of offending in adolescence. Given the protective nature of child protection agencies, the expectation was that child protection referrals would be a protective marker. This may be due to the severity of the offence the child is exposed to.

Despite these findings, there were changes when combined in the multivariate model. For example, when combined with other factors, sexual offences were no longer associated with adolescent offending. Furthermore, child protection referrals when combined with other factors were no longer significantly associated with adolescent offending. Surprisingly, the family violence indicator when combined with other factors significantly reduced the likelihood of adolescent offending. This will be discussed in more detail under protective factors.

Incident Exposed

For children exposed to incidents there were also some interesting points noted in the univariate models. For example, given the research on family violence events and the harmful impact it can cause, it was unexpected that domestic violence incidents would significantly reduce the odds of offending in adolescence (Holt et al., 2008). Police processes in attending domestic disputes may contribute to this finding. The truancy incident was expectantly associated with adolescent offending by itself, in line with research which reports truancy from school is associated with negative school experiences, social and academic difficulties and detachment from the education system, a predictor of offending in adolescence (Sutherland, 2011). It was also interesting to see there was no relationship between child

protection referrals, attempted suicide and mental health incidents and offending. Mental health challenges have been associated with adolescent offending; therefore, it was expected this would have a relationship (McArdle & Lambie, 2018). There may be a number of reasons for this outcome; for example, a child exposed to mental health challenges may not be the primary person associated with the event; a family member or peer event may have influenced this type of police contact.

Furthermore, unlike children exposed to offences, two role statuses for children exposed to incidents were, on their own significantly associated with adolescent offending this included role types of *subject of*, which increased odds of offending and *witness* role which reduced the odds of offending. However, when combined with other factors, the relationship between these four factors, domestic disputes, truancy, subject of and witness role, changed. They were no longer significantly associated with adolescent offending. This was particularly surprising for truancy incidents which no longer significantly increased the odds of adolescent offending, although it may be an indicator of school support lessening this association. These changes indicate that in a combination of factors, other factors have stronger associations to adolescent offending over these four factors, such as ethnicity and gender discussed in more detail in the following section. The changes observed from the univariate to multivariate analyses highlight why it is important to be cautious about research which has a limited set of variables, when taking into consideration other factors in children's environment that may not be predictive of youth offending when combined with others.

7.4 Consistent Predictors Associated with Adolescent Offending

Having established that police contact in childhood is associated with offending in adolescence, the purpose of the multivariate analyses was to determine which factors remained predictors of adolescent offending after controlling for the other variables in the model, and which factors were consistent predictors across the two sets of analyses (offence

and incident exposed). Several variables significantly associated with adolescent offending in the univariate models did not remain significant predictors in the multivariate analyses and several key risk and protective markers were identified across both subsamples.

7.4.1 Risk Factors

Overall, six variables consistently increased the odds of adolescent offending. Specific to the offence exposed subsample this included exposure to violent offences and specific to incident exposure included juvenile complaints, the remaining four variables were consistent across both subsamples and included Māori ethnicity, male gender, age (>7), and frequency of police contact. The six predictive factors will be discussed below as risk markers for adolescent offending. Similar to McKinlay et al., (2015) the risk factors explored here are predominantly static in nature apart from the event types which are dynamic.

Consistent Risk Factors

Māori Ethnicity

Children of Māori ethnicity were twice as likely to offend in adolescence compared to other ethnicities. This is consistent with other literature reporting children of Māori ethnicity are overrepresented in childhood risk statistics (Marie et al., 2009; Oranga Tamariki Ministry for Children, 2019; Statistics New Zealand, 2005). This suggests that children who identify as Māori may be exposed to other adverse childhood events to a greater extent than other ethnicities in New Zealand. Adverse events may include personal adjustment, family factors, acculturation stressors, social service inaccessibility, cultural disintegration, and socioeconomic status contributing to their increased risk of having contact with police or care and protection services in childhood (Marie et al., 2009; Shepherd & Ilalio, 2016).

Furthermore, several studies report on bias towards policing Māori within the wider criminal justice system of New Zealand, from policing through to conviction (Elers, 2012; Fergusson, Horwood, Swain-Campbell, & Criminology, 2003; G. Maxwell & Smith, 1998).

