Maltreatment and Youth Delinquency: The Relationship between Physical Neglect and Delinquent Behaviour in Young Males

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Abstract

Current maltreatment research speculates neglect is more prevalent than abuse, is associated with other forms of maltreatment in 95% of cases, and can go unnoticed until other forms of maltreatment are brought to the attention of authorities (Arthur, 2007). Even though any form of maltreatment is detrimental to the development of a young person; neglect has been significantly associated with youth delinquency and insecure attachment (Robertson, 2009; Zielinski, 2009). Neglect however, is the most understudied and least understood form of maltreatment (McSherry, 2007). This study aimed to explore neglect and its relationship with insecure attachment and youth delinquency. Eighty one young males, aged 16 – 20 years were recruited from community organisations and a school located in the lower North Island of New Zealand. The young people were assigned into two groups - delinquent group and non-delinquent group. Three questionnaires were administered: Childhood Trauma Questionnaire, Adolescent Attachment Questionnaire, and Self-Report Delinquency Scale. Results indicated that overall maltreatment, overall abuse, overall neglect, physical abuse, and physical neglect were all significantly associated with youth delinquency. The more severe the experience of physical abuse or physical neglect the more likely the young person was to display delinquent behaviour. There was no association found between attachment and delinquent behaviour, possible reasons for this are discussed. Physical neglect was the only type of maltreatment to remain significant after the school group was removed.

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Approval for this study was obtained from the Massey University Human Ethics Committee: Southern B on February 28th, 2012 (Appendix A).

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Chapter One

Introduction

Youth crime statistics throughout the world indicate young people aged 16 – 20 years make up at large proportion of overall offenders (Margo & Stevens, 2008; Skrzypiec, Castle, & Wundersitz, 2005; Statistics New Zealand, 2011; Thornberry, Huizinga, & Loeber, 1995). In New Zealand young people aged 16 – 20 years represent approximately a quarter of all crime statistics, with young males in particular making up 81% of all apprehended youth (Becroft, 2003; Chong, 2007; Statistics New Zealand, 2011). Many researchers believe the high youth crime statistics are associated with the experience of maltreatment (Arthur, 2007; Colman, Mitchell-Herzfeld, Kim, & Shady, 2010; English, Widom, & Brandford, 2002; Fang & Corso, 2007; Haapasalo & Pokela, 1999; Jonson-Reid et al., 2010; Kaufman, 2010; Krischer & Sevecke, 2008; Macmillan, 2009; Maughan & Moore, 2010; Mersky & Reynolds, 2007; Miura, 2009; Rebellon & van Gundy, 2005; Robertson, 2009; Ryan & Testa, 2004; Tell, 2010).

A problem with the term maltreatment is it includes both abuse and neglect - as though they are one in the same. Of the different forms of maltreatment, neglect is more prevalent than abuse, is associated with other forms of maltreatment in 95% of cases, and can go unreported until other forms of maltreatment are brought to the attention of authorities (Arthur, 2007). Yet neglect is the most understudied and least understood form of maltreatment (McSherry, 2007). The New Zealand Ministry of Social Development acknowledge in two recent studies the limited data on neglect as a construct because it is often incorporated into the construct of abuse (Lievore & Mayhew, 2007; Martin, Fielding, & Taylor, 2010).

The experience of neglect is detrimental to a growing young person and has been significantly associated with the long-term consequences of insecure attachment and youth delinquency (Robertson, 2009; Zielinski, 2009). Moreover, insecure attachment has been associated with both the experience of neglect and youth delinquency (Sousa et al., 2011). Perhaps insecure attachment may help to explain the relationship between youth delinquency and neglect (Robertson, 2009).

This research aims to provide the reader with an understanding of neglect and how it is related to insecure attachment and youth delinquency in young males aged 16 – 20 years. Particular interest will be paid to the relationship between the different forms of neglect (emotional and physical), attachment styles (secure and insecure), and youth delinquency (predatory crimes against people, predatory crimes against property, illegal service crimes, public disorder crimes, status crimes, and hard drug use). This is in an attempt to determine whether the different types of neglect are associated with different attachment styles and different types of delinquent behaviour.

Youth Delinquency

Youth is defined by the Youth Development Strategy Aotearoa as any person aged 12 – 24 years (Ministry of Youth Affairs, 2002). Delinquent behaviour and maltreatment however, can have an impact on a person's life at any age, and the definition of a child or young person can vary in different contexts, therefore for the purposes of this study the term youth will relate to any person under the age of 21 years. The current study will focus on young males aged 16 – 20 years because they represented 36% of all apprehended youth in New Zealand in 2010 (Statistics New Zealand, 2011).

Delinquent terminology often includes the terms: delinquent, antisocial, criminal, and offending. Antisocial behaviour is conduct which lacks consideration for others and potentially damages society, whether intentionally or by negligence (Jonson-Reid et al., 2010). Criminal behaviour is also known as offending behaviour and is conduct which is against the laws of the country where the offence was perpetrated (Ministry of Justice, 2010). Delinquent behaviour represents both antisocial and criminal behaviour by a young person (Piquero, Macintosh, & Hickman, 2002). Delinquent terminology is often used interchangeably and for the purposes of this study delinquent, antisocial, criminal, and offending behaviour will be referred to as delinquent behaviour.

Statistics New Zealand measure delinquency in two ways: apprehension rates and conviction rates. Apprehension rates refer to people who have been dealt with by police in response to a reported or observed crime. Apprehension means the police have spoken to this person, which may or may not result in any further action (Statistics New Zealand, 2011). Whereas, conviction rates refer to those people who have been apprehended, charged, and found guilty of participating in delinquent behaviour (Statistics New Zealand, 2011). Many crime statistics refer to apprehension rates because there is not always enough evidence to convict a person of a crime and apprehension rates more closely align with self-reported delinquent behaviour (Krohn, Thornberry, Gibson, & Baldwin, 2010). This study will refer to apprehension rates when discussing delinquent behaviour.

Delinquent behaviour tends to be generalist and diversified (Francis, Soothill, & Fligelstone, 2004; Zampese & Gray, 1999). This means young people tend to participate in any type of delinquent behaviour. Six types of delinquent behaviour are identified in this study including ‘predatory crimes against person’, which encompasses: homicide, assault

and other acts intended to cause injury, dangerous or negligent acts endangering persons, harassment, and threats of harm (Chong, 2007; Pink, 2011). Other types of delinquent behaviour include: 'predatory crimes against property' (burglary, unlawful entry, theft, willful damage, motor vehicle conversion, and arson), 'illegal service crimes' (selling illicit drugs, or purchasing alcohol for minors), 'public disorder crimes' (being loud, drunk, or begging for money in a public place), 'status crimes' (disruptive school behaviour and use of alcohol), and 'hard drug use' (includes the use of all drugs except alcohol and marijuana) (Chong, 2007; Elliott & Ageton, 1980; Pink, 2011). Traffic offences can also be delinquent acts, but have been excluded from this study as they were not part of the psychometric questionnaire used to measure delinquency (Elliott & Ageton, 1980).

Therefore, this study will identify youth delinquency as behaviour by young people under the age of 21 years, which can lack consideration for others, can be damaging to society, or may be against the law (Jonson-Reid et al., 2010; Ministry of Justice, 2010; Piquero et al., 2002). The factors which contribute to youth delinquency will be investigated using the Bronfenbrenner Bioecological Model of Youth Development. This model of youth development was selected because it encompasses many of the contributing and interacting factors associated with the development of delinquent behaviour (Allen et al., 2002; Elgar, Knight, Worrall, & Sherman, 2003; Hawkins, 1996; Krischer & Sevecke, 2008; Overbeek, Vollebergh, Engels, & Meeus, 2005). Bronfenbrenner's model includes: microsystem, mesosystem, exosystem, and macrosystem (Figure 1) (Bronfenbrenner & Ceci, 1994).

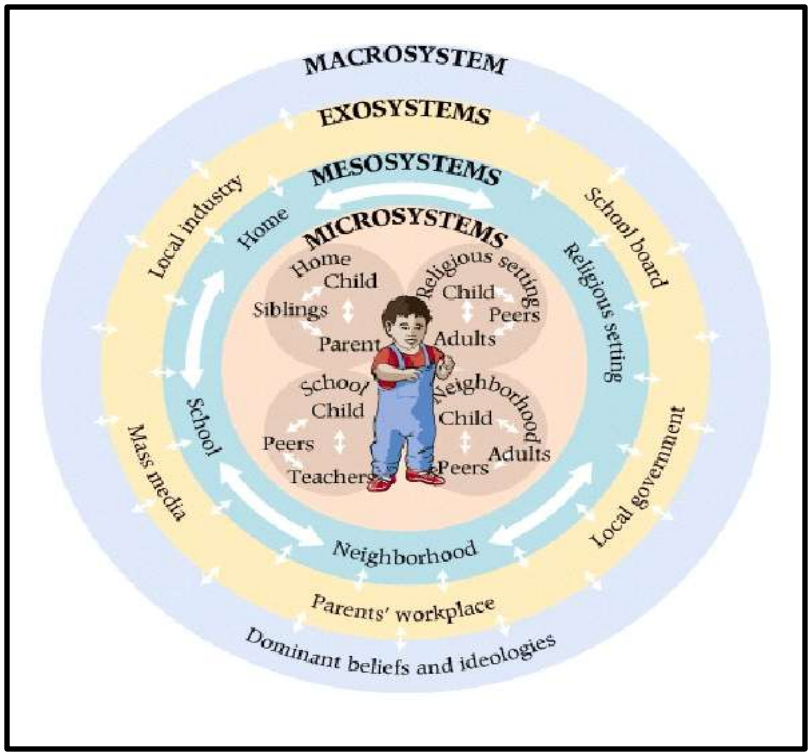

Figure 1. Bronfenbrenner's Bioecological Model of Youth Development incorporating the microsystem, mesosystem, exosystem, and macrosystem. From "Centre for child and community development: Conceptual framework", by Annette Caldwell Simmons School of Education & Human Development. Texas, United States of America: Southern Methodist University.

Microsystem

Microsystems include the young person and all factors within the young person's immediate environment (Bronfenbrenner & Ceci, 1994; Saint Rosemary Educational Institution, 2010). This can include young person characteristics (age and gender), environmental characteristics (family, attachment relationships, maltreatment, peer relationships, and protective factors), and moral developmental stages which can all shape the development of delinquent behaviour (Bronfenbrenner & Ceci, 1994).

Young person characteristics. Age (16 – 24 years) and gender (male) have been identified as prominent risk factors in the development of delinquent behaviour (Chou & Browne, 2010; Margo & Stevens, 2008; Skrzypiec et al., 2005; Statistics New Zealand, 2011; Zampese & Gray, 1999).

Age. Age is a risk factor identified in studies conducted around the world, due to 16-24 year olds committing more crime than any other age group (Chou & Browne, 2010; Margo & Stevens, 2008; Skrzypiec et al., 2005; Statistics New Zealand, 2011). In the United Kingdom, for example, 25% of all young people committed a crime in the year 2005; 50% of these crimes were committed by 10% of the youth population (Margo & Stevens, 2008). In addition, a Newcastle cohort study determined 28% of the young male population had appeared in court before the age of 18 years (Chou & Browne, 2010). Furthermore, South Australian authorities identified males aged between 16-20 years made up 81% of people apprehended in the year ending 2004 (Skrzypiec et al., 2005). New Zealand statistics are similar to those found around the world. Chong (2007) identified in 2006 25% of all 17 - 20 year olds were apprehended by police (Statistics New Zealand, 2011). Moreover, in 2010, 16 - 20 year olds had the highest apprehension rates of all age groups, making up 36% of overall apprehensions by police (Statistics New Zealand, 2011). Explanations for the increased risk in this age group include: young people can be more vulnerable to deviant peer pressure and more likely to take risks. In addition, young peoples' frontal lobes are not fully formed; when fully functioning, the frontal lobe can help to reduce impulsivity. Young people can lack the full brain development needed to prevent behaviours driven by desires and urges, therefore may be more likely to act impulsively (Murray-Close, Han, Cicchetti, Crick, & Rogosch, 2008; Wampler & Downs, 2010).

Gender. The male gender is another risk factor in the development of delinquent behaviour (Chou & Browne, 2010; Murray-Close et al., 2008; Wampler & Downs, 2010). This risk factor highlights males because they are significantly more likely to report engaging in more delinquent behaviours in all age groups compared to their female counterparts (Chou & Browne, 2010; Fergusson & Horwood, 2002). In addition, males are more likely to appear in youth court, not because of gender bias, but because they simply commit more crime (Farrington et al., 2010). Moreover, males are more likely to reoffend compared to their female counterparts (Colman et al., 2010). Broidy and Agnew (1997) explain the male gender risk factor as the difference in reactions to strain between males and females. For instance, strain is likely to lead to frustration, anger, and depression for both sexes; however males are more likely to respond to this strain and negative affectivity through externalising behaviours (delinquency) compared to females who are more likely to display internalising behaviours (depression and self-harm) (Broidy & Agnew, 1997; Pratt & Cullen, 2000). It is the externalising behaviours which are more likely to come to the attention of authorities, hence recorded as a delinquent act. Accordingly, this study will focus on 16 – 20 year old males because they make up the largest demographic for young offenders.

Environment characteristics. Environmental characteristics influencing a young person's participation in delinquent behaviour include: family, moral development, attachment relationships, maltreatment, peer relationships, and a range of protective factors.

Family. Family characteristics are environmental factors which can impact either positively or negatively on the young person within their microsystem. Family characteristics impacting on the development of delinquent behaviour can include:

reinforcement of delinquent behaviour, lack of knowledge on youth development (Twentyman & Plotkin, 1982; Weymouth & Howe, 2011), family size (Dharmalingam, Pool, Sceats, & MacKay, 2004; Haapasalo & Tremblay, 1994), single-caregiver families (Belsky, 1993; Maughan & Moore, 2010), domestic violence (Baldry, 2003; Hamby, Finkelhor, Turner, & Ormrod, 2010), corporal punishment (Straus, 2000), caregiver attitudes to education (Gorman, 1998), criminal social environments (Hay, Fortson, Hollist, Altheimer, & Schaible, 2006), and caregiver alcohol dependence (Obot & Anthony, 2004).

These family characteristics can contribute to the negative emotional and behavioural development of the young person and the advancement of delinquent behaviour (Belsky, 1993; Martin et al., 2010; Stowman & Donohue, 2005). Protective factors linked to reducing the harm caused by negative family characteristics include: knowledge of caregiving and youth development, youth behaviour management techniques, and age appropriate expectations (Counts, Buffington, Chang-Rios, Rasmussen, & Preacher, 2010). Similarly, caregivers who can provide their child with their basic needs for food, adequate financial support, supervision, and clothing, can help reduce the possible damaging consequences of negative family environments (Zielinski, 2009).

Positive family characteristics can minimise the development of delinquent behaviour, for example, families who embrace peaceful conflict resolution and communication skills are more likely to model positive verbal relationship interactions; reducing the possibility of the young person being modeled negative physical ways of interacting with others (Counts et al., 2010). In addition, caregivers who receive emotional support from other adults can be more sensitive to their children, helping to reduce stress within the caregiver-young person relationship, and allowing for the development of a nurturing relationship and secure

attachment bond with their child (Counts et al., 2010; Dixon, Browne, & Hamilton-Giachritsis, 2005).

Moral development. Moral development is another characteristic of the microsystem because it relates to how people construct beliefs about right and wrong behaviour and can contribute to how young people function and make decisions (Walker, 1982). These beliefs are constructed throughout life and change in response to changes in moral reasoning. Moral reasoning is constructed by advancements in knowledge, intelligence, and cognition and is a decision making tool used to support a persons' assessment of situations and their subsequent behaviour (Kohlberg, 1971; Palmer, 2003; Piaget, 1972). Moral development and moral reasoning are informed by cultural expectations, genetics, environment, social interactions, attachment to caregivers, and peer relationships (Barger, Power, & Chilton, n.d.; Carpendale, 2000).

Piaget (1972) stated the acquisition of moral development is based on the intellectual development of the young person, centered on the attainment of age in years. Conversely, Kohlberg (1971) believed moral development is a sequence of transformation in cognitive development not acquired at a certain age, but acquired in relation to advancements in reasoning. Kohlberg (1971) also believed there was a level of development past adolescents (Crain, 1985). The two theorists however, agreed on a number of factors, one of which was the concept of stages of progression: stages are invariant in sequence (no regression or stage skipping), linear in nature (skills acquired from previous stages are not lost), and consistent over time (moral reasoning and general patterns of thought are consistent over time) (Carpendale, 2000; Kohlberg, 1971; Piaget, 1972; Walker, 1982).

Piaget's Theory of Moral Development. Piaget's Theory of Moral Development comprised four stages identified in Table 1 (Kesselring & Muller, 2011; Lourenco & Machado, 1996). Piaget believed intelligence and morality are interrelated; the more people learn the more people use the application of logical rules to help derive solutions to their problems (Carpendale, 2000). Piaget also noted some young people may not reach certain stages due to toxic environments, a lack of stimulation, or disability (Dyson, 2004; Piaget, 1972).

Infants in the sensorimotor stage of moral development understand they can manipulate their world, but cannot comprehend their impact on the world (Kesselring & Muller, 2011). The preoperational stage involves an advancement in intellect in the form of imaginative play (Piaget, 1972). Preadolescents advance to concrete operations where abiding by the rules appears to be a part of intellectual and social interactions (Kesselring & Muller, 2011). Finally, the formal operation stage focuses on the creation of a moral identity, which can be social or antisocial in nature and results from a change in intellect and structure of thought (Kesselring & Muller, 2011; Piaget, 1972).

Young people who are maltreated by their caregivers at any stage of development can be suspended in stage progression or slow their progression in moral development; because maltreatment can delay or eliminate a young person's motivation to explore the world for fear that the world is hostile and rejecting (Ainsworth, Blehar, Waters, & Wall, 1978; Palmer, 2003). Exploring the world is a mechanism used by young people, which allows them to interact with others, understand interpersonal relationships, comprehend the relationship between behaviour and punishment, as well as identify fair exchanges (Aber & Allen, 1987). Those young people who fail to explore may be more likely to display

delinquent behaviour now and in the future because the young people's behaviour can be antisocial in nature as they have not learnt how to behave in socially appropriate ways through positive interactions with others (Palmer, 2003).

Table 1

Piaget's Stages and Ages of Moral Development

Stages	Stages achieved
Sensorimotor	Infancy (0-18 months)
Preoperational	Childhood (2-4 years)
Concrete operational	Preadolescent (7-8 years)
Formal operational	Adolescent (10-12 years)

Note. Adapted from language and stages used in "The concept of egocentrism in the context of Piaget's Theory", by T. Keselring and U. Muller, 2011, *New Ideas in Psychology, 29,* p.327-345.

Piaget's Theory of Moral Development has received multiple criticisms including: ignoring post-adolescent development (Crain, 1985; Lourenco & Machado, 1996), focusing too much on egocentrism (Crain, 1985; Kesselring & Muller, 2011), underestimating the competence of young people, and estimation of age norms disconfirmed by data (Lourenco & Machado, 1996).

Kohlberg's Theory of Moral Development. Kohlberg's Theory of Moral Development is split into three levels and six stages of orientation as indicated in Table 2 (Kohlberg, 1971).

The six stages represent the different and more advanced ways of thinking and reasoning, which guide conformity and behaviour (Crain, 1985). Kohlberg's Theory differs from Piaget's in it focuses on reasoning and not knowledge or intellect (Kohlberg, 1971; Piaget, 1972).

Table 2

Kohlberg's Levels and Stages of Moral Development

Levels	**Stages**
Pre-conventional morality	1. Punishment and obedience orientation
	2. Instrumental relativist orientation
Conventional morality	3. Interpersonal concordance orientation
	4. Law and order orientation
Post-conventional morality	5. Social contract legalistic orientation
	6. Universal ethical-principle orientation

Note. Adapted from "Stages of moral development according to Kohlberg", by L. Kohlberg, 1971. In C.M. Becks, B.S. Crittenden, & E.V. Sullivan (Eds.), *Moral education.* Toronto: University of Toronto Press, p. 1-2.

Stage one 'punishment and obedience' proposes young people who behave in accordance with accepted social-cultural norms and rules do so because they are compelled by threat of punishment, reasoning that if you get punished it must be wrong (Kohlberg, 1971). Stage two 'instrumental relativist' states, in the pursuit of personal gain there can be more than one right answer. During state two thinking the person now not only makes judgments based on

consequences but also thinks about what is in it for them and sometimes how this might benefit others (Kohlberg, 1971). Stage three identifies a shift in focus from punishment to realising approval can be earned by being nice, therefore judgments are now made based on being liked and approved of by others (Crain, 1985). At stage four, people are now showing concern for others and society, as well as the maintenance of social order (Crain, 1985; Kohlberg, 1971). Stage four is not generally dominant until males reach 20-30's - most people will only reach stage four reasoning (Carpendale, 2000). Stage five is about social mutuality and the genuine interest in the welfare of others (Crain, 1985; Kohlberg, 1971). Stage six defines correct behaviour by a decision of the conscience (Crain, 1985; Kohlberg, 1971).

The stress of maltreatment can reduce cognitive competence resulting in young people reasoning at a less mature level. This can result in an egocentric bias in moral reasoning; with the potential for confusing desire with automatic entitlement (Moshman, 2011; Palmer, 2003). Delinquent behaviour may ensue if a young person believes they are automatically entitled to items belonging to others and may acquire these items by stealing or using force (Palmer, 2003). In addition, young people may be stuck in stage one moral reasoning; if there is no punishment by caregivers, teachers, or authorities then the behaviour must not be wrong (Moshman, 2011).

Kohlberg's Theory has been criticised because the application of the theory predicts greater consistency of moral development than what has been observed (Carpendale, 2000). Kohlberg's (1971) research identified that young people progress through the stages of moral development sequentially, but this conclusion was based on using different young people at different ages and identifying younger youth were at lower stages. This type of

data analysis however, is inconclusive because it does not show each young person moving through each stage sequentially – this requires longitudinal studies (Walker, 1982).

Moral development and reasoning however, is not a perfect science. Young people do not always use their highest level of moral development (Carpendale, 2000). In addition, young people can be encouraged by peers to engage in delinquent behaviour, potentially acting in ways incongruent with their moral beliefs (Palmer, 2003). Also, not all delinquent young people will have immature reasoning and not all young people who reason at immature levels will become delinquent (Palmer, 2003). Therefore, a perfect correlation between moral thinking and moral behaviour cannot always be expected (Crain, 1985).

Attachment Theory. Attachment relationships with others are another environmental factor impacting on the young person within their microsystem. Attachment Theory was first identified by Bowlby (1958) and expanded on by Ainsworth, Blehar, Waters, and Wall (1978). Attachment Theory looks at the relationship between a child and their primary caregiver and identifies that people learn how to relate to themselves and others within the caregiver-young person relationship. This relationship creates a perception of self-worth and self-purpose and models behaviour, which demonstrates how to behave within relationships with others (Griffin & Bartholomew, 1994). Attachment can be identified as secure or insecure and is based on the child's behaviour while interacting with their caregiver and a stranger, and while alone. Attachment behaviour is a survival technique beginning in the first year of life and is a long-term emotional relationship with a specific person (Bowlby, 1987). At birth the brain of a young person is designed to elicit attachment relationships with others (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000). The most influential person for the young person is the primary caregiver, because the primary

caregiver dictates environmental influences and can be an enormous environmental influence themselves (Leucken & Lemery, 2004).

Attachment behaviour is activated by a number of elements including: fatigue, hunger, ill health, pain, a caregiver who is absent, departing or discouraging of proximity, and stressful life events. Secure attachment can be formed in response to a caregiver whose behaviour is predictable and reliable, and able to attend to the young person's needs for security and attention (Schore, 2001). This can cultivate a significant trusting relationship seen as meeting the young person's needs in the forms of comfort, support, nurturance, and protection (Howe, 2005; Schore, 2001; Siegel, 2001). The loss or threatened loss of this relationship generates intense feelings of distress (Howe, 2005; Perry, 2001).

Maltreatment interrupts the development of secure attachment to others due to the stress resulting from a lack of care and positive attention, as well as the experience of physically and emotionally painful situations inflicted by people who are supposed to protect the young person from pain and suffering (Coates, 2010). Insecure attachment can occur when the caregiver provides the young person with frightened, frightening, or disorganised interactions such as, exposure to domestic violence, abuse, and/or neglect (Siegel, 2001). The experience of maltreatment can consequently increase the likelihood of developing psychopathological symptoms in young people (Ainsworth & Bowlby, 1991; Crittenden & Ainsworth, 1989; Elgar et al., 2003; Iwaniec, 2006; Krischer & Sevecke, 2008).

Psychopathology is defined by internalising and externalising behaviours. Internalising behaviours can include: a grandiose and superficial concept of self, lack of remorse, lack of empathy, and lack of responsibility (Krischer & Sevecke, 2008; Vitacco, Neumann, & Jackson, 2005). Externalising behaviours can include: impulsivity, aggression, violence,

deviant peer associations, antisocial behaviour, and delinquent behaviour (Krischer & Sevecke, 2008; Vitacco et al., 2005). Internalising problems both predate and predict externalising problems and all of the behaviours can be related to the characteristics of delinquent youth (Overbeek et al., 2005). Delinquent behaviour can be displayed in response to relationships which trigger attachment related behaviour including: intense feelings of rage, inner turmoil, dread, and out of control thoughts, emotions, and behaviour. These people may appear to behave compulsively, recklessly, and destructively (Fang & Corso, 2007; Hirschi & Gottfredson, 1979; Howe, 2005).

Research has identified mixed results regarding the relationship between attachment and delinquent behaviour (Allen et al., 2002; Sousa et al., 2011; Tell, 2010; Wampler & Downs, 2010). Sousa et al. (2011), found secure attachment was negatively correlated to delinquent behaviour. In addition, Allen et al. (2002) found insecure-anxious attachment styles were positively related to delinquent behaviour in young people aged between 16 and 18 years. Conversely, Tell (2010) determined attachment was not directly related to delinquency; but an insecure attachment could contribute to the young person's overall functioning. Notwithstanding the connection between insecure attachment and increased delinquent activity, further evidence suggests many young people who display secure attachment styles also take part in delinquent behaviour (Wampler & Downs, 2010). Such mixed results may be due the complexity of factors influencing delinquent behaviour which is also dependent on the context in which it is performed, be that within deviant peer associations, a poor community setting, an extreme need for food, and/or a tendency to become aggressive in stress invoking situations (Wampler & Downs, 2010).

The categorisation of people into the different attachment styles (secure and insecure) as explained by Ainsworth et al. (1978) has been demonstrated by Griffin and Bartholomew's (1994) four category model, which categorises people into attachment styles based on the persons' positive and/or negative thoughts of self and others (Figure 2). The two dimensions underlying this four category model are anxiety and avoidance (Roisman et al., 2007). Statistics on the prevalence of certain attachment styles will be based on American research as New Zealand statistics were not available.