These studies raise a number of important points. For example, people with a Māori cultural identity are treated unfairly in that they are more likely to be approached and charged by police and convicted through the court system in comparison to non-Māori who may have committed the same offence. The bias effect may also account for the larger portion of Māori children going on to offend in adolescence in the current study. This bias effect is an international phenomenon reported amongst a majority of colonised countries with indigenous populations, such as Canada and Australia (Elers, 2012). In New Zealand several strategies have been adopted to reduce bias; for example, increasing recruitment and training of Māori working within policing and justice, and specialty Māori advisors and liaison officers. The New Zealand Police have implemented 'The Turning of the Tide' prevention strategy aimed at working in partnership with iwi to reduce crime and targets have been set to reduce reoffending by Māori by 25% by 2025 (New Zealand Police, 2012; 2018). The timeframe for the current study (1999-2013) may have preceded attempts by police to address the bias issue.

Male Gender

The current study found males were two times more likely to commit crime in adolescence in comparison to females. Interestingly, when combined with the other variables in the analysis, the association between male gender and later offending strengthened rather than reduced. National and international literature consistently report on male gender being a strong predictor of youth offending. These studies, (Amado et al., 2015; Fergusson et al., 2013; Fine et al., 2016; Finkelhor, 1994; Topitzes et al., 2011), suggest several reasons why males feature more predominantly in youth offending statistics. For example, males are more likely to externalise the negative impacts of trauma, have externalising behaviour problems, and negative peer associations, in comparison to females. Heightened sensitivity towards peer pressure and a desire to experience new things have been linked to peer criminal activity.

These factors may be especially influential for males in comparison to females, given the high portion of males in youth offending statistics. Furthermore, peer relationships become more significant in adolescence, with reports that a majority of offences committed by youth are committed with associates. Lastly, previous studies such as Topitzes et al., 2011, have found child maltreatment is a significant predictor of youth offending for males and females, being stronger for females. The current study found males were consistently significant in the prediction of youth offending across all domains and females did not have a significant relationship with youth offending, even after being exposed to offences such as maltreatment.

Age at first police contact

The current study illustrates criminal behavioural patterns from the onset of non-offending police contact. Age was a consistent predictor of adolescence offending; as age at first non-offending police contact increased by one unit, the odds of offending in adolescence increased. In particular, the highest risk period appeared to be from the age of eight years, especially for children exposed to offences in comparison the highest risk years for children exposed to incidents was older being between 12-13 years. There could be a number of reasons for children eight years and over having contact with police in childhood and offending in adolescence in comparison to children under the age of eight. For example, children aged between eight and 13 years are at different developmental stages than those below eight, they have greater communication skills, a greater level of cognitive and emotional understanding, are gaining independence from parents and are able to infer meaning of events occurring in their environment (McDevitt & Ormrod, 2016). They may be more affected by the occurrence of an offence or incident due to their ability to interpret, understand and remember the event. In terms of reporting events to police, children in this age group are more able to communicate to other adults things occurring in their home environment and may even report things to police themselves. Furthermore, the findings from

the current study, particularly in reference to the children coming into contact with police for juvenile complaints or truancy, reflect the age-crime curve which describes the peak age of offending onset begins between the age of 8–14years (Dennison, 2011). Some of these children may be coming to police attention for antisocial behaviour, observed particularly through the role of *subject of*. More research into the association between onset of police non-offending contact for offence or incident and youth offending would provide further insight into this relationship.

Frequency of police contact

The risk of adolescent offending increases as frequency of police contact increases despite role type or police event. In particular, children with more than two non-offending police contacts in childhood are at a greater risk of youth offending. This was a consistent trend across differing police events. Frequency of police contacts with children exposed to violent offences contained a larger portion (>60%) having more than one police contact, with approximately 38% having three or more police contacts in childhood. This is in line with the literature which reports children exposed to violence are at higher risk of experiencing other adversities such as emotional, sexual or other physical abuse increasing their risk of additional police contact, although the literature rarely examines the frequency of police events just that it has occurred (Fergusson & Horwood, 1998; Holt et al., 2008; Malvaso, Delfabbro, & Day, 2017). Frequent contact with police during this significant developmental period may contribute towards criminal thinking patterns and identity. Furthermore, police familiarity with a young person may contribute to them being stopped and spoken to by police more often, which may lead to the identification of offences to a greater extent than those less familiar with police. Overall this result suggests that frequency of police contact is an important factor when considering prevention initiatives, more so than type of police event and role status.

Offence Exposed

Both New Zealand based, and international research has shown that exposure to violence in childhood is associated with adolescent offending (Fergusson & Horwood, 1998; Holt et al., 2008). This was confirmed in the current study where police contact involving a violent offence in childhood was consistently predictive of youth offending, on its own and combined with other factors. Exposure to violence is also associated with other family adverse factors such as parental separation, socioeconomic disadvantage and parental adjustment issues (Fergusson & Horwood, 1998). This suggests children who come to police attention for violent related events are not only at risk of harm directed towards them, but potentially have other confounding factors present in their home environment which may contribute towards adolescent offending amongst other maladaptive developmental outcomes. Early identification of these factors and interventions focusing on developmental prevention have the potential to change these maladaptive trajectories (Dennison, 2011). However this main effect for exposure to violent offences was qualified by the interaction with frequency of police contact. The interaction effect suggested that as frequency of police contact increased the likelihood of exposure to violent offences leading to adolescent offending decreased. As this was the only significant interaction effect out of many that were tested, this results needs to be treated with caution. When considered in light of police process, it could be possible that the combination of coming to police attention multiple times and violence may trigger additional referrals for support.

Incident Exposed

Juvenile complaint incidents indicate the child has potentially engaged in antisocial behaviour, particularly if the role type is *subject of* indicating the child is the person of focus for the event. A juvenile complaint event may have been selected due to the child being too

young to prosecute, the antisocial behaviour of minor nature (i.e., out alone late at night, throwing stones at a letterbox) and police using discretion to use alternative action under the prevention initiative. Early signs of antisocial behaviour in childhood leading to adolescent offending has a firm foundation in the literature on predictors of offending (Fergusson et al., 2015; Tanner-Smith et al., 2013). The children involved in juvenile complaints may be more likely to follow life-course persistent trajectories given the existence of antisocial behaviour whilst in childhood. Longitudinal research reports life-course persistent offenders start offending at a younger age and commit crime throughout their life, with an earlier age of onset predicting a longer criminal career (Hawkins et al., 2003; T. E. Moffitt, 1993; Odgers et al., 2008). This suggests that children who show early signs of antisocial behaviour through juvenile complaints, for instance, may be at increased risk of youth offending, and prevention opportunities are available through these early non-formal anti-social incidents.

7.4.2 Protective Factors

While these factors reduce the probability of offending, they may not be protective as described by Cicchetti and Lynch (1993) who refer to protective factors as permanent conditions within an individual's environment, reducing risk. Overall, four factors were identified as protective in nature from the two subsamples. Factors of ethnicity of unknown and other, and family violence indicator were consistent across the two subsamples in significantly reducing the odds of adolescent offending. Specific to children exposed to offences when combined with a number of factors, dishonesty offences reduced the odds of offending. Specific to children exposed to incidents, suspicious activity events significantly reduced the odds of offending. Similar to the risk markers, there was some slight variation from the univariate models and across the multivariate models but overall these four factors:

dishonesty offences, suspicious activity, ethnicity of unknown and other, and family violence indicator remained consistently protective. These four factors will be described in detail here.