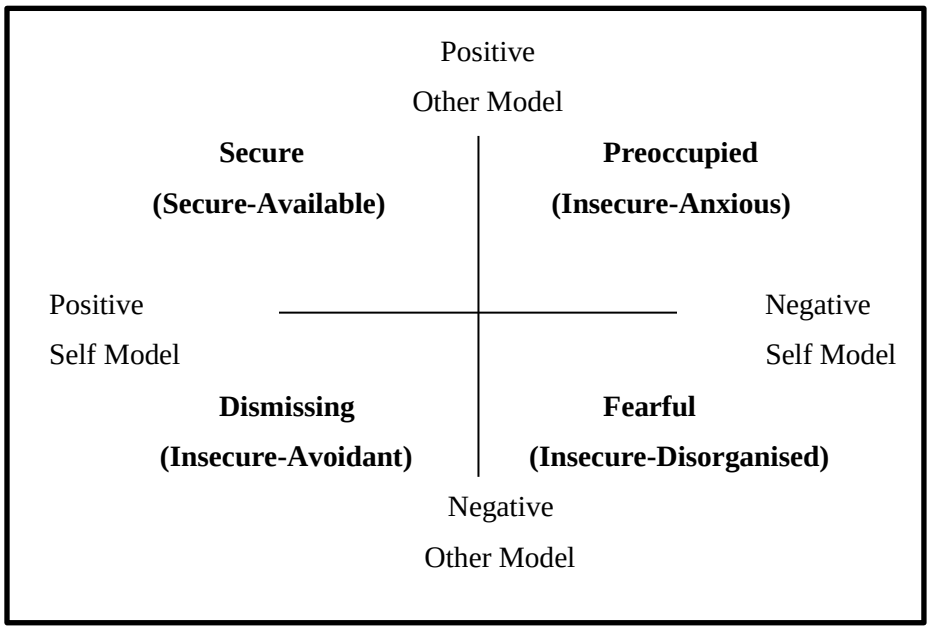

Figure 2.

Griffin and Bartholomew's (1994) four-factor model of attachment relationships, which incorporates the persons' view of self and others to assist in the categorisation of people into secure or insecure attachment styles. Adapted from "Models of self and other: Fundamental dimensions underlying measures of adult attachment," by D. Griffin, & K. Bartholomew, *Journal of Personality & Social Psychology, 67,* p. 431.

Secure attachment. A secure attachment relationship is considered the ideal relationship and is outlined in Figure 2 as a positive view of self and positive view of other (Bowlby, 1958; Griffin & Bartholomew, 1994). Secure attachment behaviour was defined by Ainsworth et al. (1978) as infants uninhibited in exploration of the new environment when their caregiver was in the room, tearful on separation, sincere happiness upon the caregivers return, and comfortable seeking physical touch and comfort from their caregiver. This supports the idea that people who are securely attached can experience their caregiver as sensitive, consistent, and responsive to their needs. The experience of negative emotions can be embraced within the attachment relationship with the caregiver providing feedback on emotions and different ways of coping; imparting valuable knowledge to the young person so they can learn how to regulate their own distress (Ainsworth & Bowlby, 1991). A secure attachment can enhance the young persons' self-worth, and help to create a view of relationships with others as safe (Ainsworth et al., 1978; Griffin & Bartholomew, 1994; Siegel, 2001). In social relationships securely attached people feel safe when expressing their attachment needs to others (Siegel, 2001). They understand emotions and can accurately recognise and comprehend their own and other peoples thoughts, feelings, and behaviour. Throughout, there is a confidence their needs will be met unconditionally by their caregivers (Howe, 2005). As a result, people who are securely attached can feel low anxiety and low avoidance relative to their relationships with others (Roisman et al., 2007). Sixty percent of the American population experiences secure attachment (Perry, 2001).

Insecure attachment. An insecure attachment relationship can impact on how the young person relates to themselves and others - positively or negatively - and can be classified into three styles: a negative view of self and positive view of other (insecure-anxious), a positive

view of self and negative view of other (insecure-avoidant), and a negative view of self and negative view of other (insecure-disorganised) (Figure 2) (Ainsworth et al., 1978; Bowlby, 1987; Griffin & Bartholomew, 1994). Insecure attachment behaviour as defined by Ainsworth et al. (1978) can be described as an unwillingness to pay attention to the caregiver when they are present, stubbornly resistant to their caregivers authority, can be irritable, clingy, demanding, and not easily soothed.

Young people adapt their attachment behaviour to promote immediate survival; in some circumstances these behaviours can result in insecure attachment, which may be maladaptive and detrimental in the long-term (Crittenden & Ainsworth, 1989). Young people who are maltreated, for example, may suppress normal attachment behaviour by minimising their affect and distorting elements of their psychological self (Aber & Allen, 1987; Howe, 2005). This has shown in some circumstances to result in insecure attachment, which can cultivate poor impulse control, hyperactivity, and feelings of hopelessness all of which can lead to delinquent behaviours (Howe, 2005; Sousa et al., 2011).

The young person's maladaptive behaviours can transfer into peer relationships, where their survival technique continues to be applied yet in a different context. The young person can display delinquent behaviours in the form of manipulation, control, and exploitation of others; not because they want to hurt others, but because, from their experience, this is how they have managed to get their needs and wants met – a technique that often leads to the inability to maintain positive peer relationships (Howe, 2005). Morton and Browne (1998) reviewed 13 studies on maltreatment and attachment and found that 76% of maltreated young people displayed insecure attachment behaviour. Howe (2005) states neglect

specifically influences the development of insecure attachment. Furthermore, Perry (2001) related the experience of emotional neglect to the development of insecure attachment.

Some of the other factors which can also influence the view of self and others include: caregiver alcohol and drug use, domestic violence, young person's temperament, the caregivers lack of understanding of young people's developmental stages, and the caregivers own mental health (Goldson & Jamieson, 2002; Howe, 2005; Perry, 2001).

Insecure-avoidant attachment. Insecure-avoidant attachment style is defined as a positive view of self and negative view of others (Griffin & Bartholomew, 1994). These young people experience low anxiety due to affect minimisation and not relying on others to enhance their self-worth. In addition, these young people display avoidance behaviour in close relationships, for fear of abandonment and painful rejection (Griffin & Bartholomew, 1994; Howe, 2005). In the Stranger Situation experiment, Ainsworth et al. (1978) described insecure-avoidant attachment behaviour in young people as the unwillingness to pay attention to their caregiver when they were present, showing little distress upon their departure, and aggressively turning away upon reunion.

Avoidant attachment can be a result of caregivers who are consistently unresponsive to the attachment behaviours of their children (Wekerle & Wolfe, 1998). Young people can learn to reduce the pain of rejection by inhibiting their attachment behaviour and withdrawing from interactions with others (Howe, 2005). Perry (2001) reports that 20% percent of the United States population experience insecure-avoidant attachment.

Insecure-ambivalent attachment. Insecure-ambivalent attachment style is expressed as a negative view of self and positive view of others model (Griffin & Bartholomew, 1994). These young people experience low avoidance because they rely on others to improve their

sense of self-worth; however, may still be weary of others because they are unable to predict other people's emotional availability. As a result these young people may live in constant fear of rejection resulting in high anxiety (Hazan & Shaver, 1994; Roisman et al., 2007). Ainsworth et al. (1978) defined insecure-ambivalent attachment as resistant attachment. In the Stranger Situation experiment the young person's behaviour was observed as inhibited; young people do not seek to explore their new surroundings and keeping close proximity to the caregiver. These young people become incredibly distressed upon separation and show anger and resistance to physical contact upon the caregivers return (Ainsworth et al., 1978).

Insecure-ambivalent attachment can be a result of caregivers who are preoccupied with their own needs and unable to satisfactorily respond to their child (Howe, 2005). In order for young people to maximise the care and protection received from caregivers, they may increase their attachment behaviour in the form of distress (Morton & Browne, 1998). While this is effective in the moment, young people may not trust their ability to hold their caregivers attention for long, and can subsequently resist being soothed or comforted (Ainsworth et al., 1978). According to Perry (2001), 15% of the United States population experience insecure-ambivalent attachment.

Insecure-disorganised attachment. Insecure-disorganised attachment style is expressed as a negative view of self and others model (Griffin & Bartholomew, 1994). People experiencing insecure-disorganised attachment encounter high anxiety and high avoidance (Roisman et al., 2007). These people rely on others to create a sense of self-esteem, however, may avoid close relationships because they fear the pain of rejection and continue to have the expectation of abandonment (Hazan & Shaver, 1994).

Caregivers who are unable to care for themselves, who are depressed, have unresolved trauma, are drunk, or drugged can appear helpless and this is frightening for the young person (Lyons-Ruth & Spielman, 2004). Additionally, the experience of abuse and neglect are also fear provoking. Experiencing fear within the attachment relationship can have a marked influence on the young person because they may live within a paradox of the caregiver as a source of fear and a source of safety, which can result in externalising behaviours (Lyons-Ruth & Spielman, 2004). Externalising behaviours such as delinquent behaviour, are a controlling strategy, which allows the young person to feel empowerment; reducing their own sense of helplessness, vulnerability, and need for comfort (Howe, 2005). According to one study, 5% of the United States population experience insecure-disorganised attachment (Perry, 2001).

Styles of attachment can be a result of anxiety and avoidance behaviours and can be influenced by a number of factors; one of the most influential negative factors is the experience of maltreatment within the caregiver-young person relationship (Howe, 2005).

Maltreatment. The microsystem also encompasses maltreatment which is an environmental factor directly impacting on the young person (Bronfenbrenner & Ceci, 1994). Maltreatment is defined by the World Health Organisation as "the physical and/or emotional ill-treatment of a person aged 17 years and under, which results in actual or potential harm to the health, development, or dignity of that person" (World Health Organisation, 2012, p.1). Although, maltreatment can be perpetrated by anyone, studies have identified 81% of maltreatment is perpetrated by the primary caregiver, 6% by relatives other than caregivers, 4% by unmarried partners of caregivers, and the remaining 9% of maltreatment is perpetrated by others (Barber & Delfabbro, 2009; Gaudiosi, 2010).

Many factors have been associated with the etiology of maltreatment including: sole caregiving, family size, the mental health of the caregivers, and a lack of education on youth development. Further evidence suggests some caregivers who have a history of maltreatment in their youth can go on to display abusive and neglectful behaviours towards their own children (Dixon et al., 2005; Maughan & Moore, 2010; Ministry of Social Development, 2010b; Sneddon, Iwaniec, & Stewart, 2010; Tobias, Gerritsen, Kokaua, & Templeton, 2009; Twentyman & Plotkin, 1982). Caregivers who have been subjected to maltreatment in their own childhoods may have experienced an environment devoid of elements such as: food, hygiene, clothing, shelter, education, healthcare, love, support, affection, and nurturance, and/or encountered verbal or non-verbal abuse, or physical injury within their home environment (Sneddon et al., 2010).

Consequently, these caregivers could have an internal working model of helplessness, emptiness, and depression, stemming from a negative view of themselves and/or others (Crittenden & Ainsworth, 1989; Hildyard & Wolfe, 2007). This deprivation of the basic necessities for healthy living may leave these caregivers lacking the skills necessary to meet the basic needs of their own child. Dixon et al. (2005) suggest some caregivers who have experienced maltreatment can exhibit negative emotions and behaviours towards their own children, because they lack the cognitive, social, and other coping resources necessary to manage the extreme emotions the primary attachment relationship presents (Burack et al., 2006; Dixon et al., 2005; Hildyard & Wolfe, 2007). As a result of extreme emotions, caregivers can withdraw and become emotionally unavailable or may lash out aggressively toward their child (Dixon et al., 2005; Twentyman & Plotkin, 1982).

Caregivers who maltreat their children can foster a home environment of hostility and/or unpredictability in the form of aggression and/or physical or emotional unavailability (Howe, 2005). Exposure to these kinds of environments can violate the natural trusting bond between the young person and caregiver, which can result in the potential for the development of insecure attachment, a lack of empathy, negative emotions, and aggression in the young person (Aber & Allen, 1987; Crittenden & Ainsworth, 1989; Howe, 2005; Krischer & Sevecke, 2008; Morton & Browne, 1998; Perry, 2001; Robertson, 2009; Sousa et al., 2011; Wekerle & Wolfe, 1998).

Other consequences of maltreatment include behavioural, cognitive, social, and physical problems throughout life (Ainsworth & Bowlby, 1991; Gaudiosi, 2008). This includes: school dropout, alcohol and drug problems, depression, a lack of motivation to establish safe relationships with adults, memory problems, and somatic complaints (Anda et al., 2006;Sousa et al., 2011;Aber & Allen, 1987). In addition, some young people who are maltreated can become more egocentric, lack social perspective taking skills, and have lower levels of self-worth (Allen, 2011; Burack et al., 2006).

A number of studies have identified a link between maltreatment and delinquent behaviour (Colman et al., 2010; English et al., 2002; Fang & Corso, 2007; Haapasalo & Pokela, 1999; Jonson-Reid et al., 2010; Krischer & Sevecke, 2008; Maughan & Moore, 2010; Mersky & Reynolds, 2007; Rebellon & van Gundy, 2005; Robertson, 2009; Ryan & Testa, 2004; Tell, 2010; Widom & Maxfield, 2006). Due to the difficulty conducting maltreatment research, many studies rely on officially recorded cases of maltreatment and delinquency, which only identify a small subset of those young people who experience maltreatment and/or engage in delinquent activity (Colman et al., 2010; English et al., 2002;

Jonson-Reid et al., 2010; Ryan & Testa, 2004). Although official records are not the most accurate measure, they are a starting point for identifying relationships between maltreatment and delinquency. English et al. (2002) for example, reviewed official records of maltreatment and youth arrests, finding maltreated youth were 4.8 times more likely to be arrested as a youth compared to control groups. In addition, maltreated young people were arrested earlier (approximately age 15 years) and committed more offences (English et al., 2002; Robertson, 2009; Widom & Maxfield, 2006). Other research suggests maltreatment is related to delinquency (Ryan & Testa, 2004), violent delinquency (Fang & Corso, 2007; Mersky & Reynolds, 2007), and antisocial behaviour (Jonson-Reid et al., 2010). Neglect in particular, has been associated with future delinquency (Maughan & Moore, 2010) as well as violent and non-violent delinquent acts (Robertson, 2009).

Maltreatment will be divided into two types' abuse and neglect, and separated further into the subtypes of physical abuse and emotional abuse, and physical neglect and emotional neglect. Each maltreatment type and subtype will be defined, and the possible etiologies and consequences will be identified. It is essential to note Belsky's (1993) argument, in reality no one pure type of maltreatment exists in isolation. The experience of maltreatment can include both abusive and neglectful events and very often do - 90% of cases include both neglect and abuse (Howe, 2005). This may account for the similarities in etiology and consequences of the different maltreatment types.

Abuse. Abuse is defined by the Children, Young Person's, and Their Families Act (1989) as "harming a young person by means of ill-treatment or deprivation" (Children Young Persons and Their Families Act, 1989, p.28). Abuse from a neurological perspective can result in heightened stimulation of neural networks related to the stress response (Leucken &

Lemery, 2004). Increased activity in this part of the brain, may instigate specialisation in maladaptive stress responses and erratic behaviour (Leucken & Lemery, 2004; Schore, 2001). Consequently, neural activity can be deviated away from other important areas of functioning. These areas can be culled due to a lack of stimulation; potentially impairing the young person's ability to regulate their emotions, form rational thought, or engage in mindful behaviour (Perry, 2002; Siegel, 2001).

Young people who are abused by their caregivers can have an internal conflict; their primary attachment figure is a source of care and protection, and at the same time is a source of emotional pain and/or physical injury (Egeland & Sroufe, 1981). Many young people can learn to adjust their behaviour to fit in with their caregivers parenting style by inhibiting anger, becoming compliant, or developing patterns of delinquent behaviour (Crittenden & Ainsworth, 1989; Perry, 2001). The consequences of abuse can be long lasting; as experiences in youth, help young people construct a way of interacting with others in the world. The experience of abuse or neglect, can mean interactions with others can become maladaptive in the form of withdrawal, manipulation, passiveness, and/or aggression (Crittenden & Ainsworth, 1989). Abuse will be categorised into two forms for the purposes of this research: physical abuse, and emotional abuse, and while sexual abuse is another form of abuse, it is not the focus of this study and will not be part of this review.

Physical abuse. New Zealand longitudinal data reveals 33-39% of people report experiencing some form of physical abuse (New Zealand Standard, 2006). Physical abuse is defined as "non-accidental bodily assaults to a young person by an adult or older person, which poses a risk of, or results in, physical injury" (Bernstein et al., 2003, p.175). Physical abuse is a traumatic experience for young people because the ordeal does not just happen

within the moment of physical contact; there is a lead up to the event, the pain of the assault, the ongoing pain of healing wounds, and the emotional distress, which can be part of every step (Krischer & Sevecke, 2008).

Physical abuse has been associated with a number of detrimental long-term outcomes (Christoffersen & DePanfilis, 2009; Durrant, 2000; Gaudiosi, 2008; Krischer & Sevecke, 2008; Malinosky-Rummell & Hansen, 1993; Tell, 2010). Tell (2010) found the experience of physical abuse was related to the future perpetration of sex offenses in some young males. Further research supports the link between physical abuse and alcohol and/or drug abuse, suicidal behaviour, emotional problems, interpersonal problems (Malinosky-Rummell & Hansen, 1993), a lack of empathy, attachment problems, social problems, psychosis (Krischer & Sevecke, 2008), and violence (Widom & Maxfield, 2006). In addition, physical abuse is also related to delinquent behaviour (Arthur, 2007; Haapasalo & Tremblay, 1994; Krischer & Sevecke, 2008; Malinosky-Rummell & Hansen, 1993; Rebellon & van Gundy, 2005; Widom, 1989; Widom & Maxfield, 2006).

Emotional abuse. Emotional abuse is "any behaviour - by action or omission - that is psychologically damaging to the behaviour, conduct, cognition, affect, or physical functioning of the young person" (Trickett, Negriff, Ji, & Peckins, 2011, p.4). Specifically, emotional abuse is verbal or non-verbal assaults on a young person's sense of self-worth or wellbeing, or any humiliating or demeaning behaviour directed toward a young person by an adult or older person (Bernstein et al., 2003; Feerick, Knutson, Trickett, & Flanzer, 2006) (Trickett et al., 2011). The motivation to harm the young person is not necessary (Feerick et al., 2006). Examples of non-verbal emotional abuse include: refusing hugs and loving gestures, not responding to the young person's spontaneous social behaviours, refusing to

discuss the young person's interests, and not allowing the young person to have friends (Trickett, Mennen, Kim, & Sang, 2009). In addition, verbal emotional abuse can consist of threats of harm to the young person or their loved ones, telling the young person they are useless or worthless, or influencing young people to engage in delinquent behaviours (Feerick et al., 2006; Gaudiosi, 2008; Iwaniec, 2006). Pure emotional abuse has been identified in 7% of incarcerated young people's case reports, yet emotional abuse occurs as a consequence of, or in combination with, other types of maltreatment 90% of the time (Gaudiosi, 2008).

Young people who experience their caregivers as emotionally abusive can internalise the caregivers critical voice and may develop the understanding they are insignificant, flawed, unloved, unwanted, and only of value in meeting the needs of another (Feerick et al., 2006; Iwaniec, 2006). Young people who have experienced emotional abuse can become destructive, attention seeking, and have short attention spans. In addition, they can appear withdrawn, detached, nervous, and depressed (Iwaniec, 2006). These young people may display hostility and aggression at times of stress, and can fail to display self-control in situations that offer instant gratification (Feerick et al., 2006; Iwaniec, 2006). Subsequently, emotional abuse is positively associated with delinquency (Allen, 2011; English et al., 2002; Iwaniec, 2006). Neglect is another form of maltreatment and includes the subtypes of emotional neglect and physical neglect. Neglect is the focus of this study, therefore will be analysed more comprehensively than abuse.

Neglect. Neglect is a heterogeneous phenomenon which is difficult to define because it includes a number of different factors related to the well-being of the young person (McSherry, 2007). The central feature of neglect is the failure of the caregiver to provide the

basic necessities of life, which are essential for the development of physical and emotional well-being (McSherry, 2007). These necessities include: food, health care, shelter, education, supervision, protection, emotional support, nurturance, affection, hygiene, and clothing (Feerick et al., 2006; McSherry, 2007). Although, perfect delivery of the young person's basic necessities is the goal, in reality, not all needs can be met perfectly, and basic needs change with age and developmental stage (Perry, 2002). In addition, most caregivers inadvertently neglect their children on at least one occasion throughout the duration of their youth (Stowman & Donohue, 2005).

Stowman and Donohue (2005) identified another issue in defining neglect - different agencies use different definitions depending on their reason for use. Researchers, for example, may require a narrow definition because it is easier to operationalise; a definition totally inadequate for use by social workers in day to day interactions with families (Stowman & Donohue, 2005). For the purpose of this research, neglect will be explained with reference to meeting the young person's basic needs; the duration and severity of neglect; young person, caregiver, and community deficits; young people and caregivers rights; and the sociocultural context of the neglectful situation.

Smith and Fong (2004) describe neglect in terms of deficits - caregiver deficits, young person deficits, and community deficits. Caregivers who are unable to provide their children with adequate healthcare, nutrition, shelter, education, supervision, affection, and protection can be seen as failing to fulfill their roles as caregivers (Bowlby, 1988; Collins et al., 2000). Although, caregivers are in control of their child's immediate in-home environment, they are not liable for failures within the community. Communities that fail to supply adequate

housing, public assistance, schooling, healthcare services, and recreational services can be considered to be providing insufficient or deficit services (Smith & Fong, 2004).

Equally, young people can foster deficits as a result of genetic inheritance or environmental factors including: behavioural problems, temperament issues, mental illnesses and/or physical disorders (Smith & Fong, 2004). In a report released by the New Zealand Ministry of Health (2004), 11% of New Zealand households had at least one young person with a mental and/or physical disorder. These disorders can include: autism spectrum disorders, attention deficit/hyperactivity disorder, spina bifida, and cerebal palsy, which can make day to day interactions with the young person more stressful and demanding for the caregiver, influencing their ability to provide adequate care (Anda et al., 2006; Bellis, Hooper, Spratt, & Woolley, 2009; Dyson, 2004; Murray-Close et al., 2008).

Another factor influencing the development of the young person is their environment. Environments fostering neglectful and/or abusive caregiver behaviours can affect a young person's ability to understanding relationships and appropriate interpersonal behaviour (Murray-Close et al., 2008). As a result some young people can display emotional dysregulation and delinquent behaviour (Krischer & Sevecke, 2008; Maughan & Moore, 2010; Robertson, 2009).

Smith and Fong (2004) go further in their definition of neglect by stating it should include the young person's rights to nurturance and support and their right to freedom from maltreatment. Smith and Fong (2004) go further in adding the caregivers and families rights to autonomy; recognised as the freedom to raise their children in a manner that they see fit, without the intrusion of authorities (Bernstein et al., 2003; Smith & Fong, 2004; Tourelle, 2007).

The impact of neglect on a growing young person is dependent on the duration and severity of the neglect experienced and the protective factors available to the young person. The consequences of neglect at a neurological level to a young person under the age of three years can result in an all-around lack of stimulation depriving the brain of significant experiences which help to organise, structure, and create the functional areas of the brain (Perry, 2002; Smith & Fong, 2004). This can predispose the young person to rage, aggression, or violent behaviour (Siegel, 2001). The impact of neglect in older young people aged four and over is dependent on the duration and severity of neglect experienced and whether emotional support is available within the microsystem (Bellis et al., 2009). Other consequences of neglect include: poor emotional and physical functioning, (Spertus, Yehuda, Wong, Halligan, & Seremetis, 2003), depression, antisocial personality disorder, conduct problems (Horwitz, Widom, McLaughlin, & White, 2001), somatic symptoms, anxiety, obesity, and sleep disturbance (Anda et al., 2006).

Lastly, the definition of neglect should be put into the sociocultural context in which it occurs (Martin et al., 2010). Many definitions lack sociocultural consideration and impose middle class values on lower class families (Stowman & Donohue, 2005). In many cultures, particularly minority cultures, young people are expected to help feed and supervise their younger siblings, which is believed to be essential for the young person's development of responsibility (Feerick et al., 2006; Martin et al., 2010). Other cultures could assess this type of arrangement as unsafe and taxing on a young person (Smith & Fong, 2004). Therefore, the definition of neglect is dependent on: reason of use, the minimum adequate levels of care, duration and severity, young person, caregiver, and community deficits, young person and caregiver rights, and the sociocultural context.

The challenge of verifying the existence of and measuring the degree of severity of neglect is not only problematic due to its heterogeneous nature, but also because it occurs when no one is watching - hence the nature of neglect (Feerick et al., 2006). Moreover, attempting to observe neglect through caregiver-young person interactions can create an unnatural environment where people modify their behaviour to approved social norms (Chaffin, Funderburk, Bard, Valle, & Gurwitch, 2011). Furthermore, social service agency case records are only consistent with self-report measures of neglect 59-65% of the time – thus professionals only capture and report two thirds of identifiable neglect in families who have been referred to authorities (Feerick et al., 2006). Therefore, a better way to identify the occurrence of neglect is to ask young people outright (Feerick et al., 2006). Even if young people are unaware their caregivers behaviours are neglectful, asking them to fill in a questionnaire will provide information about their regular interactions with their caregiver and provide a brief summary of the type of care they receive (Bernstein & Fink, 1998).

To date research has identified pure neglect affects 9% of the population of New Zealand (Martin et al., 2010). This is a low percentage and may be a result of neglect often going unnoticed and unsubstantiated by authorities until other forms of maltreatment are present (Arthur, 2007). Mennen et al. (2010) note neglect has the highest comorbidity rate of any type of maltreatment. Specifically, of those young people who experienced neglect, 70% also experienced emotional abuse, and 50% suffered physical abuse (Mennen et al., 2010). Other studies on maltreatment comorbidity found neglect was identified in 71- 95% of all maltreatment cases (Arthur, 2007; Gaudiosi, 2008). In a report released by the New Zealand Police 33 – 39% of people in New Zealand have experienced either physical abuse in their lifetime (New Zealand Standard, 2006). This may provide a more accurate picture of the

prevalence of neglect, because if neglect is associated with up to 95% of other forms of maltreatment, it could be concluded that at least 23% (71% comorbidity of 33% physical abuse) of the New Zealand population experience neglect. The following section will separate neglect into the sub-types of emotional neglect and physical neglect (Bernstein et al., 2003; Krischer & Sevecke, 2008).

Physical neglect. Physical neglect is described as the caregivers failure to provide the physical requirements for healthy development such as: nutrition, clothing, education, and hygiene (Krischer & Sevecke, 2008). Physical neglect has also been described as the refusal or delay of health care, inadequate supervision, expelling a young person from the home, and disregarding the young person's safety (Bernstein et al., 2003; Giardino, Lyn, & Giardino, 2010; Robertson, 2009). Stowman and Donohue (2005) describe the physical state of some young people who experience physical neglect as appearing constantly fatigued and hungry, having poor hygiene, and being inappropriately dressed for weather conditions. All of which can make them easy targets for peer taunts, rejection, and bullying (Howe, 2005). Howe (2005) suggests the home environment of some physically neglected young people can appear dirty and messy, have the ever present smell of old food, greasy floors, poor hygiene, no food in the cupboards, no supervision, and a lack of stimulation.