Consistent Protective Factors

Ethnicity Unknown and Other

Ethnicities of unknown and other consistently significantly decreased the odds of offending in adolescence. Ethnicities of unknown appeared to be more prevalent for minor police events such as dishonesty and, mostly, came into contact with police once. For minor events and where individuals have little police contact, police officers may have less opportunity to confirm ethnicity, particularly if the matter involved no physical attendance of police. With the current data there was no indication of when ethnicity was confirmed. For children having multiple police contact and offending in adolescence, there may be more of a necessity for police to record and confirm ethnicity, such as for potential court appearances either as a victim, witness or as an offender. The low number of Asian, MELAA and Pacific Islanders may be due to a number of factors, including cultural practices which may prevent reporting events to police or police recording processes for ethnicity. Internationally, indigenous populations represent a higher portion of offending statistics and this trend is also evident here as reported above in risk factors (Elers, 2012; Fitzgerald et al 2011; Shepherd & Ilalio, 2016). Children of Māori ethnicity consistently came to police attention for events that contained higher risk towards offending in adolescence, including exposure to violence offences and juvenile complaints, events that may include a more in-depth police investigation. Even though Europeans represented a larger group of children in comparison to ethnicities of unknown and other, and a number of European children did offend in adolescence (35.22%), the relationship between youth offending and Māori ethnicity was still stronger. This is a common trend reported in New Zealand youth offending statistics

(Ministry of Justice, 2017; New Zealand Police, 2017). Overall, it is largely speculation as to why this factor reduces the probability of offending.

Family Violence Indicator

Police processes around family violence is working to prevent adolescent offending by the way these events are dealt with. The family violence indicator consistently decreased the odds of offending in adolescence, suggesting a protective effect. This was a surprising outcome given the research around family violence and the harmful impacts it can have on a child's developmental trajectory. Family violence occurrences are often associated with other adverse factors such as adjustment issues, property crime, and substance abuse (Baglivio et al., 2015; Fergusson & Horwood, 1998; Holt et al., 2008; Patricia Logan-Greene, 2017). There could be a number of reasons for the protective outcome in the current study. For example, of the OECD countries New Zealand has been known to have a high rate of family violence. In light of this, practical methods such as multi-disciplinary approaches and enhanced information-sharing policies have been implemented across agencies (e.g. New Zealand Police, Department of Corrections, Oranga Tamariki and the Ministry of Education) to prevent the negative effects of family violence. New Zealand Police (2018) issued an approach to family violence, 'Eyes Wide Open', emphasising the significance of a quality investigation within the first 72 hours of attendance and working in partnership with other agencies to tackle the underlying harm. This approach also involved change in terminology replacing 'family violence' with 'family harm'. Multidisciplinary approaches are able to examine factors across a child's developmental system; therefore, behavioural problems may be identified earlier and appropriate supports set in place to address the collective family needs, reducing the odds of offending in adolescence.

However, given the dates of the cohort for this current study (1999-2013) are before the implementation of the multi-disciplinary approach, other factors may need to be

considered. For example, this study examined only the first police contact; the family violence indicator may not be as protective for multiple police contact for family violence. Would the protective nature still be observed on the second or third police contact for family violence? Other factors outside of family violence may be more predictive of offending even when combined with other factors such as frequency of police contact. Lastly, this variable serves only to indicate when an event is related to family violence or not; the current study is relying that it has been recorded correctly.

Offence Exposed

Dishonesty offences continued to reduce the odds of adolescent offending in the multivariate analyses. Dishonesty offences contained over 70% of victims, 20% more than victims of violence offences, 8% lesser than sexual offences. When explored amongst other police factors, the offence of dishonesty appears to contain less adverse risk than violence and sexual offences (Robinson & Keithley, 2000). For example, children exposed to dishonesty offences had the highest proportion of children with one police contact in childhood (73.90%), and less than 2% of dishonesty occurrences were associated with family violence and care and protection factors. This suggests children exposed to dishonesty offences may have protective factors present in their ecological environment and be less physically and psychologically harmful in comparison to violence or sexual offences which are often associated with other confounding factors (Fergusson & Horwood, 1998; Holt et al., 2008). Inferences could be drawn of the child's socioeconomic status (SES) and community; e.g., having items of certain value and living in a community where dishonesty offending is prevalent may talk to middle class or above SES. Perpetrators of dishonesty offences towards children may also belong in the child's peer domain, e.g., theft of a cellphone from a peer at school (Feld & Bishop, 2011; Warr, 1993). Overall, being the victim of a dishonesty offence in childhood may have psychological impacts which could affect that child's living

situation, but it does not increase the odds of offending in adolescence (Robinson & Keithley, 2000). Impacts of dishonesty offences and how they may contribute to behavioural and psychological factors are less explored in literature.

Incident Exposed

Similar to dishonesty offences, children exposed to incidents of suspicious activity were at significantly reduced odds of offending in adolescence. Suspicious activity incidents may consist of activities involving a person walking around a carpark looking into cars or looking over fences, minor events where the alleged suspicious person is not located, activities being reported before the person of interest commits an offence or there is no evidence to indicate the commison of an offence. In comparison to the juvenile complaint incident, suspicious activity appears very similar with both having a high portion of children in the role of *subject of* and only one police contact yet despite this, juvenile complaints almost doubled the risk for later offending and suspicious activity reduces the risk of offending by half. On closer examination, children exposed to suspicious activity tended to consist primarily of features less associated with adolescent offending (e.g., there was a high portion of children of European ethnicity (39.56%) and unknown (35.62%), a higher proportion of females, over 90% had only one contact with police in childhood, and less than 1% were associated with family violence. There may be differences in how police respond or record these two events, which may contribute towards the associations observed. Similar to dishonesty offending, these events are less explored in literature.

7.5 Implications for Policy

The findings highlight children exposed to police contact in non-offending status are a cohort in need of services to prevent them from becoming youth offenders. Several factors of childhood non-offending police contact were observed that should be examined more closely

in terms of policy and procedure. Given the vulnerability of children in contact with police, police may be the first to identify risk and protective markers. This evidence increases the need for police to be working closely with social and youth service agencies, multi-agency liaison. Police as a protective factor against children going on to offend in adolescence is also an important concept for policymakers to consider. For example, police contact associated with family violence consistently showed a protective effect, suggesting that the multidisciplinary processes and policies in place are working to prevent adolescent offending by way of working with family violence. Policymakers should pay attention to this finding and consider extending the family violence processes to children in non-offending contact with police.

One of the key findings in this study relates to role status. Considerable research focuses on role status of children as victims or witness and the psychological and behavioural impacts, criminal behaviour being one (Farrington & Loeber, 2013; Fergusson & Horwood, 1998; Holt et al., 2008; Mallet, 214). In light of this, police spend a lot of time focusing on role status. For example, different role types will receive different attention; victims will be referred to victim support, offenders may be charged and prosecuted, other roles may be referred for additional support depending on the severity, crime and the impact it has had on the individual. The current study expands on this research. This study shows when it comes to preventing offending in adolescence, role status is clearly not the most important thing. Findings show other factors outside of role status such as frequency of police contact, age of onset of police non-offending contact, Māori ethnicity and being male, all tend towards increasing the odds of offending in adolescence despite role status. Documenting role status may be important for other things, like trauma or victim support, for those who are victims or witnesses. Given the lack of evidence for a 'victim' status increasing offending risk, this may have implications for victim support. For policing, this finding may have implications for

how police record and respond to childhood contacts with police. Currently police record victim contacts through a hierarchy structure: bronze, silver, gold. Those who reach a certain tier will receive a different level of response such as a victim intervention plan and further referrals to partner agencies, to prevent further victimisation, especially important for family harm events. In relation to prevention of offending, having a similar hierarchy structure for the frequency of childhood police contact including all role types: victim, witness, complainant, subject of, person at risk; may be beneficial in identifying those children who have frequent police contact and are at greater risk of offending. The findings from this study clearly identified as the number of police contacts increased the risk of adolescence offending increased, a clear risk marker for children exposed to offences was above two police contacts. In relation to age for children exposed to offences, first police contact over the age of seven significantly increased their risk of adolescent offending. In light of this finding, these factors alongside the role status findings, should be given more attention in policing processes in terms of childhood non-offending contact and offending prevention.

Early intervention is in line with DLCCT and Developmental Prevention which emphasise the early identification of risk and protective factors within a child's ecological system and tackling the issue before it arises (Dennison, 2011; Farrington & Loeber, 2014; Manning et al., 2013). Māori ethnicity highlights the need for both early intervention and prevention, therefore maintaining/increasing prevention and intervention efforts with Māori families and youth will contribute towards reduced offending rates. Age of onset to non-offending police contact highlights the need for early intervention. Frequency of contact emphasises the need for prevention of further non-offending police contact, in line with the police business model and a goal to decrease victimisation and offending. Early intervention for criminal offending in children exposed to police contact for non-offending status has the

potential not only to prevent offending behaviours but to identify negative psychological impacts of exposure to adversities bringing them into police contact.