In addition, these young people can have long periods of unsupervised activity translating into undisciplined activity, which can create a young person whose behaviours do not comply with social norms because they have not been taught what the social norms are (Barber & Delfabbro, 2009; Burack et al., 2006). Moreover, sometimes caregivers who neglect their children fail to discipline aggressive behaviour. As a result aggression can be uninhibited, and the young person can display aggression, hostility, and delinquent

behaviours within interpersonal relationships (Feerick et al., 2006). This behaviour can result in inattention at school, relationship problems, poor social competence, and criminal behaviour (Feerick et al., 2006; Lounds, Borkowski, & Whitman, 2006). Males who experience physical neglect are more likely to develop conduct disorder, delinquent behaviour, and be involved in criminal activities during youth and adulthood (Colman et al., 2010; Giardino et al., 2010; Smith & Fong, 2004). Physical neglect specifically predicts crimes of property damage, violent crime, and status offending (Maughan & Moore, 2010; Rebellon & van Gundy, 2005; Robertson, 2009). Physical neglect was identified in 10% of people involved in Sneddon, Iwaniec, and Stewart's (2010) study.

Emotional neglect. Emotional neglect is defined as the failure of the caregivers to provide for the basic psychological and emotional needs of their child, including the need for love, sense of belonging, nurturance, and support (Bernstein et al., 2003; Feerick et al., 2006; Krischer & Sevecke, 2008). Emotionally neglectful caregiver behaviours can be displayed as passive or passive-aggressive inattention to the young person's needs in the form of emotional unavailability and inconsistent responses to the young person's requests (Giardino et al., 2010; Perry, 2001).

Emotional neglect can be a chaotic experience for the young person because it can be very distressing to yearn for love and support from caregivers and only receive sporadic displays of affection in return (Collins et al., 2000). Young people who experience emotional neglect often find little comfort in caregiver attention because they are unsure how long it will last and are fearful of rejection (Crittenden & Ainsworth, 1989). Additionally, young people have an innate ability to blame themselves for their caregivers' neglectful behaviour – attributing it to their inner badness. This creates a negative internal

schematic model of a negative view of self, due to their lack of competence as a result of their inability to elicit attachment behaviour from their caregivers (Hildyard & Wolfe, 2007).

Young people who are emotionally neglected can fail to build a framework for positive relationships because relationships within their microsystem may have been portrayed as inconsistent, unrewarding, and the young person has had to rely on their own ability to survive (Feerick et al., 2006; Perry, 2001). As a result the young person may find no pleasure in close relations with others and may gain no insight into empathy for others or delayed gratification (Perry, 2001). Instead, the young people may form egocentric behaviour patterns, which are unsocialised and uninhibited (Smith & Fong, 2004). Emotional neglect can also result in low self-esteem, depression, suicidal ideation, withdrawal from their peers at school, and aggression (Crittenden & Ainsworth, 1989; Feerick et al., 2006; Perry, 2001; Robertson, 2009; Smith & Fong, 2004). Emotional neglect was identified as prevalent in 21% of people who took part in Sneddon et al.'s study (Sneddon et al., 2010). This figure is higher than the pure neglect figure of 9%, because it includes the experiences of emotional neglect in combination with other forms of maltreatment.

Maltreatment in the forms of physical abuse, emotional abuse, physical neglect, and emotional neglect can all have detrimental effects on a growing young person's behaviour (Macmillan, 2009). Young people can learn to behave aggressively and violently towards others in order to have their needs met (Feerick et al., 2006; Widom, 1989). This learnt behaviour may have elongated survival at the time, but can have detrimental effects within

relationships in the long-term, particularly peer relationships (Robertson, 2009; Feerick et al., 2006).

Peer relationships. Peer relationships are another environmental factor, which can impact on the young person within their microsystem (Bronfenbrenner & Ceci, 1994). Peer relationships during adolescence are about young people attempting to seek positive feedback, a sense of security and safety, and a feeling of belonging from others (Melde & Esbensen, 2011). Typically, peer relationships can be positive or deviant (Graham et al., 2010; Rubin et al., 2004). The type of peer relationships established in adolescence can influence the development of delinquent behaviour (Graham et al., 2010).

The ability of a young person to establish positive peer relationships can be dependent on the type of home environment the young person is exposed to growing up. For instance, young people with strong bonds to positive peer influences, their family, and/or the community are seen as relatively immune to deviant peer pressure (Hay et al., 2006). Positive peer relationships can also help to reduce the damaging effects of the experience of maltreatment, because peers can provide kindness and acceptance not experienced in their home environment (Dixon et al., 2005).

Thompson and Braaten-Antrim (1998) found young people who experienced maltreatment were four times more likely to become involved in gangs than their non-maltreated peers. Gang membership is one form of deviant peer relationship, which can fill a void within the young persons' microsystem; providing a sense of belonging, family, and acceptance. The problem with deviant peer relationships, such as gangs, is they are associated with diminished self-control, increased impulsiveness, disruptiveness, aggression,

and delinquent behaviour (Chapple, Tyler, & Bersani, 2005; Maughan & Moore, 2010; Robertson, 2009).

Chapple et al. (2005) refers to peer relationships being a dominant influence on whether physically neglected young people become delinquent youth. Young people who are physically neglected can have difficulty managing their own emotions, act without thinking, and disregard the pain and suffering of others (Robertson, 2009). They can also be more aggressive and socially withdrawn (Chapple et al., 2005). Such behaviours can cause young people to be outcast by their peers, leading to deviant peer associations, rendering them more likely to engage in delinquent activities (Chapple et al., 2005; Krischer & Sevecke, 2008; Robertson, 2009; Smith & Fong, 2004).

Other influencing factors associated with a lack of positive peer relationships in youth are cognitive and intellectual disabilities including: autism spectrum disorders, ADHD, intellectual, learning, and cognitive disorders (Guralnick, 2006; Guralnick, Hammond, Connor, & Neville, 2006; Kelly, Garnett, Attwood, & Peterson, 2008; Wiener, 2004). These young people may fail to establish and maintain positive peer relationships as a result of their disabilities or due to rejection from their peers (Guralnick et al., 2006). This isolation can impact on their behavioural development and contribute to delinquent behaviour in the form of aggression, impulsiveness, and a lack of understanding of others' emotions (Guralnick, 2006).

Young people who experience maltreatment have been found to function more adaptively if protective factors are present, such as social and emotional support from a caring adult inside or outside their family (Dixon et al., 2005). Smith and Fong (2004) also note young people who have siblings going through the same situation can feel less alone in their

experience and can gain support from each other. Physical attractiveness and exceptional intellectual performance can also be buffers between the relationship of maltreatment and youth delinquency (Giardino et al., 2010).

The microsystem can assist in the identification of certain young people's characteristics (males aged 16-24 years), and environmental influences (family, moral development, attachment, maltreatment, and peer relationships), which can impact on the development of delinquent behaviours (Bronfenbrenner & Ceci, 1994; Canter, 1982; Haapasalo & Tremblay, 1994). The mesosystem is the next part of Bronfenbrenner's (1994) Bioecological Model of Youth Development and comprises the interconnections between the factors of the microsystem (Bronfenbrenner & Ceci, 1994; Muuss, 2006).

Mesosystem

The microsystem encompasses young person and environmental characteristics, which can influence the immediate environment of the young person. The mesosystem attempts to identify the interactions between these characteristics and the positive and negative outcomes (Bronfenbrenner & Ceci, 1994). Some interactions are noted next in relation to maltreatment and delinquency.

Positive outcomes can result from interconnections between factors of the microsystem resulting in a decreased likelihood of maltreatment or delinquent behaviour. Some of the interconnecting factors contributing to positive outcomes include: positive peer relationships (Dixon et al., 2005; Hay et al., 2006; Mayer, 2002), two-caregiver families (Ministry of Social Development, 2010b), outside emotional support for the caregiver (Counts et al., 2010; Dixon et al., 2005), caregiver knowledge of youth developmental stages (Twentyman

& Plotkin, 1982), meeting the young person's physical needs (Bernstein et al., 2003), and secure attachment (Allen et al., 2002).

Young people who experience maltreatment yet are able to form positive peer relationships can be less likely to display delinquent behaviour (Hay et al., 2006). In addition, young people who experience maltreatment at the hands of one caregiver can seek support and love from the other caregiver if they are present, willing, and have the capability to understand and share emotions (Ministry of Social Development, 2010b). This is similar to positive peer relationships because the non-maltreating caregiver can provide the positive care and feedback the young person is unable to get from the maltreating caregiver (Tobias et al., 2009). At the same time, sole-caregivers who receive outside emotional support can have an outlet for their frustrations and therefore may be more able to cope with the stress invoking situations, which can occur in interactions between caregivers and young people (Counts et al., 2010). Moreover, caregivers who maltreat their children, yet who are aware of youth developmental stages, or can provide their children with their basic age appropriate physical needs (food, shelter, and clothing), or display secure attachment behaviour can reduce the likelihood of their children displaying delinquent behaviours (Howe, 2005; Robertson, 2009).

Negative outcomes can also result from interconnections between factors of the microsystem, resulting in the increased likelihood of maltreatment or delinquent behaviour. Negative outcomes have been related to young person disabilities (Dyson, 2004), deviant peer relationships (Wampler & Downs, 2010), and domestic violence (Hamby et al., 2010; Sousa et al., 2011). Raising young people who have a disability requiring fulltime care can be stressful on the caregiver financially and emotionally. This can reduce a caregivers ability

to provide the young person with positive care and attention, and emotional support because much of their energy is taken up working to pay for caregiving and taking care of the young person's physical needs (Dyson, 2004; Guterman, Lee, Taylor, & Rathouz, 2009; Sousa et al., 2011).

In addition, deviant peer relationships can be an influential factor related to the development of delinquent behaviour, be it short-term or long-term (Graham et al., 2010; Rubin et al., 2004). Young people who are maltreated can find it difficult to make positive peer relationships, therefore may find comfort in the support and comradeship offered from deviant peers (Wampler & Downs, 2010). These young people however, can be easily influenced or pressured into taking part in deviant behaviours they would not have considered on their own (Graham et al., 2010). Furthermore, domestic violence can provide role modeled behaviour on how to interact in interpersonal relationships, particularly during disagreements, which can lead to the development of delinquent behaviour (Sousa et al., 2011).

The interconnections between the components of the microsystem make up the mesosystem and can have both positive (secure attachment and emotional support) and negative outcomes (maltreatment and delinquency) on the development of the young person (Counts et al., 2010; Hamby et al., 2010; Wampler & Downs, 2010). Next, the exosystem will be discussed as part of the Bronfenbrenner's (1994) Bioecological Model of Youth Development.

Exosystem

The exosystem includes all external networks within the community. These networks can comprise infrastructure, resources, and community funding (Bronfenbrenner & Ceci, 1994).

This takes into account the availability of primary health care services, local education, and the quality and quantity of employment opportunities available within the community (Bronfenbrenner & Ceci, 1994; Smith & Fong, 2004).

The components of the exosystem are all interrelated. The affordability of primary health care can be related to a person's weekly income. Weekly income can be associated with the quality and quantity of employment opportunities. The quality and quantity of employment opportunities may be dependent on the community infrastructure and employers earning prospects within the community. The potential for good quality employment with the capacity for higher income can also be connected to educational qualifications and experience within the desired field of work (Bronfenbrenner & Ceci, 1994; Gorman, 1998; King, 2001; Smith & Fong, 2004).

The exosystem can have an impact on the young person directly or indirectly and can contribute to maltreatment and delinquency (Belsky, 1993; Hay et al., 2006). Low incomes can indirectly impact on the caregivers' capacity to maltreat their child (Zielinski, 2009). Low income potential can lead to financial difficulties, which can contribute to living in disadvantaged communities, caregiver stress, more inconsistent and punitive discipline, and a more negative home environment (Counts et al., 2010;Belsky, 1993; Bronfenbrenner & Ceci, 1994). This type of home environment can be conducive to maltreatment, which can foster dysfunctional emotions and delinquent behaviour in young people (Gottfredson & Hirschi, 1994; Maughan & Moore, 2010).

The exosystem discussed the external networks within the community, which can impact on the potential for maltreatment and delinquent behaviour (Belsky, 1993; Gottfredson & Hirschi, 1994). Next the macrosystem takes a step back and looks at the dominant beliefs

and ideologies of people, the community, and society at large (Bronfenbrenner & Ceci, 1994). It overlaps with the exosystem in some aspects because it also involves external networks.

Macrosystem

The macrosystem identifies a number of etiological links to delinquent behaviour in youth including: political philosophies, economic patterns related to unemployment, reliance on government welfare, and education (Bronfenbrenner & Ceci, 1994).

Economic patterns are influential in the development of healthy family and community environments. Economic patterns include disadvantaged communities who have high unemployment rates, a lack of education, a shortage of workforce skills, and a weak social bond can result in poverty and the potential for dependency on government welfare (Hay et al., 2006). This type of economic pattern harnesses extreme deprivation and poverty, which can be motivational factors steering young people toward crime in an attempt to have their needs and wants met (Hirschi & Gottfredson, 1979). This supports the idea that young people who grow up in poverty stricken economic environments can be provoked and spurred on to commit delinquent acts because they may have the perception of 'I'm not going to get anywhere anyway' and 'I deserve this because of the way I've been treated' (Kohlberg, 1971; Moshman, 2011).

In summary, Bronfenbrenner's (1994) Bioecological Model of Youth Development incorporates the microsystem, mesosystem, exosystem, and macrosystem illustrating there are many factors contributing to the development of the young person and whether they engage in delinquent behaviour (Bronfenbrenner & Ceci, 1994). The following section looks into the different theories of delinquency and how they are related to Bronfenbrenner's

(1994) Bioecological Model in an attempt to understand why young people behave in delinquent ways.

Theories of youth delinquency

There are many theories under which the combinations of genetics, environment, culture, politics, economics, and moral developmental factors have been blended in an attempt to identify the antecedence of youth delinquency. These theories can include: General Theory of Crime (Gottfredson & Hirschi, 1990), General Theory of Adolescent Problem Behaviour (Gottfredson & Hirschi, 1994), General Strain Theory (Agnew, 1992), Social Learning Theory (Akers, Krohn, Lanza-Kaduce, & Radosevich, 1979), and Social-Control/Bonding Theory (Hirschi, 1969; Wiatrowski, Griswold, & Roberts, 1981). Not all delinquent behaviour can be explained using these theories; however these theories can help to provide a strong empirical base for what is understood about delinquent behaviour.

General Theory of Crime. Gottfredson and Hirschi's (1990) General Theory of Crime describes low self-control as a personality trait, which can reduce a young person's ability to stop and think of the consequences of their actions before participating in activities promoting self-interest and short-term gain (Pratt & Cullen, 2000;Gottfredson & Hirschi, 1990). Low self-control is an externalising behaviour characterised as: impulsive, insensitive, physical (as opposed to verbal), and short sighted (Pratt & Cullen, 2000). The internalisation of self-control can be taught in the caregiver-young person relationship, where young people learn social skills such as: postponing gratification, taking care of responsibilities, negotiating with others, and respecting others (Collins et al., 2000; Gottfredson & Hirschi, 1994).

Gottfredson and Hirschi's General Theory of Crime was supported in a meta-analysis by Pratt and Cullen (2000) who found low self-control was correlated with many social consequences related to the development of delinquent behaviour. A young person displaying low self-control can find it difficult to make and keep friends, achieve in school, and maintain stable employment; all of which can increase a young person's tendency towards antisocial peers and the possibility of residing in low socioeconomic neighbourhoods (Evans, Cullen, Burton, Dunaway, & Benson, 1997). These factors were also identified in Bronfenbrenner's (1994) Bioecological Model of Youth Development and in the advancement of delinquent behaviour.

The General Theory of Crime has been critiqued by a number of researchers based on inadequate definitions of crime and self-control (Wikstrom & Treiber, 2007) and automatically rejecting the idea delinquency could be a result of biology, social reinforcement, strain, frustration, cultural differences, socialisation, and insecure attachment (Evans et al., 1997; Perrone, Sullivan, Pratt, & Margaryan, 2004).

General Theory of Adolescent Problem Behaviour. Additionally, Gottfredson and Hirschi (1994) developed the General Theory of Adolescent Problem Behaviour. This theory reflects on three influencing factors; immediate benefit versus long-term cost; low self-control; and the age and versatility of delinquent behaviour (Gottfredson & Hirschi, 1994). Attachment Theory will be examined as a possible contributing factor to immediate gratification and the lack of self-control by explaining the caregivers' role in the development of problem behaviour (Ainsworth & Bowlby, 1991).

Immediate benefit versus long-term cost. Gottfredson and Hirschi (1994) state the motivation to engage in delinquent activities is constructed around the immediate benefit to

the young person, without consideration for the type of crime (violent or non-violent) or the long-term consequences for their actions (Gottfredson & Hirschi, 1994; Ministry of Justice, 2010). The lack of consideration for others is a factor, which can be shaped through: modeling, social interaction with others, moral development, and the attachment relationship with caregivers - all factors found in Bronfenbrenner's (1994) Model of Youth Development.

The primary caregiver attachment relationship helps young people formulate a sense of self and others, which guides their emotions and behaviours (Hart, 2008). This relationship can help to dictate the value young people put on others opinions and expectations, and can also explain their level of concern for others well-being, if any (Hart, 2008; Hirschi & Gottfredson, 1979; Peterson, Buser, & Westburg, 2010). Caregivers are expected to model and reinforce positive behaviours which conform to social norms (Hirschi & Gottfredson, 1979). Those young people who are not modeled socially appropriate behaviours or who do not receive reinforcement for behaving appropriately, will find no payoffs in conforming to these social norms (Jones, Cauffman, & Piquero, 2007). Consequently, they will find payoffs in immediate gratification and reinforcement from delinquent acts (Hirschi & Gottfredson, 1979). Immediate gratification and low self-control are highly correlated (Gottfredson & Hirschi, 1994).

Low self-control. Low self-control is described as pursuing immediate gratification without consideration for the long-term consequences (Gottfredson & Hirschi, 1990). Young people with low self-control can appear impulsive when making decisions, use force to get what they want, and engage in behaviour which immediately helps their survival without consideration of others (Pratt & Cullen, 2000).

Age and versatility of delinquent behaviour. According to Gottfredson and Hirschi (1994) delinquent acts comprise two main properties: they peak in youth (14 - 20 years), declining with age; and they are versatile (Hirschi & Gottfredson, 1979; Krohn et al., 2010; New Zealand Department of Corrections, 1999; Pratt & Cullen, 2000; Statistics New Zealand, 2011). These properties are in agreement with New Zealand apprehension statistics for 2010, which reveal a peak in youth, with males aged 14-20 years making up 36% of apprehension statistics - the highest recorded rate of apprehensions for any age group (Statistics New Zealand, 2006). The rapid decline with age is also identified in the 2010 apprehension statistics with 21-30 year making up 29%, 31-50 years accounting for 27%, and people over 51 years being credited with only 4% of apprehensions (Statistics New Zealand, 2011). The second property of delinquent behaviour is young people are versatile - showing adaptability and flexibility in their ability to engage in both violent and non-violent delinquent behaviour (Gottfredson & Hirschi, 1994; Thornberry et al., 1995).

Criticisms of Gottfredson and Hirschi (1994; 1979) General Theory of Adolescent Problem Behaviour have included: debate whether poor social bonding results in reduced self-control and a compulsion to commit crime (Hay et al., 2006), delinquent behaviour requires more than a lack of self-control (Perrone et al., 2004), and whether young people engage in delinquent behaviour as a means of reducing emotional pain instead of pursuing instant gratification (Ryder, 2006).

General Strain Theory of Crime and Delinquency. Agnew (1992) defines strain as "relationships in which others are not treating the person as they would like to be treated," which is likely to result in negative emotions (Agnew, 2001, p. 48). These experiences include: loss of a positive stimuli (e.g. romantic partnership or death of a loved one),

presentation of a negative stimuli (e.g. abuse, neglect, or domestic violence), and goal blockage (e.g. social constraints) (Agnew, 2001). Agnew (2001) acknowledges the General Strain Theory is very broad and this is one of its weaknesses, making the theory very difficult to falsify.

There are a number of strains more likely to result in delinquent behaviour including: failure to achieve goals easily achieved through delinquency (access to money), caregiver rejection, caregiver discipline that is strict, erratic, or excessive, maltreatment, abusive peer relationships, and previous victimisation (Agnew, 2001). In 2002 Agnew, along with colleagues Brezina, Wright, and Cullen investigated why some young people react to strain with delinquency. They noted different personality traits in the form of coping resources influence how young people respond in certain situations. Coping resources assist young people to adapt to stressful situations in pro-social ways; those young people with fewer coping resources may adapt by coping in delinquent ways (Agnew, Brezina, Wright, & Cullen, 2002;Reynolds, Mathieson, & Topitzes, 2009).

Social Learning Theory. Social Learning Theory is dominated by behavioural learning mechanisms in an attempt to identify why people display certain behaviour (Akers & Seller, 2004). Akers and Jensen (2006) suggest the acquisition of certain behaviours are a socialisation process where the behaviour is first imitated as a result of watching others, then strengthened through reward, or avoided based on punishment. Delinquent behaviour is suggested to be acquired, maintained, and changed through this socialisation process of interacting with others (Akers et al., 1979). This interaction provides reinforcement and instills certain values and beliefs (Akers & Seller, 2004**).**

A central feature underlying Social Learning Theory is Attachment Theory. Attachment to others dictates the value young people put on others opinions and expectations, and also explains their level of concern for others well-being (Hirschi & Gottfredson, 1979; Peterson et al., 2010). Attachment to caregivers is a major precursor to social learning and bonding, and the development of self-control (Perrone et al., 2004). The attachment relationship between the caregiver and young person helps formulate a sense of self and others, which guides a young persons' emotions and behaviours (Hart, 2008; Hornor, 2008). Secure attachment produces feelings of safety and personal competence; insecure attachment promotes feelings of anxiety and turmoil (Bowlby, 1987).

Young people who are maltreated can be shown behaviours by their caregivers or others, which can be aggressive, emotionally damaging, or neglectful (Crittenden & Ainsworth, 1989). Young people can then imitate this behaviour in their relationships with others because they have learnt treating others in this way gets results - attention and satisfying needs (Akers et al., 1979). This behaviour is strengthened due to a lack of discipline or through positive feedback (Haapasalo & Tremblay, 1994). Therefore, it continues uninhibited throughout life, unless it is identified and punished by others, and even then this may not reduce the occurrence of the behaviours because they have been learnt and strengthened throughout life, and are a proven method of getting what you want (Akers & Seller, 2004; Gunter, 2008). These behaviours can be displayed in school, where young people can get into trouble, be suspended, or expelled for fighting, not because they are want to hurt other people, but because this is how they have learned how to resolve conflict (Baldry, 2003).

Social Learning Theory also incorporates cultural values and social conditions. Cultural values can include the view of violence within the community (Lounds et al., 2006; Scannapieco, 2002). Attitudes toward violence on television, movies, videogames, and the internet foster a standard of behaviour condoned by society (Stith et al., 2009). This acceptance of violence can model tolerance towards violence which may spill over into everyday lives and may promote the manifestation of this violence within the home (Stith et al., 2009). Social Learning Theory has been criticised by Stafford and Ekland-Olson (1982) for claiming causal findings not supported by the theory.

Social Control/Bonding Theory. Social Control/Bonding Theory was identified by Hirschi (1969) as a theory depicting elements likely to decrease the propensity of a young person to commit crime. According to Hirschi (1969) all infants are born with an innate drive towards pleasure and will act in selfish and aggressive ways to achieve it, potentially leading to a path of delinquency and crime, if reinforced. Hirschi (1969) based this theory on the question "why don't we do it?" (p.10). He believed social bonds control a person's behaviour when they are tempted. These are indirect bonds because they do not need to be present to control behaviour. The four factors associated with social control are: attachment, commitment, involvement, and belief (Hirschi, 1969). Attachment refers to caregivers, peers, school, and the community (Hirschi, 1969; Wiatrowski et al., 1981). Commitment represents aspirations in employment, sports, relationships, and the value placed on social relationships (Hirschi, 1969). Involvement raises the notion of opportunity cost; the more time spent in pro-social activities the less time available for deviance (Hirschi, 1969). Finally, belief is about the values and attitudes instilled in the young person (Hirschi, 1969; Wiatrowski et al., 1981).

Social Control/Bonding Theory suggests people who display delinquent behaviour lack bonds to conventional society and behave as they wish, because they are not controlled (Hirschi, 1969). Hirschi (1969) later rejected this notion of indirect control and reconceptualised his thinking to include direct control in the form of caregivers and the instilling of self-control (Gottfredson & Hirschi, 1990).

These theories of youth delinquency all have two common factors: attachment and maltreatment. The General Theory of Crime identifies a lack of attachment, supervision (neglect) and discipline (neglect) as contributing to low self-control and delinquent behaviour (Hirschi & Gottfredson, 1979). The General Theory of Adolescent Problem Behaviour states attachment guides a sense of self and others. Attachment relationships, which include maltreatment, display for the young person an antisocial way of interacting, where aggression is used instead of verbal reasoning (Gottfredson & Hirschi, 1994). The General Strain Theory identifies insecure attachment relationships and maltreatment as forms of strain on a young person which can contribute to the development of delinquent behaviour (Agnew et al., 2002). Social Learning Theory looks to behavioural role models within the young person's microsystem. Young people observe and imitate how people in their microsystem engage with others, if this is in an aggressive way then the young people are also likely to behave in an aggressive way. They also note punishment and reward are large contributors in the progression to delinquent behaviour. Punishment in the form of maltreatment, although attempting to control delinquent behaviour, may actually exacerbate it (Akers et al., 1979). Social Control/Bonding Theory is related to Attachment Theory and how negative relationships can contribute to delinquent behaviour (Hirschi, 1969).

Therefore it is necessary to look at the relationship between maltreatment and attachment and delinquency in order to understand the relationship between them.

In summary, there are many factors associated with the etiology and consequences of maltreatment, insecure attachment, and youth delinquency including: age, gender, family, moral development, peer relationships, community networks, as well as societal and political philosophies (Bronfenbrenner & Ceci, 1994). These factors can be used in many different combinations to establish different theories of the development of delinquent behaviours including: General Theory of Crime, General Theory of Adolescent Problem Behaviour, General Strain Theory, Social Learning Theory, and Social Control/Bonding Theory (Agnew, 1992; Akers & Jensen, 2006; Gottfredson & Hirschi, 1990, 1994). A central factor underlying maltreatment, neglect in particular, is that it is a major factor associated with insecure attachment and delinquent behaviour (Howe, 2005; Robertson, 2009). Subsequently, this study will focus on three research questions regarding maltreatment and its relationship with delinquent behaviour, neglect's association with delinquent behaviour, and whether insecure attachment is related to delinquent behaviour.