7.6 Strengths and Limitations

There were several strengths to this study. Firstly, prospective analyses improve our understanding of the causal direction between variables, (e.g., links between early childhood contact and later adolescent offending), although not causality itself. In comparison, retrospective analysis may exaggerate the links. For example, a large number of adolescent offenders had childhood contact with police whereas prospectively a majority had no offending police contact in adolescence. The results show that while there is a significant relationship between life events police attend and adolescent offending, there is still a large number of children who did not offend in adolescence. Secondly, the large sample size is a strength in interpreting the data and decreases the margin of error. Lastly, nationwide data was used. Therefore, findings are able to be applied nationally opposed to by district or city.

A common limitation of using administration data is the underestimation of reporting. Even though a large dataset was used, it is well understood crime is underreported, particularly for children, due to their age and reliance on adults to report. Therefore, was this data a fair representation of children in contact with police? Given there was a higher portion of children exposed to offences than non-offence incidents and less children in minor roles such as complainant or informant, consideration needs to be given to a number of factors. For example, police may be more inclined to report children's presence when they are exposed to a serious event or an event where a prosecution is likely, or if they are a primary subject of the event. Some minor occurrences police attend to or come across on the course of their duty may not be formally reported in the police database or children's presence at an event may not always be recorded, therefore there may be a larger number of children in contact with police than what this dataset portrayed. This brings to question who are the children not in

contact with police? There was no comparison group of children who had no contact with police in childhood meaning we could not compare factors such as demographics to these children.

Predominantly factors were more static in nature in comparison to dynamic; static factors are unable to be changed in intervention, whereas dynamic factors can be and are often the target for interventions. Other limitations include markers rather than more in-depth measures and not including repeated measures (e.g., only the first contact with police and first offending was explored), repeated measures across these variables could have been employed to examine trajectories of offending as co-occurring with other police contact. Also, the current analyses do not point to a cumulative effect of these variables combined. Further analyses are needed to assess how these variables in combination increase the risk of offending.

7.7 Suggestions and Directions for Future Study

A number of directions for future research have been identified through this study. Specifically exploring the cumulative effect over time of the risk and protective factors that might point to patterns or causal chains from initial contact with police (e.g. whether exposure to offences in childhood is associated with later childhood incident occurrences of juvenile complaints). This research would further contribute to the developmental life-course criminology theory specifically offending trajectories. There is room to research the repeated measures, such as frequency of police contact, exploring factors associated with additional contacts and youth offending. Ascertaining if the same factors apply to early adulthood offending could be completed through extending the current study. This may also help to contribute towards the notion of the late onset of offending for children exposed to sexual offences. Adding in a severity measure of crime such as the New Zealand based Crime Harm

Index score (Curtis-Ham & Walton, 2017), would provide further insight into the differences of crime severity in childhood and youth offending patterns.

Conclusion

A large nationwide sample from the New Zealand Police administration system was used to examine the relationship between childhood non-offending police contact and adolescent offending. The outcomes highlight the large number (1 in 5) of children in contact with police in childhood (0-13years) for a range of events, including harmful offences and less severe non-offence incidents, and the different non-offending roles. Childhood non-offending police contact is associated with youth offending. One in six children in contact with police in childhood for a non-offending event had contact with police in adolescence as an offender. There were six childhood factors that consistently significantly increased the odds of adolescent offending. Demographic factors included male gender, Māori ethnicity and age of first non-offending police contact (>7). Other police administration factors included frequency of police contact (>2), exposure to violent offences and juvenile complaint incidents. Factors that significantly reduced the odds of offending in adolescence included events of dishonesty offences, suspicious activities, family violence and ethnicity of unknown or other. A key finding highlights when children are in contact with police, factors outside role status (e.g. *victim*, *witness*) and police event should be emphasised as markers for later offending. Furthermore, surprisingly, family violence indicator decreased the odds of adolescent offending suggesting police processes at family harm events is working to reduce offending. These outcomes have practical implications for how police record and respond to events involving children. The possibility that police might serve as a protective factor for children who are at risk of later offending in adolescence is an important concept for policymakers to consider and the need for police to be collaborating closely with social and youth service agencies is emphasised. These findings were discussed in line with developmental prevention and DLCCT, contributing to the literature on risk and protective

factors associated with adolescent offending. Overall, this study showed the significant opportunity the New Zealand Police have in the prevention of offending.