Research Question 1. Youth crime statistics throughout the world indicate young males aged 16 – 20 years make up a large proportion of overall offenders (Becroft, 2003; Chong, 2007; Chou & Browne, 2010; Margo & Stevens, 2008; Skrzypiec et al., 2005; Statistics New Zealand, 2011; Thornberry et al., 1995; Zampese & Gray, 1999). Many researchers believe high youth crime statistics are associated with maltreatment (Arthur, 2007; Colman et al., 2010; English et al., 2002; Fang & Corso, 2007; Haapasalo & Pokela, 1999; Jonson-Reid et al., 2010; Kaufman, 2010; Krischer & Sevecke, 2008; Macmillan, 2009; Maughan & Moore, 2010; Mersky & Reynolds, 2007; Miura, 2009; Rebellon & van Gundy, 2005;

Robertson, 2009; Ryan & Testa, 2004; Tell, 2010). Therefore, the first hypothesis under investigation is young people who experience maltreatment will have higher rates of delinquent behaviour than peers who have not experienced maltreatment.

Research Question 2. Although it has been speculated neglect is more prominent than abuse, it is a construct receiving little research to date (Lievore & Mayhew, 2007; Martin et al., 2010). Of the studies conducted to date neglect has been found to be related to: poor emotional and physical functioning, (Spertus et al., 2003), depression, antisocial personality disorder, conduct problems (Horwitz et al., 2001), somatic symptoms, anxiety, obesity, sleep disturbance (Anda et al., 2006), violent crime (Robertson, 2009), and delinquency (Maughan & Moore, 2010).

Many of these studies however, do not represent the population of interest in this study. Spertus et al. (2003), used 19-82 year old females, Howitz et al. (2001) population included males and females and used case records to collect data, Anda et al. (2006) used secondary data, and Maughan and Moore (2010) used secondary data on parental perceptions of their own neglectful behaviour. These studies were conducted on populations different from the young males of interest in this study and have used less accurate measures of data collection. Conversely, Robertson (2009) asked males aged on average 16 years to self-report their experiences of neglect and found physical neglect was correlated with violent crime. This study looks to strengthen Roberston's (2009) findings, specifically targeting young males experiences of neglect using self-report methodology. Therefore, it is hypothesized that young people who have experienced neglect will have higher rates of delinquent behaviour than peers who have not experienced neglect.

Research Question 3. Attachment behaviour is a learnt way of interacting with others (Griffin & Bartholomew, 1994). Young people adapt their attachment behaviour within close relationships to promote immediate survival and to get their needs met (Crittenden & Ainsworth, 1989). Insecure attachment behaviour has been associated with such delinquent behaviours as poor impulse control, aggression, and self-destructive behaviours (Gottfredson & Hirschi, 1994; Howe, 2005). Furthermore, the experience of insecure attachment has been correlated with the experience of maltreatment (Crittenden & Ainsworth, 1989). This was illustrated in Morton and Brown's (1998) review which found the experience of maltreatment were correlated with insecure attachment in 76% of the cases reviewed. Therefore, insecure attachment has been associated with both youth delinquency and maltreatment (Gottfredson & Hirschi, 1994; Hirschi, 1969; Howe, 2005; Sousa et al., 2011). Namely, young people who experience maltreatment can also experience insecure attachment relationships (Perry, 2001), insecure attachment relationships have been associated with delinquent behaviours (Howe, 2005), and maltreatment has been related to delinquent behaviour (Arthur, 2007). Therefore, the third hypothesis is that within the delinquent group, those young people who experience maltreatment will have higher rates of insecure attachment than their non-delinquent peers.

Method

Participants

Ethical approval to conduct this study was obtained from the Massey University Human Ethics Committee: Southern B, on February28th, 2012 (Appendix A). Eighty one male participants aged 16 – 20 years were recruited from throughout the lower North Island. Males aged 16 – 20 years were used in this study because this demographic make up the largest proportion for young offenders in New Zealand (Statistics New Zealand, 2011). The lower North Island (Taranaki, Manawatu, and Wellington) was the focus of recruitment because these regions made up 18% of recorded crime throughout New Zealand to the year ending June 2011, and were in close proximity to the researcher's location (New Zealand Police, 2012). Both high schools and community organisations were approached and asked to participate.

Schools. The high schools approached were selected based on their match for age (16-20 years), gender (male), decile rating (1-5), and region (Taranaki, Manawatu, and Wellington). A list of secondary schools and their decile ratings were obtained from the Ministry of Education (Ministry of Education, 2008). Deciles are decided based on the socioeconomic status (SES) of the school neighbourhood according to the most recent census data. Evaluations of SES are calculated based on the communities unemployment rates, low skilled occupations, educational qualifications, small communities, low incomes, and household crowding (decile 1 = low SES and decile 10 = high SES). Each school is evaluated and rated in relation to all other schools in New Zealand; and each decile grade has the same number of schools in it (Ministry of Education, 2008). Schools were excluded on the basis they were female only, specific religious orientation, and having a decile rating

of six or more. The decision to use schools with decile ratings of five and below was made based on the tendency of young people, who have been involved in the youth justice system, to be from areas of lower SES (Elliott & Ageton, 1980; Wiatrowski et al., 1981). There is also a relationship between low SES and insecure attachment as well as low SES and neglect (Robertson, 2009; Wampler & Downs, 2010).

The researcher approached 11 schools, only one school was able to get board of trustees' approval to take part in the research process. Forty six young people were approached from the school, 21 self-excluded and 25 volunteered to take part. The age range was 16 years, 0 months to 17 years, 9 months. The mean age was 16 years, 2 months. The ethnicity of the young people were European (n = 15) and Maori (n = 3). Some young people circled more than one ethnicity: European-Maori (n = 4), Maori-Pacific Islander (n = 2), and European-Maori-Pacific Islander (n = 1). The highest level of school education was year 12 (n = 14), year 11 (n = 10), and year 9 (n = 1). Four identified as delinquent and 21 identified as non-delinquent.

Community organisations. The community organisations approached for this study were organisations dealing with youth offenders, at risk youth, or provided alternative education to young males aged between 16 and 20 years. Twenty eight community organisations were approached; eight participated. Fifty seven young people were approached, one young person self-excluded, and 56 volunteered to participated.

The age range was 16 years, 0 months to 20 years, 10 months. The mean age was 17 years, 2 months. The ethnicity of the young people were European (n = 23), Maori (n = 16), Pacific Islander (n = 2), and one of each South African, Somalian, Iraqi, and Arabic. Some young people circled more than one ethnicity: European-Maori (n = 8), Maori-Asian (n = 1),

Maori-Pacific Islander (n = 1), and European-Maori-Asian (n = 1). The highest level of school education was year 12 (n = 21), year 11 (n = 23), year 10 (n = 5), and year 9 (n = 7). Thirty identified as delinquent, and 26 identified as non-delinquent.

Overall the study recruited and administered the questionnaire to 81 young people, whose ages ranged from 16 years, 0 months to 20 years, 10 months. The mean age was 16 years, 9 months. The ethnicity of the young people were European (n = 38), Maori (n = 19), Pacific Islander (n = 2), and one of each South African, Somalian, Iraqi, and Arabic. Some young people circled more than one ethnicity: European-Maori (n = 12), Maori-Pacific Islander (n = 3), and one of each Maori-Asian, European-Maori-Asian, and European-Maori-Pacific Islander. The highest level of school education was year 12 (n = 35), year 11 (n = 33), year 10 (n = 5), and year 9 (n = 8). Thirty four young people identified as delinquent, and 47 young people identified as non-delinquent.

Procedures

After reviewing the literature on data collection methodologies for the experiences of maltreatment, Robertson (2009) appeared to have a sound foundation for selecting self-report methodology. This method is a partial replication of Robertson's (2009) study. The procedures are displayed in Table 3, which identifies each procedure, its description, and related documentation.

1. Identify participants. The researcher approached the schools and community organisations in person and spoke with key people (school principals, deputy principals, school counselors, community organisation management and staff) to explain the purpose of the study.

Table 3

Research Procedures for the School and Community Organisations

Procedures	Descriptions
1. Identify participant	● School and community organisations from Taranaki, Manawatu, and Wellington
2. Clarify procedures	● Research information sheet (Appendix B) ● Research process (Appendix C) ● Risk minimisation (Appendix D)
3. Present research to young people	● Youth information sheet (Appendix E)
4. Administering screening questionnaire	● Screening questionnaire (Appendix F)
5. School only: mail caregiver information sheets	● Caregiver information sheet (Appendix G)
6. School only: caregiver information evening	● Slideshow (Appendix H)
7. Young person informed consent	● Young person informed consent form (Appendix I)
8. Questionnaire administration	● Questionnaire (Appendix J)
9. Give out resources available in the community forms and koha	● Resources (Appendix K, L, and M) ● Koha - $5 McDonalds vouchers
10. Results	● Summary of results and professional development for all participating community organisations and the school

2. Clarify procedures. The researcher discussed the research topic and procedures as set out on the research information sheet (Appendix B), research process (Appendix C), and risk minimisation measures (Appendix D). Procedural variations were made to suit the school or community organisations. All community organisations decided not to send information sheets home to caregivers and not to hold caregiver information evenings. They reasoned that sending information sheets home may increase the risk of harm to the young people participating. All the community organisations decided to identify vulnerable young people prior to the presentation of the research. In addition, all community organisations preferred the researcher to present and administer the questionnaire on the same day. They argued, although young people are required to come to class every day, many do not - for a variety of different reasons - and they believed that this would mean some of the young people who wanted to participate would miss out on the opportunity. The school only required one change to the research process, which was to identify vulnerable young people prior to the presentation of the research. The school counselor determined no young people were too emotionally vulnerable to take part in the study.

3. Present research to young people and hand out information sheets. The research presentation included: the research purpose, method, content, confidentiality, consent process, risks, benefits, and their right not to participate. The young people had the opportunity to ask questions and received information sheets summarising this information (Appendix E).

4. Administer initial screen questionnaire. The initial screening questionnaire asked: name, age, ethnicity, highest level of school education, and involvement in youth justice system (Appendix F). The screening questionnaire had two functions. The first was to

identify young people who wanted to participate, to enable key people to indicate if they believed any to be too emotionally vulnerable to participate. If young people were deemed too emotionally vulnerable then the researcher would inform them that they did not meet the inclusion criteria and they would not be permitted to participate. This process however, changed for both the school and community organisations as the key people decided to identify vulnerable young people prior to research commencement, and stated all young people were able to participate. The second function was to identify potential numbers in each group and to attempt to match the groups on demographic information.

5. Mail caregiver information sheets. The school was the only group who decided to mail information sheets home to caregivers. The caregivers were also invited to attend an information evening (Appendix G). The school received one phone call from a caregiver stating their child was not delinquent therefore would not be participating. This young person chose not to participate.

6. Information evening for caregivers. The information evening was held on school premises one and a half weeks after the letters were mailed home to caregivers (Appendix H). None of the caregivers attended the information evening.

7. Young person informed voluntary consent. Since all of the young people were old enough to provide consent to participate in the research, no caregiver consent was required. Before signing the consent form they read the information sheet and had it read to them. The details of the study were explained to them by the researcher and they were able to ask questions at any time during the process. Young people were informed that they did not have to participate and could withdraw at any time (Appendix I).

8. Questionnaire administration. The method of administration of the questionnaire differed for each community organisation and the school. Four community organisations preferred the researcher to administer the questionnaire on a one-on-one basis due to the low level reading abilities of some of the young people. Another community organisation requested the researcher to read the questionnaire aloud to the young people on a one on one basis. The other five community organisations preferred the researcher to administer the questionnaire in groups of two to ten young people at a time. The school preferred questionnaire administration in one group of 25 young people. The questionnaire was administered on site in a spare room at all locations. The questionnaire took between 20 and 30 minutes to administer individually and 40 minutes in a group setting (Appendix J).

The researcher was able to get the young people to maintain silence while completing the questionnaire, and answered any questions as they arose. The researcher also went around each young person to ensure they understood the questions and were answering them properly. For the school, the school counselor and deputy principle helped the researcher during questionnaire administration by ensuring all young people answered the questionnaires independently and all young people were silent while completing the questionnaire.

9. Give out resources available in the community forms and koha. Upon completion of the questionnaire, the young people had their questionnaire booklets checked by the researcher to ensure all questions had been answered. All young people received a copy of the resources available in their community, which were tailored to their specific region: Manawatu (Appendix K), Wellington (Appendix L), and Taranaki (Appendix M). A koha of

a $5 McDonald's voucher was offered as a sign of respect, consideration of time, and as a gift for the knowledge the young people provided while participating in the study.

10. Results. After the completion of the study, the researcher is going to provide each organisation with the statistics for their organisation, their region, and the overall results of the study. The researcher also intends to provide professional development to the community organisations and school to inform them about the results of the study.

Design

A two group, between groups, design was selected to identify differences in the maltreatment severity experienced by delinquent and non-delinquent young males. Assignment of young people into delinquent or non-delinquent groups were based on the answer to the demographic question "have you ever been involved in the youth justice system?" Involvement in the youth justice system was defined as: let off with a warning, arrests, and formal involvement with the courts. Those who answered yes to this question were identified as delinquent; those who answered no were identified as non-delinquent. This group assignment strategy (delinquent and non-delinquent) was employed based on Widom (1989) matched cohort design, whereby a group of delinquent youth were specified by their youth court appearance and were contrasted with a group of young people from similar demographic backgrounds who had not been involved in the youth justice system. Of the young people who reported previous involvement with the youth justice system in this study 15% were let off with a warning, 29% had been arrested, and 56% had formal involvement with the courts.

A self-report questionnaire design was chosen because it could provide rich information directly from the source about any experiences of maltreatment, attachment relationships,

and delinquent behaviour (Bernstein & Fink, 1998; Elliott & Ageton, 1980; West, Rose, Spreng, Sheldon-Keller, & Adam, 1998). Confidentiality was assured with one exception; if the young people provided further information outside of the questions posed then confidentiality may not be able to be maintained, depending on the information given. If, for example, a young person stated specific circumstances when delinquent behaviour occurred, which resulted in injury to self or others, then this would have to be reported to the police. The young people were cautioned on this exception before questionnaire administration and reminded that answering the questions as posed, could not get them into trouble. Confidentiality provided the young people with a sense of security as their answers were to be treated with respect, not shown to others, and would not get them into trouble. This was expected to increase the possibility of honest answers, providing more accurate information about what has been happening in the young people's lives.

Three psychometric questionnaires containing a total of 78 questions, as well as four demographic questions were selected as part of the battery of questionnaires (Appendix J). This included the Childhood Trauma Questionnaire (CTQ); the Adolescent Attachment Questionnaire (AAQ); and the Self-Report Delinquency Scale (SRDS). The demographic questions asked about the young people's age, ethnicity, highest level of school education, and involvement in the youth justice system and were used to help match the two groups.

The power for this study was calculated based on the number of young people recruited (n = 81), the smallest group size (n = 34, delinquent group), and the statistical tests performed (ANOVA). Power calculations were determined using G*Power 3.1.3 (Faul, Erdfelder, Lang, & Buchner, 2007). The large effect size (d = .4) achieved at a .05 alpha

level, allowed calculations to reach 80% power, with a minimum of 26 young people in each of the two groups (Cohen, 1992; Faul et al., 2007).

Psychometric Measures

Three questionnaires were selected for use in this study: CTQ, SRDS, and AAQ. The following will elaborate on questionnaire selection, provide a brief description, and highlight reliability and validity measures, as well as scoring techniques.

Childhood Trauma Questionnaire (CTQ). There are a number of methods used to measure maltreatment including: clinical interviews, independent case review of court records, and self-report (Barber & Delfabbro, 2009; Bernstein & Fink, 1998; Mennen et al., 2010). Clinical interviews are based on the interviewers' interpretation of the events described by either the young person or their caregiver or others; similarly case reviews are the researchers' interpretation of the interviewers' interpretations of the events described by young people, their caregivers, or others (Swahn et al., 2006; Willig, 2001). These methods have the potential to provide less than accurate information about the young person's actual experience of the event due to secondary examination of the young people's experiences (Swahn et al., 2006). Therefore self-report methodology was chosen for this study because self-report questionnaires can provide rich information, directly from the source, about any experiences of maltreatment (Bernstein & Fink, 1998).

Of the self-report measures for maltreatment, the CTQ is the most highly referenced youth maltreatment questionnaire in psychological and psychiatric research (Thombs, Bernstein, Lobbestael, & Arntz, 2009). Thombs et al. (2009) found in their MEDLINE search (March, 2009) 141 references to the CTQ; compared to no more than 15 references to any other maltreatment questionnaire. The CTQ has been used in studies to identify the

relationship between maltreatment and attachment styles (Emery, Paquette, & Bigras, 2008), maltreatment and youth delinquency (Krischer & Sevecke, 2008; Nederlof, Van der Ham, Dingemans, & Oei, 2010), maltreatment and criminal behaviour (Driessen, Schroeder, Widmann, von Schonfeld, & Schneider, 2006; Robertson, 2009; Sarchiapone, Carli, Cuomo, Marchetti, & Roy, 2008), and maltreatment, attachment, and youth criminal behaviour (Tell, 2010).

The CTQ is a 28-item retrospective self-report measure for people aged 12 years and over (Scher, Stein, Asmundson, McCreary, & Forde, 2001; Thombs et al., 2009). The CTQ provides a history of abuse and neglect and takes five minutes to administer (Bernstein & Fink, 1997). Five types of maltreatment are investigated: emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect, plus three additional questions used to detect a person's tendency to minimise or deny abusive experiences (Bernstein & Fink, 1997; Feerick et al., 2006). This study did not investigate experiences of sexual abuse; therefore those questions concerning sexual abuse were removed. Please note abuse relates only to direct experiences and not observation of any abuse.

Bernstein and Fink (1997) normed the test on 398 psychiatric inpatients aged between 12 and 17 years located in the United States of America. These young people were of middle SES and different cultural backgrounds (African-American, Caucasian, and Hispanic/Latino) (Feerick et al., 2006). The CTQ has robust psychometric properties exhibited by the test-retest reliability (.79 - .86) over a two to six month time period (Bernstein et al., 2003; Feerick et al., 2006). Reliability was also measured using internal consistency: physical abuse (.69 – .91), emotional abuse (.83 – .85), physical neglect (.58 - .66), and emotional neglect (.80 - .85) (Bernstein et al., 2003; Scher et al., 2001). The CTQ

also has good convergent, discriminant, and criterion related validity (Bernstein et al., 2003). The CTQ has also been validated in populations in Netherlands (Thombs et al., 2009)

Scoring. The questions are answered using a 5-point Likert scale ranging from: (1) never true, (2) rarely true, (3) sometimes true, (4) often true, to (5) very often true. A score of 5 for a subscale indicates no trauma; a score of 20 indicates extreme trauma (excluding sexual abuse) (Bernstein & Fink, 1998; Gil et al., 2009).

Adolescent Attachment Questionnaire (AAQ). There are three main formats of attachment measures – self-reports, observations, and interviews, each with positive and negative attributes and were considered for use in the present study. Of the interview format measures, the Adult Attachment Interview (AAI) is considered the gold standard of attachment measures (Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010). In contrast to self-report measures, which ask people to understand and interpret their own experiences, the AAI analyses people's narrative of their experiences. This process looks to discover the unconscious processes related to attachment relationships and attachment styles are extrapolated from the narrative and separated into three categories: secure, dismissing (insecure-avoidant), and preoccupied (insecure-ambivalent) (Roisman et al., 2007). While providing insight into unconscious processes and separating attachment styles into categories is beneficial, the time necessary to administer the AAI was not suitable for this study. The AAI takes one – two hours to administer and additional hours to transcribe and interpret the data (Ravitz et al., 2010). The training and experience required to administer the AAI to vulnerable young people, makes the AAI an unachievable prospect in the time available to complete this study.

Ainsworth et al. (1978) used observation in the "psychological study of the Strange Situation" to identify attachment styles in infants (p.1). Observational techniques require the consent and attendance of the young person's caregiver, trained researchers, research assistants, and electronic equipment to record the observations (Ainsworth et al., 1978; Rodriguez, Dumont, Mitchell-Herzfeld, Walden, & Greene, 2010). All of which were beyond the training competencies of the researcher and scope of this study. Furthermore, observations are more likely to exhibit the Hawthorne Effect in the people participating (Feerick et al., 2006). Therefore, it was decided a self-report measure would be more applicable.

Of the self-report attachment measures available a number of studies have used the AAQ with youth delinquent populations ranging from ages 12 to 21 years (Allen et al., 2002; Elgar et al., 2003; Marsh, Evans, & Williams, 2010; Schechter & Francis, 2010; West et al., 1998). Schechter and Francis (2010) used the AAQ in their study of young peoples' life histories and their preference to engage in risky behaviours. Elgar et al. (2003) used the AAQ in their study of the attachment characteristics and behavioural problems in detained young people. The AAQ was also used in Marsh et al. (2010) study on positive social relationships within youth correction facilities.

The AAQ is a brief questionnaire consisting of only nine questions, divided into three subscales consisting of three questions on each: availability, angry-distress, and goal-corrected partnership (West et al., 1998). The AAQ was originally normed using a sample of 824 young people aged between 12 – 19 years. The sample consisted of a clinical sample of 133 young people who were experiencing suicidal behaviour at the time, half of which were in residential care. The remaining 691 consisted of young people from nearby schools. The

only ethnicity information available for this Canadian population was 87% were Caucasian (West et al., 1998).

The AAQ provides good psychometric properties demonstrated by internal reliability ranging between .62 – .80 (availability = .80, angry-distress = .62, goal-corrected partnership = .74). Test-retest reliability was executed three months after the original application of the AAQ, and again, was within acceptable range .69 – .74 (availability = .74, angry distress = .69, goal-corrected partnership = .73) (West et al., 1998). Convergent validity was substantiated with reference to AAQ dimensions of attachment and their relationship to the AAI categories (availability = secure, angry-distress = insecure-preoccupied, and goal-corrected partnership = insecure-dismissive) (Ravitz et al., 2010; West et al., 1998). Therefore the AAQ was selected for use in this study based on its suitability to the population, brevity, and relationship to the specific attachment styles identified in this study.

Two aspects of the AAQ were changed for this study. First all references to parents were replaced with caregivers. This was because not all young people are raised by their parents. Secondly, the original question posed to young people responding to the AAQ was to answer the nine questions based on "the person in your life that raised you from birth to five years" (West et al., 1998). It was decided to alter this question to state "answer the following questions based on the person that raised you… If you had more than one caregiver, select the person that you felt closest to". This question was changed to ensure consistency in responses from all young people filling in the questionnaire. It was decided limiting the young people to only those caregivers who raised them up until the age of five years, may not be compatible with the young people taking part in this study, because it may be that the

young people were taken off their caregivers at a young age and may not remember them, they may have had more than one caregiver over their life time, and many may have been influential in the development of any delinquent behaviour. In addition, some young people may have been raised in foster homes potentially resulting in them having a number of caregivers.

Scoring. Each subscale consists of three questions. The questions were answered using the 5-point Likert scale (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, (5) strongly agree. Subscale scores can range from 3 to 15; total scores can range from 9 to 45. The scores for the availability and goal-corrected partnership subscales were reverse scored. Higher scores on all three subscales reflect insecure attachment (Elgar et al., 2003; McConnell, 2008). An insecure attachment relationship is identified by a score above the means plus one standard deviation of the sample population (M. West, personal communication, May 9, 2012) (West, 2012). Those young people who scored below the mean plus one standard deviation were classified as securely attached (West et al., 1998).

Self-Report Delinquency Scale (SRDS). Delinquency can be measured using a number of methods including: self-report questionnaires, structured interviews, and reviewing official criminal records. Of the methods available, reviewing official criminal records as an accurate measure of delinquency is problematic in a number of ways. First, official records do not represent criminal behaviour; they represent a measurement of official reactions to only those delinquent acts, which have come to the attention of authorities (Canter, 1982). Second, official records only represent a small percentage of actual offences committed by a young person. This is evident due to the disparities between official records and self-reported criminal behaviour; official records and self-reports of delinquency only align 16%

to 75% of the time (Krohn et al., 2010; Maxfield, Weiler, & Widom, 2000). Lastly, official criminal records can include events that did not happen as recorded. This can be a result of measurement error and police discretion. Typically police have the authority to decide who to arrest, what arrests to record, and what charges to assign (Maxfield et al., 2000). This results in possible inaccuracies and the potential unreliability of official criminal records as a tool for assessing youth offending.

Structured interview approaches can also provide a less than accurate measure of delinquency. While structured interview approaches may appear to gather more in-depth information about criminal involvement; self-report delinquency questionnaires, can obtain higher estimates of delinquency (Elliott & Ageton, 1980; Krohn et al., 2010; Maxfield et al., 2000). This can be a result of self-report measures being less likely to exhibit the Hawthorne Effect; the idea people want to look good and exhibit socially acceptable behaviours when under observation (Feerick et al., 2006; Piquero et al., 2002). In addition, self-report measures do not require young people to verbalise their offenses – thus reporting delinquent acts may feel less like a confession.

Of the self-report delinquency questionnaires available, several studies have used Elliott and Ageton (1980) SRDS to investigate: maltreatment and male youth offending (Robertson, 2009), attachment and delinquency (Allen et al., 2002), conduct problems and delinquency (Frick, Cornell, Barry, Bodin, & Dane, 2003), the Self-Control Theory of crime (Williams, 2007), and gender differences in delinquent behaviour (Canter, 1982).

The SRDS was created using American Uniform Crime Reports between 1972 and 1974. Items were included in the SRDS if they represented at least 1% of reported youth arrests (Elliott & Ageton, 1980). This resulted in the selection of 47 items representing six types of

crime: predatory crimes against the person, predatory crimes against property, illegal service, public disorder, status offending, and hard drug use (Elliott & Ageton, 1980). The SRDS was normed on 1,726 young people aged between 11 and 17 years first in 1976 then again in 1977.

Allen et al. (2002) administered the SRDS to their population of high risk 15-16 year old young people from local schools. Roberston (2009) administered the SRDS and the CTQ to her population of 16 – 18 year olds. Other studies have used populations aging from 11 to 19 years (Elliott & Ageton, 1980; Gretton, Hare, & Catchpole, 2004; Krischer & Sevecke, 2008). It was decided that although other studies have not included 20 year olds, it would be prudent to use the SRDS on the 16-20 year olds participating in this study because they are only one year older than people in other studies and the 16-20 year old population represent 36% of all offenders in New Zealand (Ministry of Justice, 2010).

The SRDS was designed in an interview format to first have an open-ended question asking young people to identify the number of times over the last 12 months they had committed each of the 47 delinquent behaviours. If their answer was more than 10 then they were required to categorise their delinquent behaviour into one of the following groups: once or twice a year, once every 2-3 months, once a month, once every 2-3 weeks, once a week, 2-3 times a week, once a day, 2-3 times a day (Elliott & Ageton, 1980; Piquero et al., 2002).

Robertson (2009) and Piquero et al. (2002) used the SRDS, but modified it to include a self-report response format in the form of a 9-point scale (1 = never, 2 = once or twice a year, 3 = once every 2-3 months, 4 = once a month, 5 = once every 2-3 weeks, 6 = once a week, 7 = 2-3 times a week, 8 = once a day, and 9 = 2-3 times per day). To make the

response scale interval level data however, it was decided to use these same categories but separate them into interval type format because interval scale forms are more precise than ordinal scale formats (Figure 3).

Circle the ONE best number that describes how many times in the past 12 months have you…?

Purposely damaged or destroyed property belonging to your caregivers or other family members?

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

Figure 3.

New response format for Self-Report Delinquency Scale to facilitate the collection of interval data.

One challenge as a result of the change in response format was whether the young people were able to understand how to respond to the questions. To combat any misunderstanding and problems with unusable data, the researcher clearly explained how to respond to the SRDS before questionnaire administration, answered any questions during the administration, and checked the answers at the end to ensure the questions had been answered appropriately.

The SRDS has strong reliability (internal consistency = .91) (Elliott & Ageton, 1980), and although Piquero et al. (2002) reports the SRDS has acceptable levels of validity, identifying specific validation measurements can be difficult (Huizinga & Elliott, 1986). This is because validity measurements of the SRDS attempt to align self-reported delinquency with official records, which can result in changeable measurements of validity as self-report and official records only align between 16-75% of the time (Krohn et al., 2010; Maxfield et al., 2000; Piquero et al., 2002). Despite validation difficulties, Krohn et al. (2010) assessed the SRDS as part of their review of self-report measures of crime and delinquency and praised Elliott and Ageton (1980) for their nationally representative sample and longitudinal panel design. Therefore, the SRDS was chosen for use in this study because: it has been used within the 16- 19 year old age group and could be expanded to include 20 year olds, it has been used with attachment measures and the CTQ, and the SRDS in questionnaire form has the advanced ability to expose higher estimates of involvement in delinquency than other methods.

Scoring. Delinquent behaviours were categorised into six subtypes: predatory crimes against the person, predatory crimes against property, illegal service, public disorder, status offending, and hard drug use (Elliott & Ageton, 1980). The subscale frequency scores were transformed into standard scores to allow for statistical analysis (1 = 0 – 12 times per year, 2 = 2 – 4 times per month, 3 = 2 – 7 times per week, and 4 = 2 – 3 times per day) (Elliott & Ageton, 1980). Total subscale scores were then divided by the number of questions within that subscale. For example, predatory crimes against property have 15 questions, whereas predatory crimes against person only have 7. By applying this analysis each item had the same weight.

A few questions were removed because they were not applicable to the study. Questions 13, 14, and 27 were removed from the questionnaire because sexual relations and sexual contact were excluded from investigation in this study. These questions asked how many times in the past 12 months have you " been paid for having sexual relations with someone", "been paid for having sexual intercourse with a person of the opposite sex other than your wife or husband" because prostitution is legal in New Zealand (Ministry of Justice, 2012). In addition, question 27 "had (or tried to have) sexual relations with someone against their will" was also removed due to its sexual content and the need to work in partnership with community organisations and schools (Elliott & Ageton, 1980) (p.108).

The SRDS was normed on a nationally representative sample in America in 1976, which may have different cultural conventions to New Zealanders in the year 2012. Therefore, the following drug names were altered to align with current New Zealand drug culture and language. Question 16 and 42 were altered to include "oil" as a form of marijuana or hashish. Question19 and 21 were altered to replace the terms parents with caregivers. Question 24 was altered to include a supplementary item "ecstasy". This is because according to the Ministerial Committee on Drug Policy (2007) ecstasy is used by 1.9% of New Zealand's population and is the second most commonly used stimulant. Question 41, "hard liquor" was removed and replaced with "spirits and Ready to Drink (RTD) premixed spirits" because this is more appropriate language for the New Zealand population. Question 43 removed "mescaline and peyote" and replaced them with "mushrooms, PCP, and ecstasy" as these are commonly used hallucinogens in New Zealand (ecstasy is both a stimulant and hallucinogen) (New Zealand Ministerial Committee on Drug Policy, 2007). Question 44 removed "whites" and added "P and Chrystal meth" as these are commonly

used in New Zealand and the term “whites” is not a common part of drug language for New Zealand youth. Question 45 replace “reds” with “sleeping pills” as these are commonly used in New Zealand and “reds” is not a common part of drug language for New Zealand youth.

The removal of three items and alteration of nine items are believed not to have an effect on validity because each item is weighted so that its contribution to the total score is the same as any other item (Elliott & Ageton, 1980). The reliability is potentially improved because the young people are better able to understand what the questions are asking and more current substances were listed.

Results

Statistical Analysis

A between subjects one-way Analysis of Variance (ANOVA) statistic was applied to the data in this study as it could provide an indication of any differences between the two groups. Post hoc examination of the means of specific variables were later analysed to determine the factors associated with the differences between the two groups. The ANOVA statistic does have intrinsic limitations due to the possibility of confounds and multiple possible explanations for any group differences found. This will be explored further in the discussion section. Statistical Package for Social Science (SPSS) for Windows volume 19 was used for statistical analysis (SPSS Inc, 2010).

Demographic data. Young people were recruited from two types of locations (community organisations and a school) and divided into delinquent and non-delinquent groups based on previous involvement in the youth justice system (Table 4).

Table 4

Identification of Young People into Delinquent and Non-Delinquent Groups

	Non-Delinquent Group		Delinquent Group	
Recruitment Location	n	%	n	%
School	21	45%	4	12%
Community Organisations	26	55%	30	88%
Total	47	100%	34	100%

Statistical assumptions. The ANOVA statistic was selected to determine any differences between the two groups. Chi squared was not selected as it required at least five people to be present in each condition, which was not achieved. T-tests were discounted because multiple comparisons were required, thus multiple t-tests would result in an inflated alpha level and a higher probability of making type I errors. The data collected met the statistical assumptions for ANOVA including: between groups-unrelated design, interval level data, normal distribution, and homogeneity of variance. Between groups unrelated design was achieved by having different young males allocated to each group. Interval level data were collected using the psychometric measures (CTQ, AAQ, and SRDS). The distribution of results were indicated as normal because the skewness value (.33) was less than twice the value of the standard error of skewness (.27) (Brown, 1997). Homogeneity of variance could have been affected by the uneven group sizes (delinquent group, n = 34, non-delinquent group, n = 47), however, uneven group sizes did not result in bias because it met the 80% power requirement: large effect size (d = .4), $\alpha < .05$, minimum of 26 young people in each of the two groups (Cohen, 1992; Faul et al., 2007).

Homogeneity of variance between groups for age, education, and ethnicity were tested using ANOVA (Table 5). The two groups differed significantly in terms of age (ES = .46) and education (ES = .12) yet did not differ significantly in relation to ethnicity (ES = .18). Age and education may be different because the young people who attend community organisations may have been removed from or left school early therefore may not have achieved their age equivalent qualifications. In addition, community organisations accept young people up to the age of 20 years; whereas, young people in schools generally are no older than 18 years of age – accounting for the difference in age ranges between groups.

Table 5

Comparison of Demographic Information between Groups using ANOVA

Source	*df*	*F*	η^2	*p*
Age				
Between groups	1	10.59	.46	.00***
Within groups	79	(1.16)		
Ethnicity				
Between groups	1	.65	.18	.42
Within groups	79	(9.43)		
Education				
Between groups	1	10.85	.12	.00***
Within groups	79	(.77)		

Note: Values enclosed in parentheses represent mean square errors. η^2 is the effect size of the sample.

*** $p < .01$.

Even though there were differences between age and education, other demographics such as socioeconomic status and ethnicity were similar enough to conduct a meaningful analysis. Full demographic data are displayed in Table 6.

Missing data. Before statistical analysis was performed the raw data were screened for accuracy and missing data. One young person in the non-delinquent group failed to identify a caregiver for the Adolescent Attachment Questionnaire (AAQ). This missing data did not compromise the quality of the data because it contributed less than 10% of the overall data (n = 2%) (Scheffer, 2002).

Table 6

Group Differences in Demographic Information

Demographic variables	Non-delinquent group n	%	Delinquent group n	%	Total n	%
Age						
16 years	30	64%	13	8%	43	53%
17 years	13	28%	9	26%	22	27%
18 years	3	6%	7	21%	10	12%
19 years	-		-		-	-
20 years	1	2%	5	15%	6	7%
Education						
Year 9	1	2%	7	21%	8	10%
Year 10	2	4%	3	9%	5	6%
Year 11	19	36%	14	41%	33	41%
Year 12	25	53%	10	29%	35	43%
Ethnicity						
European	27	57%	11	32%	28	35%
Maori	10	21%	9	26%	19	23%
European & Maori	7	15%	5	15%	12	15%
Pacific Islander	-		2	6%	2	2%
Maori & Pacific Islander	1	2%	2	6%	3	4%
European, Maori & Pacific Islander	-		1	3%	1	1%
European, Maori, & Asian	-		1	3%	1	1%
Maori & Asian	1	2%	-		1	1%
South African	1	2%	-		1	1%
Somalian	-		1	3%	1	1%
Iraqi	-		1	3%	1	1%
Arabic	-		1	3%	1	1%

Maltreatment and Delinquent Behaviour

Delinquent behaviour was investigated using the Self-Report Delinquency Scale (SRDS). The differences between groups on overall delinquency and the subscales of the SRDS were identified using ANOVA (Table 7 and 8).

Table 7

Comparison of Reported Overall Delinquent Behaviour between Groups using ANOVA

Source	*df*	*F*	η^2	*p*
Overall Delinquency				
Between Groups	1	8.90	.12	.00***
Within Groups	79	(.06)		

Note: Values enclosed in parentheses represent mean square errors. η^2 is the effect size of the sample.

*** $p < .01$

A statistically significant difference was found between groups on overall delinquency (ES = .12) (Table 7), predatory crimes against person (ES = .07), predatory crimes against property (ES = .09), illegal service crimes (ES = .09), public disorder crimes (ES = .08), and status crimes (ES = .11) because the variation within groups were low compared with the variation between groups. Hard drug use was not statistically different between groups (ES = .02) (Table 8).

Table 8

Comparison of Reported Delinquent Behaviour between Groups using ANOVA

Source	*df*	*F*	η^2	*p*
Predatory Crimes against Person				
Between Groups	1	5.38	.07	.02**
Within Groups	79	(.08)		
Predatory Crimes against Property				
Between Groups	1	6.99	.09	.01***
Within Groups	79	(.88)		
Illegal Service Crimes				
Between Groups	1	6.99	.09	.01***
Within Groups	79	(.09)		
Public Disorder Crimes				
Between Groups	1	6.43	.08	.01***
Within Groups	79	(.14)		
Status Crimes				
Between Groups	1	8.74	.11	.00***
Within Groups	79	(.96)		
Hard Drug Use				
Between Groups	1	1.39	.02	.24
Within Groups	79	(.01)		

Note: Values enclosed in parentheses represent mean square errors. η^2 is the effect size of the sample.

*** $p < .01$, ** $p < .05$.

Group differences on the mean frequency of delinquent acts (excluding hard drug use) identified that although both group means fell within the none-low delinquency range, the

mean ranges and standard deviations between groups differed: delinquent group (M = 1.03 – 1.24, SD = .17 – .55) and non-delinquent group (M = 1.00 - 1.02, SD = .00 – .15) (Table 9). This identifies the delinquent group reported higher rates of delinquent behaviour than the non-delinquent group on all delinquent subscales excluding hard drug use.

Table 9

Comparing Groups on Subscale Scores of the SRDS using Mean and Standard Deviation

	Non-Delinquent Group			Delinquent Group		
SRDS Subscales	n	M	SD	n	M	SD
Overall Delinquency	47	1.00	.02	34	1.16	.06
Predatory Crimes against Person	47	1.00	.00	34	1.15	.44
Predatory Crimes against Property	47	1.00	.00	34	1.18	.46
Illegal Service Crimes	47	1.00	.00	34	1.18	.46
Public Disorder Crimes	47	1.02	.15	34	1.24	.55
Status Crimes	47	1.00	.00	34	1.21	.48
Hard Drug Use	47	1.00	.00	34	1.03	.17

Note: Scores on the SRDS were 1 = 0-12 times per year, 2 = 2-4 times per month, 3 = 2-7 times a week, to 4 = 2-3 times per day.

Maltreatment was investigated using the Childhood Trauma Questionnaire (CTQ). The CTQ was analysed in two ways, first by calculating overall maltreatment, overall abuse, and overall neglect; second the four subscales were analysed individually. Overall maltreatment was calculated by combining all answers on the four subscales. Overall abuse was calculated by combing physical abuse and emotional abuse, and overall neglect was calculated by

combing physical neglect and emotional neglect. Table 10 shows the differences between groups for the reported experiences of overall maltreatment (ES = .34), overall abuse (ES = .09), and overall neglect (ES = .05), were all significant because the variance between groups was higher than the variance within groups.

Table 10

Comparison of Reported Maltreatment between Groups using ANOVA

Source	*df*	*F*	η²	*p*
Overall Maltreatment				
Between Groups	1	4.93	.34	.03**
Within Groups	79	(.79)		
Overall Abuse				
Between Groups	1	3.35	.09	.07*
Within Groups	79	(1.17)		
Overall Neglect				
Between Groups	1	3.43	.05	.07*
Within Groups	79	(.92)		

Note: Values enclosed in parentheses represent mean square errors. η² is the effect size of the sample.

*** $p < .01$, ** $p < .05$, * $p < .10$.

Overall, 44% of participating young people reported experiencing maltreatment (n = 36). Table 11 shows the breakdown of maltreatment severity for the delinquent and the non-delinquent groups.

Table 11

The Difference between Groups on Reported Experiences of Overall Maltreatment

	Non-delinquent Group		Delinquent Group		Total	
	n	%	n	%	n	%
Overall Maltreatment						
None-Minimal	29	62%	16	47%	45	56%
Low-Moderate	12	26%	8	23.5%	20	25%
Moderate-Severe	4	8%	8	23.5%	12	15%
Severe-Extreme	2	4%	2	6%	4	4-5%
Total	47	100%	34	100%	81	100%

Overall neglect and overall abuse showed statistically significant differences between groups, however when broken down into the separate subscales of the CTQ physical abuse (ES = .09) and physical neglect (ES = .09) were also significant, whereas there were no significant differences for the subscales of emotional abuse (ES = .08) and emotional neglect (ES = .02) (Table 12). Therefore it would seem the statistically significant results for overall neglect and overall abuse were as a result of physical abuse and physical neglect being statistically significant.

Table 12

Comparison of Reported Maltreatment between Groups using ANOVA

Source	*df*	*F*	η²	*p*
Emotional Abuse				
Between Groups	1	.97	.08	.33
Within Groups	79	(1.15)		
Physical Abuse				
Between Groups	1	5.61	.09	.02**
Within Groups	79	(1.54)		
Emotional Neglect				
Between Groups	1	1.45	.02	.23
Within Groups	79	(1.06)		
Physical Neglect				
Between Groups	1	7.25	.09	.01***
Within Groups	79	(1.27)		

Note: Values enclosed in parentheses represent mean square errors. η² is the effect size of the sample.

*** $p < .01$, ** $p < .05$, *$p < .10$.

To identify any minimisation of the experience of maltreatment three minimisation questions were asked. There were no significant differences between groups, F (1, 79) = 1.77, $p < .19$. In addition, overall maltreatment scores were compared to minimisation scores between groups. Minimisation of the experience of maltreatment was evident in the responses to the CTQ of eight young people – four from each group. Six of the young people who reported maltreatment minimisation were from the community organisations, and two school participants minimised their maltreatment experiences. These young people

answered questions indicating they had experienced certain types of maltreatment at certain severity levels, and then contradicted themselves by answering the minimisation questions as though their experiences were not traumatic. Although, this indicates eight young people were either attempting to minimise their experiences of maltreatment or did not understand the questions however this does not impact on the overall quality of the results because only 10% of the sample was affected.

Therefore, ANOVA established the groups differed significantly on the CTQ scores of overall maltreatment, overall abuse, overall neglect, physical abuse, and physical neglect. Also the SRDS scores of overall delinquency, predatory crimes against person, predatory crimes against property, illegal service, public disorder, and status crimes showed significant differences between groups.

Neglect and Delinquent Behaviour

Maltreatment takes on many forms; one of the least understood forms is neglect (Howe, 2005). It has been identified that overall neglect and physical neglect were significantly different between groups, but emotional abuse and emotional neglect were not. The experience of physical neglect was investigated further by identifying group means and standard deviations (Table 13). The delinquent group experienced low to moderate physical neglect ($M = 2.47$, $SD = 1.26$) compared to the non-delinquent group who experienced none to minimal physical neglect ($M = 1.79$, $SD = 1.02$).

Table 13

Comparing Groups on Subscale Scores of the CTQ using Mean and Standard Deviation

	Non-Delinquent Group			Delinquent Group		
CTQ subscales	n	M	SD	n	M	SD
Overall maltreatment	47	1.51	.80	34	1.85	.99
Overall Abuse	47	1.70	1.00	34	2.15	1.18
Overall Neglect	47	1.66	.89	34	2.06	1.04
Emotional Abuse	47	1.85	.98	34	2.09	1.19
Physical Abuse	47	1.81	1.19	34	2.47	1.31
Emotional Neglect	47	1.81	.99	34	2.09	1.08
Physical Neglect	47	1.79	1.02	34	2.47	1.26

Note: Scores on the CTQ were: 1 = none-minimal maltreatment, 2 = low-moderate maltreatment, 3 = moderate-severe maltreatment, 4 = severe-extreme maltreatment.

Insecure Attachment, Maltreatment, and Delinquency

Attachment was investigated using the AAQ, which asked young people to select the caregiver they felt closest to and answer nine questions based on their relationship with this person. The choice of caregiver was thought to have an impact on the outcome of the AAQ. The non-delinquent group selected their mother or father as their caregivers 90% of the time compared to the delinquent group who selected their mother or father only 71% of the time. Full information on caregiver selection is displayed in Table 14. The caregivers selected by the non-delinquent group were significantly different to the caregivers selected by the delinquent group, F (1, 79) = 4.92, $p < .03$.

Table 14

Group Differences in Caregiver Selection for AAQ

	Non-delinquent group		Delinquent group	
Caregiver	n	%	n	%
Mother	38	81%	18	53%
Father	4	9%	6	18%
Foster mother	-	-	1	3%
Aunty	-	-	3	9%
Uncle	1	2%	-	-
Grandmother	1	2%	2	6%
Grandfather	2	4%	1	3%
Sister	-	-	3	9%
Missing data	1	2%	-	-
Total	47	100%	34	100%

The young people's attachment styles were identified as either securely or insecurely attached to their chosen caregiver. There was no significant difference between the groups on the type of attachment style to their chosen caregiver (ES = .01) (Table 15). In fact only seven young people were scored as insecurely attached overall – four from the delinquent group, three from the non-delinquent group. Six of the young people who reported insecure attachment were from the community organisations, with only one school participant identifying as insecurely attached. The majority of the young people in this study identified

as securely attached to their chosen caregiver, specifically, 94% of the non-delinquent group and 88% of the delinquent group.

Table 15

Comparison of Attachment Style between Groups Using ANOVA

Source	*df*	*F*	η^2	*p*
Attachment				
Between Groups	1	.71	.01	.40
Within Groups	79	(.08)		

Note: Values enclosed in parentheses represent mean square errors. η^2 is the effect size of the sample.

Tables 16 and 17 however, identify the small number of young people who identified as insecurely attached also reported more participation in delinquent behaviour, as well as more severe experience of maltreatment than their securely attached peers.

Table 16

Comparison of Participation in Delinquent Behaviour and Attachment Styles

Delinquent Behaviour	n	M	SD
Attachment Style			
Secure	74	1.05	.19
Insecure	7	1.31	.56

Note: Scores on the SRDS were 1 = 0-12 times per year, 2 = 2-4 times per month, 3 = 2-7 times a week, to 4 = 2-3 times per day.

Although, numbers are too small to draw conclusions, relationships between the constructs could be suggested. Of those young people who reported insecure attachment relationships with their chosen caregiver on average they reported participating in more delinquent behaviour although both group means fell within the none-low delinquency range, the means and standard deviations between attachment styles differed: securely attached (M = 1.05, SD = .19) and insecurely attached (M = 1.31, SD = .56) (Table 16).

Table 17

Comparison of Experience of Maltreatment and Attachment Styles

Maltreatment	n	M	SD
Attachment Style			
Secure	74	1.51	.76
Insecure	7	3.14	.90

Note: Scores on the CTQ were: 1 = none-minimal maltreatment, 2 = low-moderate maltreatment, 3 = moderate-severe maltreatment, 4 = severe-extreme maltreatment.

In addition, Table 17 identifies insecure attachment relationships were also related to experiencing more severe maltreatment: securely attached young people reported none-minimal maltreatment compared to insecurely attached young people who reported moderate-severe maltreatment.

Young People from Community Organisations Only

It was decided to remove the school group and analyse just the community organisations because although the school group were included to increased numbers and provide a population of non-delinquent young people; it was found that the community organisations

alone had adequate numbers to maintain 80% power (minimum group size, n = 26) and were evenly distributed between delinquent (n = 30) and non-delinquent (n = 26) groups. It was thought this method would also allow greater control of demographic data; however, age, F (1, 55) = 3.99, $p < .05$, and education F (1, 55) = 6.64, $p < .01$, were still statistically significantly different between groups, and ethnicity, F (1, 55) = .42, $p < .52$, were still not that different between groups.

Using community organisation data only, overall maltreatment, overall abuse, overall neglect were no longer statistically significant (Table 18).

Table 18

Comparison of Reported Overall Maltreatment between Groups using ANOVA, for Young People from Community Organisations Only

Source	*df*	*F*	η^2	*p*
Overall Maltreatment				
Between groups	1	.60	.03	.44
Within groups	55	(1.00)		
Overall Abuse				
Between groups	1	.81	.11	.38
Within groups	55	(1.42)		
Overall Neglect				
Between groups	1	.88	.02	.35
Within groups	55	(1.10)		

Note: Values enclosed in parentheses represent mean square errors. η^2 is the effect size of the sample.

In fact only physical neglect (ES = .06) remained significantly different between the two groups (Table 19).

Table 19

Comparison of Reported Maltreatment between Groups using ANOVA, for Young People from Community Organisations Only

Source	*df*	*F*	η^2	*p*
Emotional Abuse				
Between groups	1	.11	.03	.74
Within groups	55	(1.35)		
Physical Abuse				
Between groups	1	2.03	.09	.16
Within groups	55	(1.75)		
Emotional Neglect				
Between groups	1	.12	.05	.73
Within groups	55	(1.24)		
Physical Neglect				
Between groups	1	3.01	.06	.09*
Within groups	55	(1.42)		

Note: Values enclosed in parentheses represent mean square errors. η^2 is the effect size of the sample.

* $p < .10$.

The delinquent group reported low-moderate experiences of physical neglect (M = 2.40, SD = 1.25), whereas the non-delinquent group reported none-minimal experiences of physical neglect (M = 1.85, SD = 1.12) (Table 20).

Table 20

Comparison between Groups on CTQ Scores Using Means and Standard Deviations, for Young People from Community Organisations Only

	Non-Delinquent Group			Delinquent Group		
CTQ Subscales	n	M	SD	n	M	SD
Overall Maltreatment	26	1.69	1.01	30	1.90	.99
Overall Abuse	26	1.85	1.19	30	2.13	1.20
Overall Neglect	26	1.77	1.03	30	2.03	1.07
Emotional Abuse	26	1.96	1.11	30	2.07	1.20
Physical Abuse	26	1.96	1.31	30	2.47	1.33
Emotional Neglect	26	1.96	1.11	30	2.07	1.11
Physical Neglect	26	1.85	1.12	30	2.40	1.25

Note: Scores on the CTQ were: 1 = none-minimal maltreatment, 2 = low-moderate maltreatment, 3 = moderate-severe maltreatment, 4 = severe-extreme maltreatment.

Results of ANOVA analysis for subscales of SRDS (ES = .11) and AAQ (ES = .00) remained the same. Attachment styles frequency analysis indicated 88% of the non-delinquent group and 90% of the delinquent group were securely attached to their selected caregiver. Delinquent behaviour frequency analysis revealed the non-delinquent group participation in delinquent behaviour remained unchanged except for public disorder crimes, where the mean increased from 1.02 to 1.04. The delinquent group displayed a slight increase in participation in all different types of delinquent behaviour except hard drug use, which remained the same.

Discussion

The aim of this study was to establish whether there was a relationship between neglect, insecure attachment, and delinquent behaviours in young males (16-20 years). Although it has been speculated neglect is more prominent than abuse, it is a construct which has received little research to date (Lievore & Mayhew, 2007; Martin et al., 2010). Of the research conducted, methodological practices have restricted data collection accuracy. Namely, social service agency case records and caregiver reports indicate fewer incidents of neglect than self-reported measures, possibly because case records and caregiver reports underestimate the cases of, and impact of, neglect (Feerick et al., 2006). In order to obtain the most accurate information on young people's experiences of neglect, self-report methodology was selected in this study (Bernstein et al., 2003; Elliott & Ageton, 1980; West et al., 1998). Although, difficult to undertake, this method provided an opportunity to ask young males in the lower North Island of New Zealand about their direct experiences of neglect and abuse, their attachment relationships with their caregivers, and whether they participate in delinquent behaviour.

The results indicated young people with a history of delinquent behaviour reported more maltreatment than young people who did not have a history of delinquent behaviour (ES = .34). This supports the first hypothesis, that young people who participate in delinquent behaviours will report more maltreatment than their non-delinquent peers. In addition, the second hypothesis that those young people who had a history of delinquent behaviour will report more neglect than their non-delinquent peers was also supported. Results indicated young males with a history of delinquent behaviour reported experiencing more severe physical neglect than their non-delinquent peers (ES = .09). The third hypothesis that there

will be a relationship between insecure attachment and delinquent behaviour was not supported.

Bronfenbrenner's Bioecological Model of Youth Development will be used to help determine the possible influencing factors on the development of delinquent behaviour, the experience of maltreatment, and the type of attachment relationships (Bronfenbrenner & Ceci, 1994). Finally, the theories of delinquent behaviour will be examined in relation to the results found in this study.

Maltreatment and Delinquent Behaviour

The Childhood Trauma Questionnaire (CTQ) was used as the measurement of maltreatment in this study and identified 53% of the delinquent group and 38% of the non-delinquent group experienced some form of maltreatment in their lifetime. The maltreatment percentage identified in the delinquent group is 1% different from the 54% of young males (n = 526) who identified experiencing maltreatment in Odgers et al. (2008) New Zealand study of antisocial trajectories. The similarity between these the current study and Odgers et al. (2008) study may indicate the use of the CTQ in this study contributed to the young people's willingness to disclose their experiences of maltreatment. Studies conducted outside of New Zealand show variable results, for example, Roberston (2009) used the CTQ and found maltreatment accounted for 12% of delinquent behaviour. In addition, Krischer and Sevecke (2008) used the CTQ in their study and found between 10-39% of the delinquent group had experienced some form of maltreatment. Although figures fluctuate between studies the CTQ has consistently shown to identify experiences of maltreatment. It could be argued the maltreatment identified in this study illustrates - at least for a number of young people - the CTQ retrospective self-report measure may have provided a platform for

them to disclose experiences of maltreatment without having to articulate those experiences to others and potentially without the fear of repercussions. Therefore it could be argued the CTQ can elicit honest answers from young people, is written at an age appropriate level, and is easy to answer – thus appears to have provided an accurate measure of maltreatment in this study.