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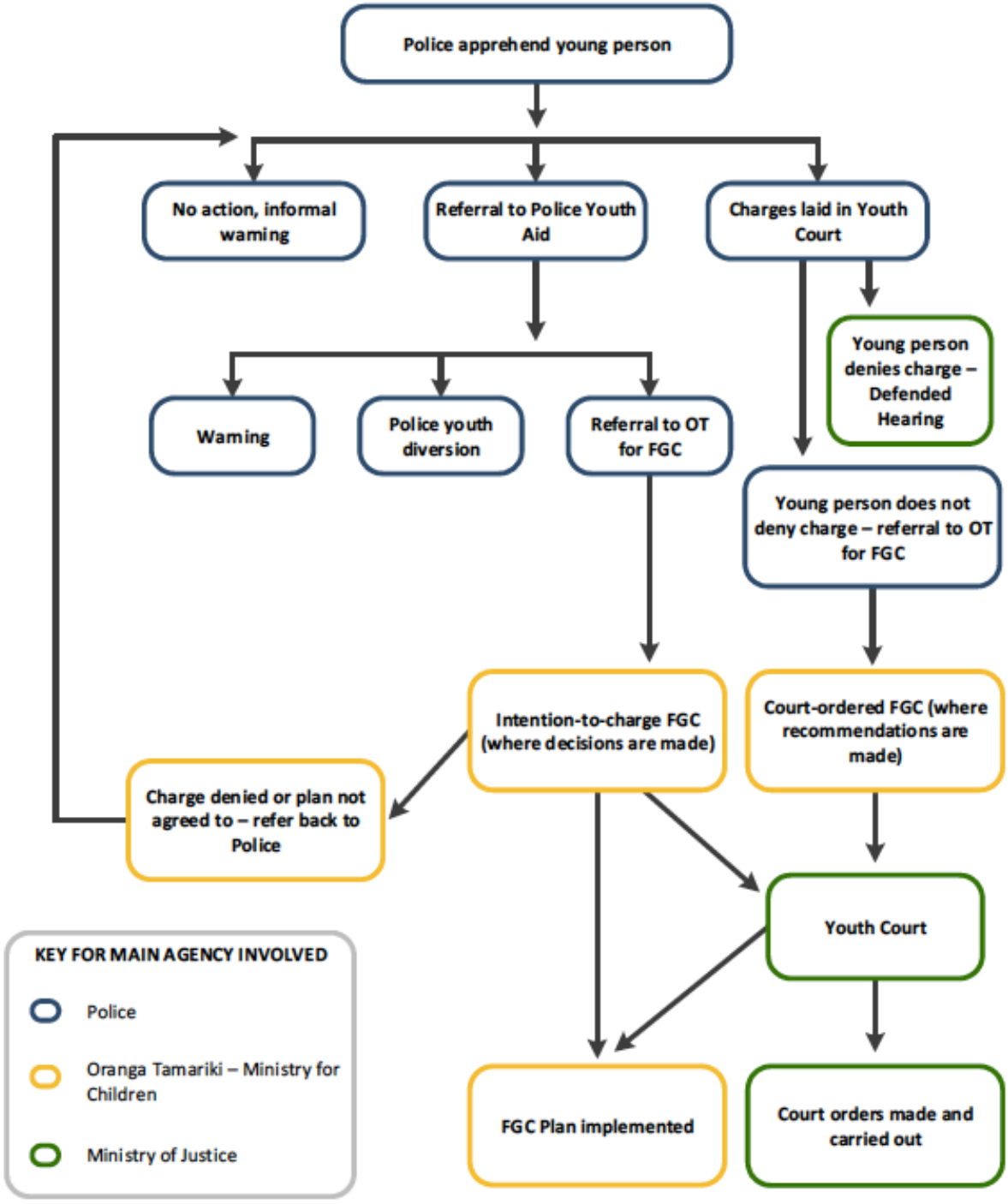
Appendices