Delinquent behaviour. Although, both the delinquent and non-delinquent groups on average were low level offenders, categorised within the lowest level of delinquent behaviour (0-12 times per year) for reported participation in each type of delinquent behaviour; the delinquent group participated more frequently in each type of delinquent behaviour as well as more frequently overall. Specifically, overall delinquency (ES = .12), predatory crimes against person (ES = .07), predatory crimes against property (ES = .09), illegal service crimes (ES = .09), public disorder crimes (ES = .08), and status crimes (ES = .11) were participated in more frequently by the young people in the delinquent group than the non-delinquent group. The increased participation in delinquent behaviour by the delinquent group may be a result of their experiences of maltreatment because maltreatment can result in less advanced neurological development and therefore a higher possibility of acting on impulses. Delinquent behaviour for young people can be about acting on impulses without regard for the consequences for themselves and others. Notwithstanding, maltreatment can also result in reduced stages of moral development, because the young people may not have been modeled constructive, empathetic, and socially appropriate ways of interacting with others. As a result the young people in this study may have not contemplated how the consequences of their actions may have impacted on others.

Hard drug use (ES = .02) however, was not significantly different between the two groups. In fact, results indicated hard drug use was the least participated in subtype of delinquent behaviour of both groups. This may be because the hard drugs specified in the Self-Report Delinquency Scale (SRDS) (amphetamines, barbiturates, hallucinogens, heroin, and cocaine) may not be as readily available to young people in New Zealand compared to other countries (Elliott & Ageton, 1980; Hawkins, Catalano, & Miller, 1992). Furthermore, the young people included in this study may be less likely to use hard drugs because they are still enrolled in school or alternate means of education, which can be viewed as a protective factor against hard drug use (Savage & Marchington, 1977; Schroder, Sellman, Frampton, & Deering, 2008).

Maltreatment and delinquent behaviour. The relationship between maltreatment and delinquency was demonstrated based on the reported rates of participation in delinquent behaviour and reported experiences of maltreatment. The reported rate of overall maltreatment was higher for the young people in the delinquent group than those in the non-delinquent group (ES = .34). Specifically, the reported severity of overall abuse (ES = .09), overall neglect (ES = .05), physical abuse (ES = .09) and physical neglect (ES = .09) were higher for the delinquent group compared to the non-delinquent group. This identifies a relationship between the reported experience of overall maltreatment, overall abuse, overall neglect, physical abuse or physical neglect and the reported participation in delinquent behaviours. The direction of the relationship could not be concluded from the data collected; thus it could be that maltreatment may result in an increased likelihood of participation in delinquent behaviours or participating in delinquent behaviours could result in higher rates of maltreatment for young people. These results are consistent with past research on the

relationship between maltreatment and participation in delinquent behaviour (Jonson-Reid et al., 2010; Krischer & Sevecke, 2008; Maughan & Moore, 2010; Rebellon & van Gundy, 2005; Robertson, 2009; Tell, 2010). Jonson-Reid et al. (2010) found a causal relationship between maltreatment and the perpetration of delinquent acts. Mersky and Reynolds (2007) identified maltreatment was related to delinquent behaviour. English et al. (2002) indicated the experiences of abuse and neglect were related to delinquent behaviour. Finally, Rebellon and van Gundy (2005) concluded physical abuse was associated with delinquent behaviour. The current study aligns with past research, confirming a relationship between maltreatment and delinquent behaviour. The unique characteristic of this study is the use of self-reported maltreatment and delinquent behaviour. This potentially increases the reliability of the results of this study because it does not rely on the substantiation of maltreatment and police responses to delinquent behaviour; it purely relies on the honesty of the young people participating, although this could also be contentious.

Emotional abuse and emotional neglect. Interestingly, emotional abuse and emotional neglect were found not to be related to delinquent behaviour. These findings were similar to Riggs and Kaminski's (2010) study which found emotional maltreatment (emotional abuse and emotional neglect) was not significantly related to aggressive behaviour, however the study was limited by the use of college students. Conversely, emotional maltreatment has been linked to physical and psychological symptoms but for females only, therefore the results cannot be compared directly (Spertus et al., 2003). Perry (2001) and Iwaniec (2006) reviewed research on emotional neglect and noted people who have experienced severe emotional neglect can display poor impulse control, a lack of empathy, aggression, and/or delinquent behaviour. Therefore, although research supports the non-significant findings in

the current study between emotional maltreatment and delinquent behaviour, a number of studies contradict these findings, which could mean the findings may be mediated by other factors.

There are a number of factors potentially contributing to these insignificant findings. In cases where young people have been maltreated, their ability to understand and label emotions can be limited, therefore the young males in this study may have had difficulty interpreting the emotional abuse and emotional neglect questions (Gibb, Schofield, & Coles, 2009; Overbeek et al., 2005). Whereas, questions concerning physical neglect and physical abuse are easier to understand because they relate to physical injury and the physical environment (Bernstein et al., 2003; Howe, 2005). In addition, physical abuse has greater media prevalence than emotional abuse and emotional neglect; previous exposure to the terminology may have made the concepts easier to interpret and understand.

Neglect and Delinquent Behaviour

The relationship between the experience of neglect and delinquent behaviour was also supported in this study. The reported experiences of overall neglect (ES = .05) and physical neglect (ES = .09) were more severe for the young people in the delinquent group than the non-delinquent group. Again the direction of the relationship could not be identified; indicating the experience of physical neglect either contributes to the advancement of delinquent behaviour, or happens as a result of delinquent behaviour. Either way, the experience has detrimental effects on a growing young person.

Of the limited research conducted on neglect, self-reported experiences of neglect have identified both overall neglect and physical neglect are associated with early behavioural problems and an increase in delinquent behaviours in males (Krischer & Sevecke, 2008;

Robertson, 2009). In addition, secondary longitudinal self-report research found physical neglect was associated with an increase in violent delinquency (Chapple et al., 2005). Robertson's (2009) study used the self-report methodology on young males and found physical neglect was a significant predictor of delinquent behaviour. The current study was a partial replication on Robertson (2009) study and found the same results - physical neglect is associated with delinquent behaviour in young males. Therefore strengthening the research foundation for the relationship between neglect and delinquent behaviours as well as establishing a need for further research into the construct of neglect and its impact on the functioning of young males.

Young people from community organisation only. Physical neglect (ES = .06) was the only relationship to remain significant after the school participants were removed and the community organisation participants were analysed alone. This appears to be as a result of both the delinquent and non-delinquent groups comprising only community participants experiencing similar severities of maltreatment; with the exception of physical neglect whose severity was still statistically significant between the delinquent group and the non-delinquent group.

Specifically, the non-delinquent group reported more severe average CTQ scores without the school participants than with them included. The non-delinquent group with only young people from the community organisations reported on average a score of 1.69 for overall maltreatment, compared to a score of 1.51 for the non-delinquent group with the school participants included. Although, both scores fell within the none-minimal severity of maltreatment, it must be noted the young people from the community organisations experienced more severe maltreatment on average.

Interestingly, despite the increased average severity of maltreatment for the non-delinquent group consisting of only community participants, their rate of delinquent behaviour did not increase and remained significantly different from the delinquent group. This shows, for the non-delinquent group, the experiences of maltreatment were neither a catalyst for delinquent behaviour nor was the maltreatment a result of participation in delinquent behaviour.

An explanation for the similar maltreatment levels between the delinquent and non-delinquent groups comprising only the young people from the community organisations could be the young people attending the community organisations may have similar risk factors for the probability of experiencing maltreatment. Low socioeconomic status is a risk factor for the experience of maltreatment, which is shared by both the delinquent and non-delinquent groups from community organisations only (Stith et al., 2009). This is because the circumstances associated with young people attending alternative education can include: poor school adjustment possibly due to cognitive or behavioural problems, bullying by others in school, caregiver financial hardship, and caregiver substance use (Baldry, 2003; Hildyard & Wolfe, 2007; Raskauskas, Gregory, Harvey, Rifshana, & Evans, 2010). Young person substance use is another risk factor associated with maltreatment; despite the non-significant results for hard drug use, alcohol and marijuana use (status crimes) were significantly different between the delinquent and non-delinquent groups. Substance use can be a coping mechanism for some young people who experience maltreatment to help them reduce or block out negative emotions (Hawkins et al., 1992). Substance use is also an externalising behaviour, which could be a result of the young person's experience of anger

and frustration at their current situation; be it, expulsion from school, maltreatment at home, bullying, or a lack of care and attention from caregivers.

These results appear on the surface to be contrary to current research in the field of maltreatment, however may not be. There is still a relationship (yet not a significant relationship) between maltreatment and delinquency, shown by the delinquent group experiencing more severe maltreatment than the non-delinquent group. This identifies even though there is a link between maltreatment and delinquency it is not an unavoidable relationship (Carpendale, 2000). The following discussion will be analysing the results from the delinquent and non-delinquent groups consisting of both school and community organisation participants, unless otherwise stated.

Insecure Attachment, Maltreatment, and Delinquency

The third hypothesis was drawn from the idea young people who are maltreated may also experience insecure attachment relationships (Perry, 2001) and insecure attachment and maltreatment are related to delinquent behaviour (Arthur, 2007; Howe, 2005). Therefore, it was hypothesized that there would also be a relationship between insecure attachment and delinquent behaviour (Allen et al., 2002; Sousa et al., 2011). This hypothesis was not supported. The majority of young people in both groups identified secure attachment relationships with their chosen caregiver.

Many studies however, contradict this finding. Allen et al. (2002) used the Adult Attachment Interview and identified insecure-preoccupied attachment was related to an increase in delinquent behaviour in 16-18 year olds. Moreover, Elgar et al. (2003) used the Adolescent Attachment Questionnaire (AAQ) and found insecure attachment was related to an increase in behavioural problems in young males. In addition, Wampler and Downs

(2010) analysed attachment in young males using the self-report Inventory of Parent and Peer Attachment and found insecure-isolated attachment to caregivers increased the risk of violent problem behaviour. The implications of the findings in this study are young people experiencing maltreatment and participating in delinquent behaviour can in fact still be securely attached to their chosen caregiver; this may mean insecure attachment is not related to maltreatment or delinquency, or it could mean a different questionnaire may have been required to identify any underlying unconscious feelings of insecurity in close relationships with others.

There may be a number of factors contributing to the results of this study, specifically the relationship between maltreatment and delinquent behaviour as well as neglect and delinquent behaviour. This will be investigated using Bronfenbrenner's Bioecological Model of Youth Development (Bronfenbrenner & Ceci, 1994) and will include discussion on the microsystem, mesosystem, exosystem, and macrosystem. An analysis on how the theories of delinquent behaviour may have contributed to the results will follow.

Microsystem

In the analysis of the results, the microsystem looks to identify aspects of the young people or their direct environment which may be impacting on their experiences of maltreatment, types of attachment relationships, and their participation in delinquent behaviours. This section will look at neurological development, secure attachment relationships, and protective factors in an attempt to identify the relationship these factors have with the experience of maltreatment and the participation in delinquent behaviour.

Young person neurological development. Physical neglect and delinquent behaviour could be linked due to the negative impact neglect has on a young person's neurological

growth and development. Neurological growth and development is dependent on stimulation; physically neglected young people can be deprived of stimulation and the stimulation they do receive can be stressful (Collins et al., 2000). The stimulation physically neglected young people do receive can be internally or externally stressful. Young people for example, who are left alone for long periods of unsupervised activity can internally assess this situation as frightening, heightening neural stimulation in the stress response area of the brain. Furthermore, young people who are emotionally neglected may find the presence of people in their environment stressful because the people who are present will not help them, and may potentially be there to harm them eliciting a fear/stress response from the young person (Howe, 2005; Perry, 2002). This heightened activity in the stress response areas of the brain can result in the rest of the brain failing to receive strengthening, particularly in the frontal cortex, which is responsible for impulsivity, emotional control, informed decision making, and controlling aggressive (delinquent) behaviour (Schore, 2001; Siegel, 2001;Leucken & Lemery, 2004).

Secure attachment. Secure attachment as indicated by 88% of the non-delinquent group and 90% of the delinquent group may be another protective factor reducing the likelihood of young people participating in delinquent behaviour (Howe, 2005). Secure attachment theorizes, at some point early in the lives of these young people they had a relationship with another person who was sensitive, consistent, and responsive to their needs (Ainsworth & Bowlby, 1991). This type of relationship can result in the young person being able to regulate their own distress, have a sense of positive self-worth, and the ability to maintain stable healthy relationships – thus reducing the likelihood of participating in delinquent behaviour (Ainsworth & Bowlby, 1991; Griffin & Bartholomew, 1994; Siegel, 2001). The

question remains however, why did the delinquent group participate in more delinquent behaviour if they also reported secure attachment relationships? In fact, based on percentage, more young people in the delinquent group reported secure attachment than the non-delinquent group. It may be despite their secure attachment relationships other negative factors were also evident. In addition, securely attached young people can also display delinquent behaviour (Wampler & Downs, 2010).

Protective factors. Young people who reported experiencing maltreatment yet did not participate in delinquent behaviours may have experienced protective factors within their environment, which reduced the impact of the maltreatment. Protective factors can include: the reinforcement of pro-social behaviours by caregivers or peers (Twentyman & Plotkin, 1982) and the implementation of pro-social youth behaviour management techniques by caregivers (Perrone et al., 2004). In addition, caregivers who display predictable and reliable caregiving practices (Howe, 2005), no domestic violence (Baldry, 2003), no substance use (Egeland, Jacobvitz, & Sroufe, 1988; Perry, 2001), no mental health problems (Egeland et al., 1988), and an understanding youth developmental stages (Twentyman & Plotkin, 1982) are likely to reduce the young person's potential to display delinquent behaviours. Furthermore, smaller family sizes, with two or more caregivers who have age appropriate expectations, can supply plenty of food, have financial freedom, receive child care assistance, and provide adequate clothing for their children can strengthen the attachment bonds and reduce the likelihood of delinquent behaviour (Dharmalingam et al., 2004;Belsky, 1993;Counts et al., 2010; Hay et al., 2006). Moreover, caregivers who are involved in the community and receive emotional support from other adults can feel less stress in relation to

caregiving and therefore be less likely to maltreatment the children in their care (Christoffersen & DePanfilis, 2009).

Additional protective factors for the young people can include: social and/or emotional support from an adult outside of the home, physical attractiveness, and superior intellect (Giardino et al., 2010). Therefore, it may be the young people in the non-delinquent group who were maltreated had social and emotional support from a teacher, coach, counselor, friends, caregiver, or other adult, which helped to reduce the impact of the experienced maltreatment (Peterson et al., 2010). Moreover, the young people could be physically attractive therefore receive positive attention from others as a consequence; reducing the impact of maltreatment (Giardino et al., 2010). Additionally, the young people could have been intelligent and therefore receive positive feedback from their teachers and school, again reducing the impact of maltreatment (Giardino et al., 2010). Intelligence also influences the type of peers associated with; more positive peer relationships may be formed as a consequence thus reducing the possibility of being influenced by deviant peers (Wampler & Downs, 2010).

Mesosystem

The mesosystem can help to identify what factors may be interacting in the life of the young person to influence their experiences of maltreatment, attachment, and the development of delinquent behaviours. This section will focus on the factors associated with the interaction between secure attachment and delinquent behaviour, and maltreatment and delinquent behaviour.

Secure attachment and delinquent behaviour. Wampler and Downs (2010) note securely attached young people can be influenced and pressured by deviant peers to take

part in delinquent behaviours they would not have participated in on their own; behaviours which are contrary to their moral developmental level. This is because young people do not always use their highest level of moral development, particularly when influenced by deviant peers (Carpendale, 2000). Another factor influencing young people's participation in delinquent behaviours is their ongoing brain development. The ability of the young people to make informed decisions can be compromised because their brain is still developing; they can therefore act before thinking about the consequences for themselves or others, yet still be securely attached to their caregivers.

Poor communities are also associated with the development of delinquent behaviours. Young people who grow up in poor communities or who are from families who have difficulty providing for their basic needs of food, shelter, and clothing may be compelled to commit delinquent acts due to necessity, yet still be securely attached to their caregivers (Wampler & Downs, 2010). For these reasons, young people who are securely attached to their caregivers (as in this study) can display delinquent behaviour, which is incongruent with their future goals (Miura, 2009; Siegel, 2001).

Even though the results of the relationship between attachment and delinquency were not significant in this study, they are still important. This is because these results show signs of supporting the relationship between attachment and delinquency, as well as attachment and maltreatment. In examining the individual results and items on the questionnaires, of the young people who reported insecure attachment relationships in this study, on average they reported higher rates of maltreatment and delinquent behaviour compared to young people who reported secure attachment relationships. Of the 44% (n = 36) of young people who reported experiencing maltreatment, only 5% (n = 7) reported insecure attachment. These

seven young people reported moderate-severe experiences of maltreatment, whereas the remaining 39% (n = 29) of young people who reported secure attachment relationships reported experiencing none-minimal severity maltreatment. This indicates either the caregivers may not be the perpetrators of the maltreatment, or the maltreatment experienced at the hands of the caregiver was not severe enough or frequent enough to impact on the attachment relationship, or it may have been only one caregiver was maltreating the young person, or the other main caregiver was caring and supportive - hence provided a secure attachment relationship for the young person. In addition, the young people may have considered their friends parents as caregivers and felt closer to them than their own caregivers, therefore answered the questions on the AAQ based on their experiences with their friends' parents. Although, greater numbers are needed to provide significant results, it is a window into the relationships between attachment and delinquent behaviour, and maltreatment and attachment.

Maltreatment and delinquent behaviour. Negative family characteristics associated with maltreatment and delinquent behaviour can include: large family size (Dharmalingam et al., 2004), lack of knowledge of youth developmental stages (Twentyman & Plotkin, 1982), single-caregiver families (Belsky, 1993), ineffective conflict resolution skills (Belsky, 1993), and caregiver mental health and substance use problems (Wissink, Dekovic, & Meijer, 2006). A large family size impacts on a caregivers ability to provide their child with adequate amounts of attention to meet their child's need; potentially impacting on the amount of unsupervised and unsocialised activity, which can lead to delinquent behaviours such as aggression (Dharmalingam et al., 2004).

Moreover, a lack of knowledge of youth developmental stages can be detrimental to the long term behaviour patterns of the young person (Counts et al., 2010). This is because caregivers may be unaware of age appropriate expectations of young people and may require them to behave in ways far beyond their developmental stage. Caregivers, for example, may expect their child to make themselves meals and take care of themselves without supervision at an age where being left alone feels like a threat to their personal safety (Twentyman & Plotkin, 1982). As a result, the young person may have to learn through trial and error how to behave and take care of themselves; potentially resulting in patterns of behaviour which may be unsocialised and not consider others because their focus is survival first and foremost (Counts et al., 2010; Twentyman & Plotkin, 1982).

Providing for the family as the sole caregiver can be an emotionally and physically exhausting job because it can require the caregiver to balance work commitments, social commitments, self-care, and caregiving. This is a difficult task with two caregivers (for example, mum and dad), therefore can be considerably more difficult for one caregiver (Ministry of Social Development, 2010b). Sole caregiving can result in the caregiver being outside of the home for long hours earning money to maintain the household and support the young people in their care (Goldson & Jamieson, 2002). This can mean leaving young people in the care of others (potential perpetrators of maltreatment) or leaving them home alone (neglect) (Ministry of Social Development, 2010b). The concern here is the safety of the young person if they are left with family members or babysitters; and whether they are receiving the care and attention they need from the person or people they need it from (Ainsworth & Bowlby, 1991). A number of babysitters provide adequate care and attention to the young people in their care; however, some people who are left in charge of young

people can be unaware of their needs and may intentionally or inadvertently maltreat the young people due to frustration or ignorance (Howe, 2005; Ministry of Social Development, 2010b). Young people who are left home alone can spend many hours unsupervised resulting in undisciplined activity (Barber & Delfabbro, 2009). Young people who are undisciplined at the obedience and punishment stage of moral development can potentially reason, if there is no punishment for behaviour then it must not be wrong (Kohlberg, 1971). This can lead to delinquent behaviour because these young people may not consider the impact of their actions on others (Kohlberg, 1971).

Caring for young people can be a stressful role and is more difficult if the caregiver is mentally unwell or abusing substances (Wissink et al., 2006). Caregivers who are mentally unwell or abuse substances can create a home environment, which is frightening and can be unsafe for young people. This is because the caregiver appears out of control and unable to take care of themselves, let alone the young people in their care (Goldson & Jamieson, 2002). The young people can feel as though their safety is compromised, which can be stressful. Levels of stress can impact on a young person's developing brain, focusing more neural development on the stress response and less on the prefrontal cortex, responsible for mood and decision making (Anda et al., 2006). If young people are unable to make informed decisions or have difficulty regulating their own mood, they are more likely to engage in delinquent behaviour (Ainsworth & Bowlby, 1991; Perry, 2002; Siegel, 2001).

Conflict resolution skills are used to create productive and harmonious relationships. Conflict resolution skills are a necessary way to get your point across, feel you have been heard, hear others opinions, and come to an agreement about the way forward (Reese-Weber, 2000). These skills are role modeled and used by caregivers; therefore the

caregivers' way of interacting with others can influence the young person's ability to resolve conflict peacefully (English et al., 2009). English et al. (2009) point to domestic violence as one way conflict resolution can be negatively modeled to young people. Domestic violence models for the young people a way of interacting with others in relationships which is aggressive, non-verbal, and has poor outcomes (English et al., 2009). Young people who are modeled this type of conflict resolution can appear more aggressive in interpersonal relationships and impose their will on others if they feel like they are not being heard or are not getting their way (Reese-Weber, 2000). In addition, young people who are physically abused by their caregiver's have been modeled behaviour which demonstrates physical assault is acceptable if you want to change someone else's behaviour (Wekerle & Wolfe, 1998). Therefore, these young people are likely to display aggressive behaviours toward others (English et al., 2009).

Exosystem

The exosystem includes all external networks within the community outside of the family unit and comprise: school boards, local government, and local industry. In particular, consideration is focused on school boards potential acceptance of alternative strategies for the identification of maltreatment, local government's resource allocation regarding maltreatment and delinquency, and local industries ability to provide therapy for young people and their families (Bronfenbrenner & Ceci, 1994).

There are a number of problems with the current system of identifying maltreatment and notifying authorities of its occurrence including: the reliance on other people to notice the occurrence of maltreatment, other people believing the maltreatment is negatively affecting the young person, and the informant's concern for their own safety (Iwaniec, 2006; Mennen

et al., 2010; Trickett et al., 2009). The principle problem with this system is maltreatment is more likely to take place when no one else is watching, therefore most occurrences of maltreatment never come to the attention of other's or authorities (Feerick et al., 2006). Furthermore, in order to verify the existence of maltreatment there needs to be physical evidence of its occurrence in the forms of bodily injuries on the young person, which is problematic in terms of physical abuse because the young person may not have been hit hard enough to leave bruises (Ministry of Social Development, 2011). Additionally, in terms of neglect and emotional abuse - which require no physical touch - there can be no evidence to prove its existence (Howe, 2005).

In order to identify the occurrences of maltreatment, specifically physical neglect, it would be prudent to ask young people outright - thus administering the CTQ or another age appropriate measure may be sensible. Asking young people questions about maltreatment however, comes at a cost. Administering the questionnaire to all school pupils, even limiting the administration to certain age groups comes at an enormous monetary cost to society both in the administration and follow-up. School wide approaches to identify physical neglect and delinquency can be beneficial because they can identify at risk young people before negative outcomes have occurred and offer assistance to the young person and their families to help them cope. School wide approaches however, are costly and require a number of factors to be aligned in order for positive outcomes to be achieved (Hallam, Young, Caldarella, Wall, & Christensen, 2010). These factors include: the commitment of all staff, professional development for all staff, screening to identify at risk youth instead of waiting for them to fail before providing interventions, and integrating intervention strategies into regular school operations (Hallam et al., 2010). Although, it can be difficult to implement, school wide

approaches could provide an identification strategy, which could help prevent negative outcomes such as delinquent behaviour from occurring.

Geeraert et al. (2004) found that an increase in early family support for caregivers in the form of education on youth developmental stages and caregiving skills reduced the likelihood of further maltreatment (Geeraert et al., 2004). They also recommended the interventions selected should be based on the type of maltreatment experienced. Cognitive Behavioural Therapy for example, has shown to work for physical abuse but not emotional abuse. Psychiatric treatment of caregivers, individual therapy, and family therapy on the other hand has demonstrated a change in emotional abuse (Geeraert et al., 2004). Chaffin et al. (2011) used Parent-Child Interaction Therapy and self-motivation to teach parenting skills to caregivers already involved in the youth welfare system. Findings suggest this type of education decreases harsh and neglectful parenting approaches (Chaffin et al., 2011). This identifies the need for education on child-caregiver relationships, disciplining practices, and the effects of neglectful and abusive caregiving styles, with the idea of establishing pre-emptive interventions as opposed to post-traumatic rehabilitation. In this way, it may be prudent to teach caregiving skills in high schools or alternative education organisations in the community - thus attempting to stop the cycle of maltreatment before it reaches the next generation.

Macrosystem

The macrosystem includes: political philosophies and societal ideologies (Bronfenbrenner & Ceci, 1994). This section will focus on the consequences of maltreatment and delinquency from the point of view of society. It will also identify the current youth justice practices, expected outcomes, and how these may be flawed.

The experience of maltreatment and participation in delinquent behaviour can have detrimental consequences both for the young person and society (Macmillan, 2009; Moffitt, 2002; Sampson & Laub, 1990). Society in particular can experience negative consequences if young people are unable to contribute to society in terms of skills, knowledge, and income; as a result of this decrease in functioning possibly due to experiencing maltreatment at a young age or the legal consequences of delinquent behaviour. This can cost New Zealand considerable sums in terms of lost income potential, reduced contribution to society both financially (lawyers' fees, court fees, reparation, and the cost of imprisonment) and non-financially (creativity or trades, fragmented family units and victims' traumatic experiences) (Becroft, 2003; Brown, 2010). Therefore, maltreatment and its subtypes need to be considered detrimental to the development of healthy people, healthy families, and a healthy society, not just as a result of the traumatic experiences suffered by the young person, but because of the long-term costs to the person and society (Becroft, 2003).

Societal ideologies could be contributing to the continuation of maltreatment within New Zealand, for example, it could be that maltreatment is not a priority for society, or society may be influenced by an ingrained belief that what goes on in the family stays in the family. The potential for financial resources to be made available to combat the occurrence of maltreatment is always present; it is the belief of society, which dictates the value placed on treatment and prevention programmes. Current societal funding has indicated maltreatment is not a priority; funding for delinquency however appears to be easier to acquire.