Appendix A



Flow Chart Illustrating Youth Justice Process from Apprehension to Conviction, (Ministry of Justice, 2012)

Appendix B

Illustrates examples of precise offences according to the primary category of offences

Violence	*Sexual*	*Dishonesty*	*Drugs and Antisocial Behaviour*	*Property Abuse*	*Property Damage*	*Administration*
• Assaults Child (manually) • Male Assaults Female (manually) • Common Assault (manually) • Common Assault (domestic) (manually) • Assault Person with Blunt Instrument	• Indecently Assaults Female under 12 • Indecently Assaults Female 12-16 • Unlawful Sexual Connection Female under 12 • Indecent Assault on Boy under 12 • Male rapes Female under 12	• Theft (under $500) • Unlawful Takes Bicycle • Theft ($500 - $1000) • Shoplifts (Est val under $500) • Burglary • Robbery (by Assault)	• Leaving Child without Reasonable Excuse • Behave Threateningly • Speaks Threateningly • Disorderly Behaviour • Cultivates Cannabis	• Wilful Trespass • Cruelty/ Ill-treatment of animals • Offensive/ Disturbing use of telephone • Unlawfully carry imitation firearm • Unlawfully in enclosed yard	• Wilful damage • Wilful sets fire to property/ endangers life • Wilful damage – Graffiti • Attempted Arson • Arson	• Escape Lawful Custody • False Statement/ Declaration • Owns dog attacks person/ stock • Breaches of Medicines Act 1981 • Breach detention conditions

Appendix C

HUMAN ETHICS COMMITTEE

Secretary, Rebecca Robinson
Telephone: +64 03 369 4588, Extn 94588
Email: human-ethics@canterbury.ac.nz

Ref: HEC 2018/61

6 August 2018

Kelly Marie Foster
Health Sciences
UNIVERSITY OF CANTERBURY

Dear Kelly

The Human Ethics Committee advises that your research proposal "Youth Offending and Prior Non-Offending Police Contact" has been considered and approved.

Please note that this approval is subject to the incorporation of the amendments you have provided in your email of 31st July 2018, **and the following:**

Please send the HEC a copy of the approval from the Research Review and Access Committee once this is received.

Best wishes for your project.

Yours sincerely

pp. R. Robinson

Professor Jane Maidment
Chair
University of Canterbury Human Ethics Committee

Appendix D

Ngāi Tahu Consultation and Engagement Group

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Tuesday 31 July 2018

Tēnā koe Kelly Foster

RE: Young Persons and Prior Non-Offending Police Contact

This letter is on behalf of the Ngāi Tahu Consultation and Engagement Group (NTCEG). I have considered your proposal and acknowledge it is a worthwhile and interesting project and you are clear about how you ought to take participants' (cultural) needs into account if and when applicable.

Given the scope of your project, no issues have been identified and further consultation with Māori is not required.

I understand Ethics has suggested; 'Given the prevalence of Māori engaged with police investigations, the Committee strongly recommend that the results of the research are reviewed by a Māori academic to ensure the your safety when publishing, given the highly politicised nature of offending rates by Māori.'.

You are a Detective with the NZ Police, having been employed for the last 6 years, and been part of the Child Protection Team. It is with that in mind that I suggest you ask Sergeant Andrea Dahl and Inspector Hirone Waretini to also review your research.

Thank you for engaging with the Māori consultation process. This will strengthen your research proposal, support the University's Strategy for Māori Development, and increase the likelihood of success with external engagement. It will also increase the likelihood that the outcomes of your research will be of benefit to Māori communities.

The Ngāi Tahu Consultation and Engagement Group would appreciate a summary of your findings on completion of the current project. Please feel free to contact me if you have any questions.

Ngā mihi whakawhetai ki a koe

Henrietta Latimer (on behalf of the NTCEG)

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