Further factors affecting the macrosystem include the current strategy of the youth justice system such as the "get tough on crime" policy - particularly violent crime (Ministry of Justice, 2003). This approach is based on societal ideologies and public appeals for harsher

sentences; a strategy not supported by scientific literature to reduce delinquent behaviour (Brown, 2010; Haney, 2002; Nadesu, 2007). Notwithstanding, section 283 of the Children, Young Persons, and their Families (Amendment) Act (2010) has been revised to include: a reduction in the eligible age of prosecution in the youth court from 14 years to 12 or 13 years, longer sentences, and larger reparation (Ministry of Social Development, 2010a). These amendments are an attempt to both please the public and deter young people from committing crime (Ministry of Social Development, 2010a). The outcomes expected within the youth court (ages 12 – 16 years) include: diversion, fines, reparation, family group conferences, community work, supervision, supervision with activity, and supervision with residence (imprisonment) (Child Youth and Family, 2001). The district court outcomes (ages 17 + years) include: diversion, fines, reparation, community service, home detention, electronic monitoring, and imprisonment (Department of Corrections, 2011). These outcomes are expected to safeguard the community due to the temporarily removal of the young person from the community, denounce the young person for their criminal behaviour, and deter future offending (Alexinas, 2008; Becroft, 2003; Brown, 2010; Smith, 2007).

The expected outcomes however, do not match what has been observed in reality (Alexinas, 2008). While a term of imprisonment does remove the young person from the community; whether the community is safer after the young person has served their term of imprisonment is questionable (Brown, 2010). The delinquent behaviour is certainly denounced by the public but it can be glorified during imprisonment by other prisoners. In addition, imprisonment is not only deleterious to the young person at the time, it can continue to impact on the life of the young person post-incarceration (Brown, 2010; Haney, 2002). In the short-term, imprisonment fractures family structures, can result in the young

person losing their job and income potential, and can affect the young person's physical and mental health (Brown, 2010). Moreover, young people can fail to keep their place in social groups and sporting teams – known protective factors from delinquent behaviour (Alexinas, 2008). Furthermore, the long-term consequences of imprisonment include: labeling, deskilling, reliance on criminal networks built up in prison, reduced employment opportunities, and reduced access to benefits and social programmes – hence a reduced capacity for self-reliance (Alexinas, 2008; Brown, 2010).

Another expected outcome of the youth justice system is to deter future offending, however the short-term and long-term consequences of imprisonment make this difficult to achieve. New Zealand research identifies that young people aged 17-20 years have the highest recidivism rates of all age groups (Alexinas, 2008; Nadesu, 2007; Petrosino, Turpin-Petrosino, & Guckenburg, 2010; Zampese & Gray, 1999). New Zealand's high recidivism rates are echoed by Nadesu (2007) who identified over the 36 month period after release from prison 77% of young people 17 years and under, 69% of 18 year olds, and 60% of 19 year olds reoffended and were returned to prison (Nadesu, 2007). Saville-Smith et al. (2005) also note placing young people who have conduct problems, anger issues, and unresolved emotional problems together in a residence with other antisocial peers is not a solution. This is because deviant peer association and positive feed-back for antisocial behaviour is seen as one of the risk factors in the development of ongoing antisocial behavioural problems (Saville-Smith et al., 2005).

Bronfenbrenner's Bioecological Model of Youth Development (Bronfenbrenner & Ceci, 1994) has helped to identify possible reasons for the results found in this study. The microsystem looked at the relationship between neurological development and physical

neglect, along with the potential protective factors associated with maltreatment and secure attachment relationships. The mesosystem covered a number of influencing factors on maltreatment, insecure attachment, and delinquent behaviour. The exosystem looked to at possible approaches to help identify the experience of maltreatment in young people and also looked at the limitations of these approaches. Finally, the macrosystem examined the consequences of maltreatment and delinquent behaviour from the perspective of society. The following section looks into the different theories of delinquency and how they may relate to the factors identified in Bronfenbrenner's (1994) Bioecological Model of Youth Development.

Theories of Delinquent Behaviour

The following section identifies relationships between the General Theory of Crime and neglect, the General Theory of Adolescent Problem Behaviour and attachment, the General Strain Theory and physical neglect, and Social Learning Theory and physical neglect.

The theories of delinquent behaviour can provide insight into how physical neglect can be related to delinquent behaviour. The General Theory of Crime, for example, identifies that a lack of supervision (neglect) and discipline (neglect) can contribute to low self-control and delinquent behaviour (Hirschi & Gottfredson, 1979). This theory proposes that as a result of undisciplined and unsupervised activity young people may not have been taught the skills necessary to control their impulses and consider the consequences for themselves and others; that is, they may not be able to internalise self-control and postpone gratification therefore, may be more likely to display delinquent behaviours (Ainsworth & Bowlby, 1991;Collins et al., 2000; Gottfredson & Hirschi, 1994;Barber & Delfabbro, 2009). In addition, these young people can have difficulty managing their own emotions because they

may have not learnt how to identify and cope with emotions as they arise in close relationships and as a result can feel out of control when intense emotions arise in close relationships. As a coping mechanism and a form of control over their environment young people can become aggressive, thus delinquent (Robertson, 2009).

In the General Theory of Adolescent Problem Behaviour low self-control is a factor alone, or can be imbedded within the factor of immediate benefit versus long-term cost (Gottfredson & Hirschi, 1994). Both low self-control and immediate benefit versus long term cost are factors which can be shaped through the attachment relationship with the primary caregiver (Ainsworth et al., 1978). Attachment relationships are the place where socially appropriate behaviours are modeled, social interactions are observed and practiced, and other people's opinions and expectations are viewed and possibly applied to the young person's behaviours (Gottfredson & Hirschi, 1994). Those young people who are modeled insecure attachment behaviours can display delinquent behaviour either due to a lack of self-control or because they are seeking immediate benefit despite the long-term consequences (Gottfredson & Hirschi, 1994). The third factor associated with the General Theory of Adolescent Problem Behaviour is young people are more likely to display delinquent behaviour if they are aged between 14-20 years (Gottfredson & Hirschi, 1994).Therefore, it could be the young people in this study reported participating in delinquent behaviour solely because they are male and aged between 16-20 years.

The General Strain Theory identifies neglect as a form of strain on the young person, which can result in negative internal schematics, and can externally manifest in delinquent behaviour (Agnew, 2001). The external manifestation of physical neglect (fatigue, hunger, and poor hygiene) can be an outward indication of the young person's negative internal

schemata, including: feelings of worthlessness, hurt, hopelessness, and rejection (Howe, 2005). Evidence suggests the external and internal manifestations can cause young people to be outcast by their peers - another form of rejection and strain - contributing to a young person's thoughts of worthlessness, resulting in social isolation or deviant peer relationships, which are associated with delinquent behaviour (Chapple et al., 2005; Krischer & Sevecke, 2008; Robertson, 2009; Smith & Fong, 2004). In addition, delinquent behaviour can be a result of the young person attempting to reduce their emotion pain (strain) through short-term gratifying behaviours (destroying property or use of physical force) and/or self-destructive behaviours (hard drug use) (Ryder, 2006).

Social Learning Theory can also help provide insight into the relationship between physical neglect and delinquent behaviour. Akers and Jensen (2006) identified the acquisition of behaviours can be a socialisation process whereby, behaviour is imitated, strengthened through reward, and avoided through punishment. Young people who are physically neglected are not modeled positive social learning skills; therefore have to evoke self-learning, which is strengthened based on results. If the behaviour elongates survival then it will be strengthened; if it results in further maltreatment or other negative consequences then it will be avoided. Therefore, delinquent behaviours, which result in survival in the short-term, can be behaviours that are strengthened in the long-term (Akers & Jensen, 2006).

In conclusion, the theories of delinquent behaviour illustrate a number of theories underlying the potential for young people to display delinquent behaviour including: low self-control, immediate gratification versus long-term cost, age and gender, difficulty managing emotions, taking control using aggressive behaviours, learnt attachment

behaviour, and utilising the skills they have taught themselves as survival techniques (Agnew, 2001; Akers & Jensen, 2006; Gottfredson & Hirschi, 1990, 1994).

Limitations

Threats to External Validity

This study included 81 young males aged 16-20 years. Although, power calculations were achieved and statistically significant results were calculated, it is not yet possible to conclude that all young males aged 16-20 years will experience the same severity of maltreatment, the same attachment relationships with their caregivers, and the same rate of participation in delinquent behaviours. More participants would be needed to generalise the findings to the general population of 16-20 year old males. In addition, while, the study endeavored to gather information from young people within a certain level of SES (decile five or lower), not all young people may have been from the SES in question, therefore cannot be generalised to other low SES populations. The study also included many young people from different ethnic backgrounds therefore conclusions cannot be made in relation to specific ethnic and cultural groups based on the limited numbers of each ethnicity within this study.

This study collected data from community organisations and a school from regions in the lower North Island of New Zealand (Taranaki n = 47, Manawatu n = 23, and Wellington n = 11). Although, gathering data from a broader area would allow for a greater ability to generalise to the wider population; the questionnaire was unable to be administered to equal numbers of young people from each region, meaning data may be skewed depending on the environmental and cultural differences within each region. Therefore, the young people in

this study may not be representative of the entire populations of these regions and some geographic variations maybe under or overstated.

This study endeavored to collect data from a youth justice population and a non-youth justice population. Unfortunately, it was not possible to gain access to a youth justice facility and the researcher had to rely on self-identification of delinquent behaviour to allocate young people into delinquent and non-delinquent groups. Therefore, a true youth justice population was not able to be recruited. Of the young people who reported previous involvement with the youth justice system 15% were let off with a warning, 29% had been arrested, and 56% had formal involvement with the courts. It could be suggested the population in this study participated in low end delinquent behaviour compared to those young people currently residing in youth justice facilities, who could be referred to as participating in high end delinquent behaviours. It is unknown however, for the young people who participated in this study, whether those young people who reported previous participation in the youth justice system, had ever participated in many more serious delinquent acts they had not been caught for; and whether those young people who reported no involvement in the youth justice system had in fact participated in delinquent behaviour but had just never been caught.

It could be argued, by asking young people about whether they had ever had any involvement in the youth justice system provided another level of self-reported personal experience in line with self-report methodology, potentially providing more accurate data about involvement in delinquent activity. Compared to the alternative of asking young people who were currently within a youth justice residence, because these young people would only have been in the residence because they got caught participating in delinquent

behaviour that was against the law – thus reverting to case record type data collection methods.

Unfortunately, only one school agreed to participate in the research and made up 31% of the young people who took part in the study. This may have been due to the subject area; many school boards were concerned about the impact answering the questionnaire would have on their students. Although their concerns were made based on the best interests of their students, the fact remains, maltreatment is a prevalent problem throughout New Zealand, which has one of the worst rates of maltreatment within the Organisation for Economic Co-operation and Development (OECD) (UNICEF, 2003). Many schools also displayed the slogans "say no to violence", and "speak out about violence", yet would not allow their students to voice their experiences of maltreatment, which seems contrary to such adages. It could be the schools did not have the resources available to deal with the violence their students may be experiencing at home thus did not want to identify any occurrences. Therefore, conclusions could not be generalised to school populations either.

Threats to Internal Validity

Testing validity. The questionnaire was administered in different group sizes (one on one, or in groups of up to 25), and in different methods (read aloud by the researcher, or read silently to themselves). Reading the questions aloud to the young people may have made the responses feel less confidential and therefore may result in less honest answers. On the other hand reading the questions aloud provides the young person with a better understanding of what is being asked because they have the researcher there on a one on one basis. In addition, the young people could ask questions about question content and response methods, which they may have been too scared or intimidated to ask in a group setting.

Moreover, administering questionnaires in groups may lead to an exaggeration in delinquent behaviour if the young people wish to show off in front of their peers. The researcher attempted to counteract exaggeration by requiring silence while the questionnaire was completed. The researcher did not leave the room during questionnaire administration.

The study however, was limited by the young people's reading and comprehension levels. Although key people (teachers, school counselors, and staff) were asked about the young people's reading and comprehension levels prior to questionnaire administration to ensure all young people would be able to answer the questionnaire accurately, some young people may have been unable to read and comprehend some words or questions and therefore could have guessed or made up their answers – limiting the accuracy of the results.

Data collection was completed over a 10 week period. This is problematic as not all the questionnaires were administered on the same day and young people may have discussed the contents of the questionnaire with friends who attended different community organisations or the school which had yet to be approached. This did not appear to be the case because none of the young people approached knew anything about the study prior to questionnaire administration.

Measures. Although self-report questionnaires have a number of strengths, there are also some weaknesses including: the potential for cultural bias, untrue answers, and closed-ended format.

Demographic information. Year 13 was not included in the demographic questions regarding highest level of school education because it was believed young people who are still attending school or alternate education would not have achieved this level of education. Yet, as it turns out a number of young people had achieved year 13 qualifications in at least

one school subject, but had to answer "year 12". Future research should include year 13 as well as other qualifications such as trade, university, and polytechnic education.

Childhood Trauma Questionnaire (CTQ). Some of the questions in the CTQ are worded in such a way that a wide range of behaviours or experiences could fit the criteria. For example "skipped class without an excuse" can be interpreted in a number of ways by different people. Some young people may believe not wanting to go to class is an excuse and therefore, even though they regularly skip class they may believe they have an excuse therefore their answer could be incongruent with their behaviour. Another example is "I got hit so hard by someone in my family that I had to see a doctor or go to the hospital" some young people may have received injuries from people who lived within their home who were not their family – caregivers partner – therefore may have answered no to this question even though they may have received multiple injuries as a result of encounters with their caregivers partner. In addition, they may have been hit hard enough to see a doctor, but were never taken to see one.

Data on the perpetrator of the maltreatment would have been prudent to collect. Then comparisons could have been made between the person who perpetrated the maltreatment and the person the young person's attachment figure. This may have made the relationship between attachment and maltreatment, and attachment and delinquency clearer.

Adolescent Attachment Questionnaire (AAQ). As discussed in the method section the decision to change the lead in question of the AAQ was based on the population taking part in this study and their ability to identify who their caregiver was from the ages of birth to five years. Future research may wish to ask the young people to answer the AAQ based on their relationship with "the person in their life that raised them from birth to age five years"

(West et al., 1998, p. 664) or based on the person who maltreated them if the perpetrator was a caregiver. It appears as though asking young people to choose the caregiver they felt closest to, may inadvertently cause them to disregard other caregivers who may have influenced them negatively. Also in retrospection, asking young people to identify caregivers who raised them until the age of five years would be instrumental in terms of neurological growth and attachment relationships at the time their brain was developing, especially if they had experienced maltreatment. This is because maltreatment could potentially strengthen the neurological stress response and at the same time elicited more insecure attachment relationships (Schore, 2001; Siegel, 2001).

Self-Report Delinquency Scale (SRDS). The response format for the SRDS may have been difficult for the young people to answer. One reason is due to the need for the young people to identify the frequency all stated delinquent acts within the past 12 months. This was difficult for a number of young people and it is unknown if their answers were based on fact or guess work. In responding to these questions the young people may have included delinquent activities which took place over 12 months ago, or may have responded by averaging delinquent behaviour over a shorter passage of time. Therefore, could have provided answers, for example, stating they have frequently taken part in certain delinquent activities, when this has only been the case for the past two months.

Other problems with the SRDS were the young people may have chosen to respond dishonestly for reasons including: the desire to appear socially acceptable, exaggerating their involvement in delinquent activities to fit in with their peer group, they were too embarrassed to provide true details, or did not want to put themselves at risk of being caught by authorities or caregivers. In addition, the closed-ended format may have forced the young

people in to an unnatural reply if their specific situation does not fit within the required interval answer format.

The researcher found some young people started filling in the SRDS incorrectly, the researcher would explain how to fill it in again, the young person would say they understood, yet some would continue to fill it in incorrectly. This may be due to the researcher not explaining the response format in terms easily understood by young people, or may be due to the young person's reading and/or comprehension levels. Also, English may not have been the first language for some of the young people.

Moreover, the SRDS asked one question about the young people's alcohol usage over the past 12 months. Although, the consumption of alcohol is a delinquent activity for young people under the age of 18 years; for those young people aged 18, 19, and 20 this is not a delinquent act. Twenty percent of young people in the study fit this criterion, where alcohol consumption was a legal act given their age. American norms may have contributed to the inapplicability of this question to some young people because the legal drinking age in America is 21 years.

Statistical analysis. The statistical assumption of homogeneity of variance between the two groups may have been compromised due to the group differences for the demographic data of age and education levels, as well as having different numbers of young people in each group. Although it could be argued that ethnicity and socioeconomic status were similar, and the minimum group sizes were met therefore homogeneity could be assumed, it would have been an improvement to also match the groups for age and education levels, and ideally have equal group sizes.

The results identify relationships between the types and subtypes of maltreatment and delinquent behaviour; however these relationships may be mediated by confounding factors. Although some confounds have been identified in the discussion the list can be exhaustive and many confounds may not have been identified, because they were beyond the scope of this study.

Other. Sexual abuse was not able to be included, even though it is estimated between 5% and 76% of young males experience different forms of sexual abuse (Dube et al., 2005; Finkelhor, 1994; Gorey & Leslie, 1997; Holmes & Slap, 1998; Walton et al., 2011). This limits the current study because sexual abuse cannot be analysed with reference to the other forms of maltreatment, the types of attachment, or the frequency of delinquent behaviour. Future studies may wish to include sexual abuse as a variable. In addition, sexual delinquent behaviour was not included in this study. This study removed three questions from the SRDS because of their sexual content. This limits the validity of the SRDS because it was created to include all delinquent acts which made up at least 1% of youth crime. Unfortunately, due to the exclusion of the three sexual delinquent behaviour questions the SRDS no longer represented all of the delinquency types. The decision to remove the sexual abuse and sexual delinquent behaviour content was made due to the sensitive nature of these topics and the study being conducted in partnership with the community. It was decided to limit the study to physical abuse, emotional abuse, physical neglect, emotional neglect, and non-sexual delinquent acts because it was thought more schools and community organisations would be likely to participate in the study without sexual content.

Future Directions

In practice these findings may not just assist the youth justice system, they can also assist practitioners, teachers, social workers, and caregivers to look to rule in or out the experience of maltreatment, specifically neglect when dealing with young people who are displaying delinquent behaviours. If maltreatment is identified prevention strategies for the reduction of negative outcomes should be found and implemented as part of a social policy reaching to reduce both maltreatment and delinquent behaviour for the benefit of all; the best method would be to remove the likelihood of maltreatment ever occurring in the first place.

A way of increasing the awareness of maltreatment in society could be to educate young people in school from a young age (possibly aged 13 years and up) on the definitions of the different types of neglect and abuse, and what they can do about it. This way young people are not only being given the knowledge – a powerful tool – but they are also being supplied with information about the resources available to them if they are experiencing maltreatment within their home environment. In addition, positive caregiving practices could also be implemented as part of the school curriculum to provide young people with the tools necessary to cope when they have young children of their own; attempting to stop the cycle of violence by providing young people with behavioural management techniques they can apply in their own lives and in the lives of their future children.

Another way of reducing the impact of maltreatment on young people is to steer them toward pro-social activities such as sports teams, hobby groups, band participation, and church groups, to name a few. Participation in pro-social activities has shown to reduce the likelihood of young people taking part in delinquent behaviours (Raskauskas et al., 2010). This may be because the young people are less likely to be influenced by deviant peer

associations and more likely to think about how participation in any delinquent act could potentially influence their current standing within the pro-social groups (Hirschi, 1969; Raskauskas et al., 2010).

Prevention strategies are all about education and education requires funding. Social policies are driven by cost effectiveness and the perceived benefit to the wider community. Education can be aimed at the whole community, schools, parents, or young people and can be delivered in a variety of methods including: media publications and broadcasts (Klevens & Whitaker, 2007), home visitation (MacMillan et al., 2005), preschool identification of risk (Geeraert et al., 2004), school wide approach (Hallam et al., 2010), and psychosocial evidence-based interventions (Chaffin et al., 2011; Dumas, 1989). Families who have already come to the attention of Child, Youth, and Family services could benefit from individualised assessments based on their specific needs in relation to neglect and abuse. Additionally, treatments can be based on the family's individual strengths, which can help to achieve more positive outcomes for both the young person and their family.

Other variables of interest may include the young person's relationship to the perpetrator of the maltreatment – are they securely attached to this person, or has someone else taken on the role of their secure attachment figure. In addition, information about when the maltreatment began would be prudent to identify whether neurological development could be associated with delinquent behaviour. A good way to assess both of these is to ask the young person outright. Neurological tests may be another way to determine the impact of maltreatment on the young person, and whether this has impacted on their ability to make informed decisions.

Areas for Future Research.

Future research may wish to use other populations including females, different ages, specific cultural backgrounds, populations from within the youth justice system, populations from schools only, other areas of New Zealand, or the whole of New Zealand. Even though results found physical neglect was related to delinquent behaviour there may be other negative outcomes. Further research may wish to consider the relationship between neglect and other negative outcomes, for example addiction, unemployment, lower academic achievement, low socioeconomic status, and eating disorders. In addition, the combination of neglect and abuse may result in other outcomes, or more severe outcomes than just the experience of neglect or abuse alone. Therefore, future research may wish to identify comorbid experiences of maltreatment.

Conclusion

This study has contributed to current research in the field by confirming maltreatment in the forms of overall maltreatment, overall abuse, overall neglect, physical abuse, and especially physical neglect are related to participation in all identified types of delinquent behaviours except hard drug use. The more severe the physical abuse or physical neglect the more likely the young people are to display delinquent behaviours. In addition, physical neglect was the only type of maltreatment to remain significant after the removal of the school participants. Many factors have been identified as possibly impacting on the relationship between maltreatment and delinquent behaviour including: young person characteristics, family characteristics, secure and insecure attachment relationships, social and emotional support, physical attractiveness, superior intelligence, ineffective conflict resolution skills, domestic violence, caregiver mental health problems, and caregiver substance abuse. The process of identifying maltreatment is a concern and has been a large part of this study; specifically self-report methodology has been argued to be the most accurate form of identification. Although, identification is paramount to be able to verify the existence of maltreatment and protect young people from further suffering, it can be avoided due to the lack of resources available in the community to manage the numbers of young people who could potentially report maltreatment. Therefore, it may be beneficial to first educate politicians and society on the importance of identifying maltreatment and delinquent behaviour to establish an argument for increased funding. Once funding has been granted young people should be educated in school's on the different types of maltreatment, the consequences of maltreatment, the relationship between maltreatment and delinquent

behaviour, and the long-term consequences of maltreatment and delinquent behaviour to try and stop the cycle of violence before it begins in the next generation.

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Appendices

A. Ethical Approval

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA

28 February 2012

Melissa Wilson
18 Logan Way
Kelvin Grove
PALMERSTON NORTH 4144

Dear Melissa

Re: HEC: Southern B Application – 11/76
The relationship between childhood experiences and family life, and juvenile delinquency

Thank you for your letter received 14 February 2012.

On behalf of the Massey University Human Ethics Committee: Southern B I am pleased to advise you that the ethics of your application are now approved. Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

Dr Nathan Matthews, Chair
Massey University Human Ethics Committee: Southern B

cc Dr Ruth Gammon
School of Psychology
WELLINGTON

A/Prof Mandy Morgan, HoS
School of Psychology
PN320

B. Research Information Sheet

SCHOOL OF PSYCHOLOGY
Massey University
Private Bag 11-222
Palmerston North 4442
T: 06 350-5799 Ext 2040
http://psychology.massey.ac.nz

Youth experiences, family life, and youth delinquency research (2012)

My name is Melissa Wilson and I am completing a Masters in Psychology at Massey University, Palmerston North. My research topic is youth experiences, family life, and youth delinquency. My research design has the approval of the Massey University Human Ethics Committee and is scheduled to begin early in 2012.

Current research identifies that neglect is more prevalent than abuse, is associated with other forms of maltreatment in 95% of cases, and often goes unnoticed until other forms of maltreatment are brought to the attention of authorities. Although maltreatment in any form is detrimental to the development of a growing young person; neglect has been significantly associated with long-term consequences such as: developmental deficits, behavioural problems, youth delinquency, insecure attachment, social bonding problems, unemployment, and poverty. Yet neglect is the most understudied and least understood form of maltreatment.

Specifically this research is designed to provide a better understanding about the relationship between neglect and youth delinquency. Several questionnaires will be administered to each young person. These questionnaires will ask questions regarding their connection to family, experience of abuse and neglect, and participation in delinquent behaviour. This research topic is extremely important because it will help to identify how certain experiences and relationships within the family influence how young people behave.

Below is a breakdown of the research process including the research method, what I would need your school or organisation to do and what I can do for your school or organisation? If you have any questions or suggestions for the research process, please do not hesitate to contact me directly by phone or email.

Research design and method:
I will present the proposed research to young males aged 16 to 20 years attending your school or organisation. The presentation will include: the proposed research, the need for the research, and will request participation from males aged 16 to 20 years. The young people will be given an information sheet summarising this information. Additionally, each young person participating will be given the opportunity to ask questions and know the content of the questionnaires prior to giving their informed consent.

As the young people are of an age that caregiver consent is not legally or ethically required we will not be seeking caregiver consent. However, caregivers will be sent out information sheets directly from the school or organisation informing them that the school or organisation has been selected to take part in the study, identify the research topic, why the research topic is important, the risks and benefits of participating, the consent process, and the type of questions that are going to be asked. Specific emphasis was put on the type of questions that will be asked of the young people including questions on the topics of physical neglect, emotional neglect, physical abuse, emotional abuse, attachment relationships, and delinquent behaviour. The caregivers will also be invited to an information evening – held on school or organisation premises.

Young people who are interested in taking part in the research will initially be screened for their suitability by filling in a quick demographic questionnaire. These questions include: name, age, ethnicity, highest level of school education, and any involved in the youth justice system. After the screening questionnaire has been completed, staff will be approached to identify any young person who they believe may be too emotionally vulnerable to participate in the study. Young people who are deemed too vulnerable will be told that they do not meet the inclusion criteria and will not be invited to participate.

Selected young people will be administered the questionnaire, on site, in a spare room, one at a time or in groups (depending on reading ability). This will be followed with a Koha of a $5 McDonalds voucher. The questionnaire takes approximately 30 minutes to administer.

The time involved for the school or organisation will vary depending on the number of young people and the method of questionnaire administration (one at a time or in groups). It is approximated to take up to four hours to complete the research process if the question is completed in groups, which would include: clarifying procedures with managers, presentation of research to young people, handing out information sheets, sending out letters to caregivers, caregiver information evening, administering screening questionnaire, identifying vulnerable young people, consent procedure, and administration of questionnaire.

Vulnerability
Filling in the questionnaire may cause some young people to experience some psychological discomfort due to the topic of the questionnaire. To reduce the possibility of any young person being exposed to psychological distress, we have a number of procedures in place including the initial screening of young people, the young people giving full informed

consent, a registered Clinical Psychologist available if needed, and each young person and the organisation will be provided with a list of resources available free in their community.

What I need your organisation to do?
I would like the opportunity to liaise with your staff, so that we can together identify young people who may be too vulnerable to participate. I also need the school or organisation to send the information sheets home to caregivers – all costs will be borne by the researcher.

I would appreciate if the school or organisation would allow me to hold the caregiver information evening and administer the questionnaire, on site, in a spare room.

What I can do for your organisation?
After the completion of the research I am more than happy to provide your school or organisation with professional development. This professional development will be on the consequences of neglect and what behaviours may be displayed in young people who experience neglect. In addition, I can provide you with your organisations statistics, your regions statistics, as well as the overall summary of results from the study.

If you have any questions please feel free to contact me or my supervisor:

Melissa Wilson
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melissa.wilson.8@uni.massey.ac.nz

Dr Ruth Gammon
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Kind regards,

Melissa Wilson BA (HONS) Psychology & BCA (HRIR & MGMT)

"This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 11/76. If you have any concerns about the conduct of this research, please contact Dr Nathan Matthews, Acting Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 8729, email humanethicsouthb@massey.ac.nz*."*

C. Research Process

SCHOOL OF PSYCHOLOGY
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http://psychology.massey.ac.nz

Youth experiences, family life, and youth delinquency (2012)

Research Process

Discuss procedures
Discuss process and procedures with you and your team. Make any changes that would make the study more applicable to your school or community organisation and the young people who attend.

Present research to young people
I will present the proposed research to young males aged 16 to 20 years attending your school or community organisation at a convenient time. The research presentation will include the research purpose, method, content, confidentiality, consent process, risks, benefits, and their right not to participate. The young people will have the opportunity to ask questions and know the content of the questionnaire prior to deciding whether to take part. The young people will receive information sheets summarising this information.

Send information sheets home to caregivers
Caregivers will have information sheets posted directly to them from the school or community organisation. The information sheets will inform caregivers that the school or community organisation have been selected to take part in the study, identify the research topic, why the research topic is important, the risks and benefits of participating, the consent process, and the type of questions that were going to be asked. Specific emphasis will be put on the type of questions that would be asked of the young people including questions on the topics of physical neglect, emotional neglect, physical abuse, emotional abuse, attachment relationships, and delinquent behaviour. The caregivers will also be invited to an information evening.

Caregiver information evening
Caregiver information evenings will be held on school or community organisation premises one to two weeks after the information sheets have been posted out. Caregivers will be invited to listen to a presentation about the research and can ask any questions.

Young person informed voluntary consent
Since all of the young people participating in the study will be of an age that they can consent to participate in the research, no caregiver consent is required. Young people will be required to provide their informed voluntary written consent prior to participating in the research. Before signing the consent form they are required to read the information sheet and/or have it read to them. I will explain the details of the study to them and answer any questions that they may have. If they are happy with the answers and agree to participate in the study under the conditions set out in the information sheet, then they can sign the consent form.

Screening questionnaire
Young people who are interested in taking part in the research will initially be screened for their suitability by filling in a quick demographic questionnaire. These questions include: name, age, ethnicity, highest level of school education, and any involved in the youth justice system.

Discussion with staff
After the screening questionnaire has been completed, the staff will be approached to identify any young person who they believe may be too emotionally vulnerable to participate in the study. Young people who are deemed too vulnerable will be told that they do not meet the inclusion criteria and will not be invited to participate.

Questionnaire administration
The questionnaire will be administered at a time convenient for your school or community organisation, in a spare room, on site, one person at a time or in groups. The young people will have the questionnaire read to them. This process takes approximately 30 minutes.

Resources available in the community
All young people will receive a copy of the resources available in their community. These resources will be tailored to their specific region.

Koha
Koha - $5 McDonalds voucher

Please contact me to discuss the research process.

Kind regards,

Melissa Wilson
Melissawilson1983@live.com
021 204 2045

"This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 11/76. If you have any concerns about the conduct of this research, please contact Dr Nathan Matthews, Acting Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 8729, email humanethicsouthb@massey.ac.nz*."*

D. Risk Minimisation Measures

1. Every step of my research will be supervised by Dr Ruth Gammon (PhD, MSW). Dr Gammon is the Director of the Massey University Psychology Clinic in Wellington and a senior lecturer at Massey University. She has 25 years' experience working with young people, their families, and the youth justice populations.

2. Participation is voluntary. Eligible young people (males aged between 16 and 20 years) will be given a presentation at the school or community organisation. They will also be given an information sheet telling them what the research is about, what their participation involves, and their right not to participate.

3. Young people interested in participating will fill in a screening questionnaire which asks: name, age, ethnicity, highest level of school education, and involvement in the youth justice system. Staff will be approached and asked if they believe that any young person is too vulnerable to participate. Vulnerability will be described as those young people who are more likely to become emotionally distressed as a result of answering the questions on the research topic. Those that are considered too vulnerable will be told they do not fit the inclusion criteria and will not be selected to take part.

4. Letters will be posted home to caregivers of the selected young people detailing the research and that the school or organisation has been selected to take part in the research. Some organisations may not wish to send information home.

5. Caregivers will be invited to an information evening, where they can learn more about the research topic and what the research involves. Some organisations may not wish for caregivers to be specifically involved, therefore not wish to have an information evening.

6. Voluntary informed written consent will be required from the young people prior to participation. Young people will be told that they can withdraw their consent at any time and that they do not have to answer any questions that they feel would cause them distress.

7. Young people will be informed that they can approach the researcher with any questions at any time.

8. The young people will be given a list of free community resources, which they can access if they do not wish to approach the researcher.

9. Should a young person experience psychological distress as a result of filling in the questionnaire I will immediately contact Dr Ruth Gammon, who is a Registered Clinical Psychologist with the New Zealand Board of Psychology. She will debrief with the young person and assess their safety needs. Dr Gammon will make a time to meet with the young person at the earliest possible date and will contact the school or community organisation to inform them.

10. Both Dr Gammon and I will be available to the young people for a minimum of 6 months after the questionnaire has been administered. Our contact details are on the information sheets. If the young people experience psychological distress after the fact, they are free to contact us at any time.

11. This study meets the strict guidelines set down by Massey University's Ethical Principles which cover: informed consent, confidentiality, avoidance of harm and deception, social sensitivity, and the understanding that the right of the participant supersedes that of the researcher. No identifying information about the young people participating or about your school or community organisations participation will be mentioned in any document associated with this research.

My experience:

- I have experience working in the mental health field as a community support worker. I have held this position for the past three years. In this role I communicate with people who are at times mentally and physically unwell. Some of these people are of a different culture from me including: Maori and Indian cultures. This experience will be beneficial in the likelihood that some of the young people in the study experience mental health problems.

- I also volunteer with PARS (Prisoner Aid Rehabilitation Society). In this role I communicate with prisoners and their families, providing them with information about the judicial process as well as the support that PARS can provide the family and the prisoner during their time in prison.

- I volunteer for Epilepsy New Zealand. In this position I run seminars on epilepsy and facilitate epilepsy support groups within the Palmerston North community.

- I am also a member of toast masters Palmerston North. Toast masters are a group that helps people to develop effective communication skills, particularly public speaking and presentation skills. This will assist me in providing a competent presentation of the research proposal and effective administration of the questionnaire.

- I have also spent 18 months as a volunteer phone counselor at Youthline, Palmerston North. In this role I communicated on the phone with young people who would call in wanting to discuss problems ranging from: too much homework to suicidal behaviour and suicide attempts. This role included 52 hours of training and on-going workshops. This experience provided me with excellent communication skills, especially in relation to communicating with youth.

Dr Ruth Gammon's experience includes:

- Over 25 year's clinical experience working in youth justice
- Performing forensic assessment and evaluations for at risk youths.
- Current Clinic Director of the Psychology Clinic at Massey University, Wellington.
- A senior lecturer in Psychology at Massey University, Wellington.

- Ruth is a registered Clinical Psychologist with the New Zealand Psychology Board.
- Member of the New Zealand Psychological Society.
- Member of New Zealand College of Clinical Psychologists.
- Vast experience and expertise working with children who have suffered trauma.
- Working with youth, their families, and youth justice.
- Ruth has worked in residential, child welfare, outpatient, community, and school based settings.
- Trained in Trauma Focused Cognitive Behaviour Therapy.
- Created, managed, and supervised the development of programs for youth in youth justice.
- Certified trainer for Aggression Replacement Therapy, an evidence based practice for youth delinquents.

If you have any questions, please do not hesitate to contact either myself, or my supervisor direct,

Melissa Wilson
021 204 2045
melissa.wilson.8@uni.massey.ac.nz

Dr Ruth Gammon
Clinic Director - Psychology Clinic
School of Psychology
Massey University
P.O. Box 756
Wellington, 6140
04 801 5799 ext. 62029
r.gammon@massey.ac.nz

Kind regards,

Melissa Wilson BA (HONS) Psychology & BCA (HRIR & MGMT)

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E. Youth Information Sheet

SCHOOL OF PSYCHOLOGY
Massey University
Private Bag 11-222
Palmerston North
T +64 6 350-5799 Ext 2040
http://psychology.massey.ac.nz

The relationship between youth experiences, family life, and youth delinquency

Melissa Wilson
I am a student at Massey University doing a Masters in Psychology

Dr Ruth Gammon
Dr Ruth Gammon is my supervisor. She tells me if my ideas are any good, and helps me with my research.

What am I studying?
I am assessing how your upbringing and family life may or may not have affected how you behave.

What does this mean?
This means that I want to ask you questions about you, your family, and any delinquent behaviour you have displayed. I would like to invite you to participate in my research.

Why do I want to know all this information about you?
By you answering questions about your experiences I will be able to see the impact these experiences have had on you. I appreciate your participation because it will help me to understand youth behaviour better which will influence how I work with youth in the future.

What do I need you to do?
You can choose for yourself whether you would like to participate or not. If you would like to participate:

1. I need you to be between 16 – 20 years old and be of the male gender.

2. I need you to understand what the research is about and the risks involved

3. I need you to fill in an initial screening questionnaire. Not everyone will be selected to take part in the study.

4. I need you to sign a voluntary informed consent form that says you understand what the study is about, and would like to voluntarily join in the research.

5. I will need approximately 30 minutes of your time to fill in a questionnaire. I will read the questions aloud to you. They are all simple questions and are easy to answer. There are no wrong answers. You do not have to answer any questions that you feel will cause you distress. You can remove yourself from the study at any time.

   I would like to offer you a Koha (a $5 McDonalds voucher) upon completing the questionnaire to thank you for your knowledge and time.

Your rights, what are they?
You have the right to refuse to participate in my study. Participation is voluntary and confidential.

You can ask questions at any stage throughout the research process.

If you sign the written consent form saying you would like to join in, and then later decide that you don't want to, that's not a problem, you can withdraw your consent at any time and all the information you provided will be destroyed.

What are the risks of participating in the study?
Sometimes when people fill in questionnaires it can cause them to experience psychological discomfort due to the topic of the questionnaire. I will be asking a variety of questions including questions regarding physical neglect, emotional neglect, physical abuse, emotional abuse, attachment relationships, and delinquent behaviour. If you have any questions I can review the questionnaire with you. This means that the questionnaire might make you feel uncomfortable, angry, or sad. If this happens please come up to me at the time, or afterwards and let me know. This would be completely between you and me and we can arrange for you to get some support. If you start to feel uncomfortable, angry, or sad once you return home, or sometime in the upcoming weeks and months please feel free to contact either myself or Dr Gammon on the below contact details.

Please also be aware that you should only answer the questions as posed to you. If you give out additional information about criminal offending outside of the questionnaire this will need to be reported to the Police.

What are the benefits of participating in the study?
The answers that you give to the questions are confidential. This means I will not share your answers with anyone else other than my supervisor. The reason I have done this is so that you feel safe enough to fill it in to the best of your knowledge and honestly.
You get to be the person with the knowledge; you get to teach me what it is like being you.

I will provide you with information about the free resources available in the community that you live so that you can go along and see what they have to offer you.
You get a koha of a $5 McDonalds voucher after you finish.

If you have any questions please feel free to contact me or my supervisor:

Melissa Wilson
022 088 3595
melissa.wilson.8@uni.massey.ac.nz

Dr Ruth Gammon
Clinic Director - Psychology Clinic
School of Psychology
Massey University
P.O. Box 756
Wellington, 6140
04 801 5799 ext. 62029
r.gammon@massey.ac.nz

Kind regards,

Melissa Wilson BA (HONS) Psychology & BCA (HRIR & MGMT)

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F. Screening Questionnaire

1. What is your name?

   _____

2. What is your date of birth _____

3. What is your ethnicity (circle one or more)

   European Maori Asian Pacific Islander Other _____

4. What is your highest level of school education (circle one)

   Year 12 Year 11 Year 10 Year 9 Year 8

   Year 7 or less

5. Have you ever been involved in the youth justice system?

   Yes No

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G. Caregiver Information Sheet

SCHOOL OF PSYCHOLOGY
Massey University
Private Bag 11-222
Palmerston North
T +64 6 350-5799 Ext 2040
http://psychology.massey.ac.nz

The relationship between youth experiences, family life, and youth delinquency

My name is Melissa Wilson and I am a student at Massey University completing a Master's Thesis in Psychology.

Dr Ruth Gammon is my supervisor. She will oversee all areas of my research and will provide advice and direction throughout the research process. Dr Gammon is the Clinic Director of the Psychology Clinic and a senior lecturer at Massey University in Wellington. She has 25 years' experience working with young people, their families, and the youth justice population. Dr Gammon has experience working in a number of different settings including: residential, out-patient, youth welfare, community, and school settings.

What am I studying?
I am assessing how young people's experiences and family life affects the possibility of them behaving delinquently, the frequency of their delinquent behaviour, and the seriousness of the delinquent behaviour.

What does this mean?
This means that I want to ask young people questions about their experiences, their family life, and their behaviour. I would like to invite your child to participate in my research.

Past research has shown a link between maltreatment, attachment styles, and youth delinquency. Therefore, I will be administering 3 questionnaires to young people, which will ask about their experiences growing up. These questions will be on the topic of exposure to maltreatment, their relationship with their caregiver, and their previous delinquent behaviour.

Why is this research important?
Family life and youth experiences influence how young people view themselves, their family, and society. Research has shown that negative youth experiences can contribute to delinquent behaviour. This research is important because it will provide additional information and contribute to the small but growing literature available about the link between youth experiences and delinquent behaviour.

What does the research involve?
Five processes need to take place including: presentation of research to the young people, young person consent, initial screening questionnaire, information evening, and questionnaire administration.

1. ***Presentation of proposed research to eligible young people (males aged 16-20 years)***
   I have already presented the proposed research to male students aged 16 to 20. The presentation included: the proposed research, the need for the research, and a request for their participation. The young people were given an information sheet summarising this information.

2. ***Young people consent***
   Those young people who have been selected to take part in the study can chose for themselves whether they would like to participate in the study. In order for them to participate they must first provide their informed voluntary written consent.

3. ***Initial screening questionnaire***
   Interested young people will be asked to fill in an initial screening questionnaire. This will identify your child's suitability to take part in the research. Those young people who fit the studies inclusion criteria will be asked if they would like to participate in the study. Given, the young people in this study are of an age that they able to choose for themselves whether or not they wish to participate, if you do not want your child to take part in the research please discuss your concerns with your child.

4. ***Information evening***
   The information evening will inform you of the proposed research, answer any questions you may have about the research, provide information about your children's involvement in the research, and the benefits that may come to them or others as a result of the research.

5. ***Questionnaire administration***
   I will return to the school organisation in two weeks to administer the questionnaire to those young people who meet the inclusion criteria and who have provided their own written informed voluntary consent.

What are the benefits?
This research will provide information on the relationship between youth experiences, family life, and youth delinquency. This will add to the small but growing literature on the topic.

I will provide the young people with information about the free resources available to them in their communities.

I will present the results of this research to community groups and at appropriate conferences. I will also provide professional development to schools and community organisations involved in the study. Publication will also be sought within a scholarly peer reviewed journal article.

What are the risks?
Some young people may experience some psychological discomfort due to the topic of the questionnaire. We will be asking a variety of questions including questions regarding physical neglect, emotional neglect, physical abuse, emotional abuse, attachment relationships, and delinquent behaviour. If you have any questions I can review the questionnaire with you.

I will be familiar your school or organisations policies and procedures regarding research and psychological discomfort. I will consult with the staff so that they can alert me to any young people who they feel would be too vulnerable to participate in the questionnaire. I will ensure there are adequate supports in place to identify and alleviate unintended psychological distress including providing information the free resources available in the community. Should your child feel psychological discomfort and wish to speak to myself or Dr Gammon, we will be available on the below contact details.

Should there be an extreme response by a young person, I will contact Dr Ruth Gammon a registered clinical psychologist with experience working with young people in school and community settings, who will ensure that all risk factors and safety issues are addressed until she is happy that the young person is safe and has the resources they need to maintain their safety.

The young people will also be informed that they should only answer the questions as posed to them. This is because if they provide additional information about criminal offending outside of the questions asked, this will need to be reported to the Police.

If you have any questions please feel free to contact me or my supervisor:

Melissa Wilson
022 088 3595
melissa.wilson.8@uni.massey.ac.nz

Dr Ruth Gammon
Clinic Director - Psychology Clinic
School of Psychology
Massey University
P.O. Box 756
Wellington, 6140
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Kind regards,

Melissa Wilson BA (HONS) Psychology & BCA (HRIR & MGMT)

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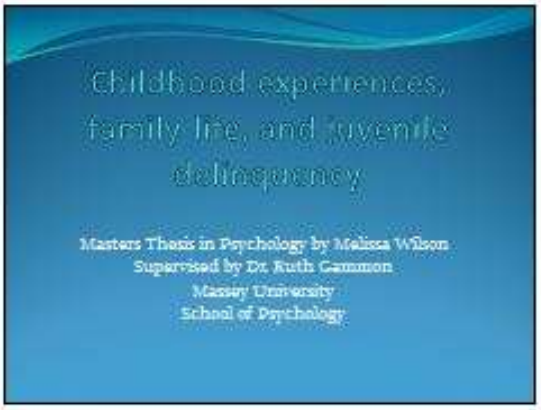
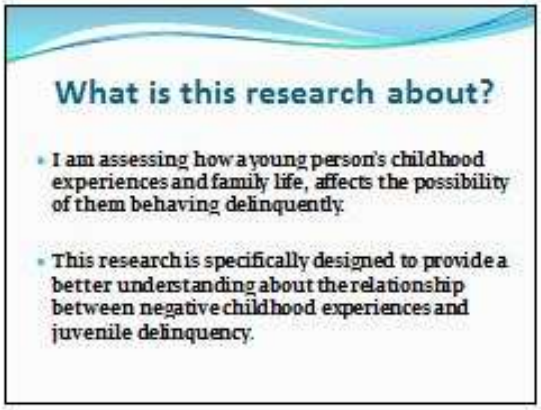
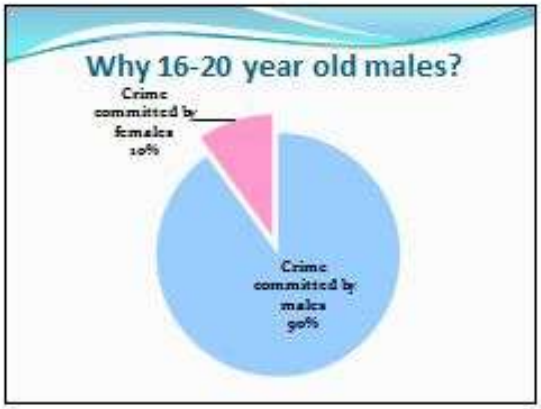
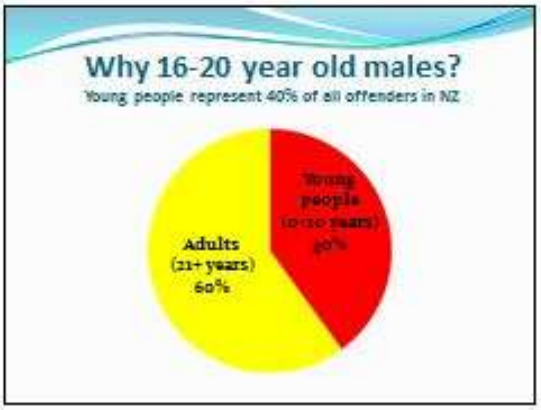
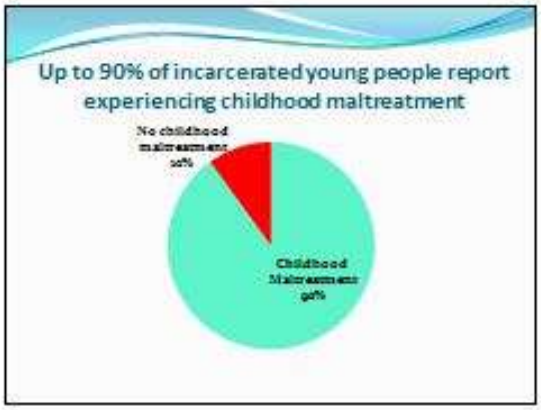
H. Slideshow for Caregiver Information Evening











The Questionnaire

- Neglect
- Abuse
  *** Sexual abuse has been excluded
- Attachment relationships to caregivers
- Past delinquent behaviour

Neglect

- Emotional neglect – failure of the caregivers to provide basic psychological and emotional needs
  - Eg. Love, belonging, support, attention
- Physical neglect – failure of the caregivers to provide basic physical needs
  - Eg. Nutrition, clothing, supervision, health care, education, hygiene

Abuse

- Physical abuse – non-accidental bodily assaults to a young person creating a risk of or resulting in injury.
  - Eg. Hitting, kicking, using objects to injure the young person
- Emotional abuse – any act or omission that is psychologically damaging to the behaviour, mood, thoughts, and/or physical functioning of the young person.
  - Eg. Telling a young person that they are worthless, stupid, good for nothing, ignoring them when they are upset

Attachment

- Attachment is a survival technique that begins in the first year of life. It is an enduring emotional relationship with a specific person that is pleasurable, and creates an environment of safety and security.
  - Secure attachment: Children feel safe and secure
  - Insecure attachment: Children feel unsafe and insecure. This may be a result of the child's difficult temperament, child maltreatment, domestic violence, other distressing experiences

Delinquent behaviour

- Juvenile delinquency is behaviour that maybe anti-social in nature, lacks consideration for others, and/or is against the law.

Examples of delinquent behaviour include:

- Skipping class without an excuse
- Throwing objects at cars or people
- Using a fake ID
- Using drugs
- Physically assaulting someone

What I need the young people to do?

- Fill in the initial screening questionnaire. Not everyone will meet the inclusion criteria
- Provide voluntary informed written consent – consent may be withdrawn at any time
- Answer the questions on the questionnaire

What are the benefits?

- $5 McDonald's voucher for participating
- They will receive information sheets about the free resources available in the community
- The results of my research will be presented to staff as professional development and at community groups and conferences. I plan to publish my results in a journal article.
- Add to the small but growing public knowledge on the topic

What are the risks?

- Filling in the questionnaire may cause some young people to experience some psychological distress due to the topic of the questionnaire.
  - Psychological distress can be displayed as:
    - Anger
    - Fear
    - Sadness

Risk minimisation measures

- This research is supervised by Dr. Ruth Gammon (PhD, MSW) a registered Clinical Psychologist
- Participation is voluntary
- Letters posted home to caregivers
- Caregiver information evening
- Young people can withdraw at any time
- Young people can approach me at any time
- List of free community resources

Risk minimisation measures

- Dr. Gammon and I will be available for a minimum of 6 months after the research
- This study has been approved by Massey University's Ethics Committee

Any questions?

- ?
- ?
- ?

I. Young Person Informed Consent

SCHOOL OF PSYCHOLOGY
Massey University
Private Bag 11-222
Palmerston North
T +64 6 350-5799 Ext 2040
http://psychology.massey.ac.nz

Youth experiences, family life, and youth delinquency

Consent form – Individual

This consent form is strictly confidential

- I have read the Information Sheet and have had the details of the study explained to me.
- My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.
- I understand that I can withdraw from the study at any time.
- I agree to participate in this study under the conditions set out in the Information Sheet.

☐ I agree ☐ I do not agree

Signature: ..... **Date:** .....

Full Name printed: .....

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J. Questionnaire

The answers that you give in this questionnaire are strictly confidential

1. **What is your date of birth _____**

2. What is your ethnicity (circle one or more)

European Maori Asian Pacific Islander Other _____

3. What is your highest level of school education (circle one)

Year 12 Year 11 Year 10 Year 9 Year 8 Year 7 or less

4. Have you ever been involved in the youth justice system?(circle one)

Yes No

If yes, were you: (please tick one or more)

☐ Let off with a warning

☐ Arrested

☐ Formal involvement with the courts

Please answer the following questions based on the person that raised you (caregiver). You may have been raised in a household that included extended family members such as; grandparents, aunties, uncles, and cousins. If you had more than one caregiver, choose the person who you felt closest to.

Please circle the person you have selected:

Mother Father Aunty Uncle Grandmother Grandfather

Cousin Other _____ (what is your relationship to this person?)

Please circle the number that most represents you and your caregiver:
1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree

1. **My caregiver only seems to notice me when I am angry.**

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

2. **I often feel angry with my caregiver without knowing why.**

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

3. **I get annoyed at my caregiver because it seems I have to demand his/her caring and support.**

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

4. **I'm confident that my caregiver will listen to me.**

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

5. **I'm confident that my caregiver will try to understand my feelings.**

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

6. **I talk things over with my caregiver.**

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

7. I enjoy helping my caregiver whenever I can.

1	2	3	4	5
Strongly Disagree		Disagree	Neutral	Agree	Strongly Agree

8. I feel for my caregiver when he/she is upset.

1	2	3	4	5
Strongly Disagree		Disagree	Neutral	Agree	Strongly Agree

9. It makes me feel good to be able to do things for my caregiver.

1	2	3	4	5
Strongly Disagree		Disagree	Neutral	Agree	Strongly Agree

Please answer these questions based on your life experiences.

Please circle the number that most represents you:
1 = Never True, 2 = Rarely True, 3 = Sometimes True, 4 = Often True, 5 = Very Often True

1. I didn't have enough to eat

1 2 3 4 5
Never True Very Often True

2. I knew that there was someone to take care of me and protect me

1 2 3 4 5
Never True Very Often True

3. People in my family called me things like "stupid", "lazy", or "ugly"

1 2 3 4 5
Never True Very Often True

4. My caregivers were too drunk or high to take care of the family

1 2 3 4 5
Never True Very Often True

5. There was someone in my family who helped me feel that I was important or special

1 2 3 4 5
Never True Very Often True

6. I had to wear dirty clothes

1 2 3 4 5
Never True Very Often True

7. I felt loved

1 2 3 4 5
Never True Very Often True

8. I thought that my caregivers wised I had never been born

1 2 3 4 5
Never True Very Often True

9. I got hit so hard by someone in my family that I had to see a doctor or go to the hospital

1 2 3 4 5
Never True Very Often True

10. There was nothing I wanted to change about my family

1 2 3 4 5
Never True Very Often True

11. People in my family hit me so hard that it left me with bruises or marks

1 2 3 4 5
Never True Very Often True

12. I was punished with a belt, a board, a cord, or other hard object

1 2 3 4 5
Never True Very Often True

13. People in my family looked out for each other

1	2	3	4	5
Never True				Very Often True

14. People in my family said hurtful or insulting things to me

1	2	3	4	5
Never True				Very Often True

15. I believe that I was physically abused

1	2	3	4	5
Never True				Very Often True

16. I had the perfect childhood

1	2	3	4	5
Never True				Very Often True

17. I got hit or beaten so badly that it was noticed by someone like a teacher, neighbour, or doctor

1	2	3	4	5
Never True				Very Often True

18. I felt that someone in my family hated me

1	2	3	4	5
Never True				Very Often True

19. People in my family felt close to each other

1	2	3	4	5
Never True				Very Often True

20. I had the best family in the world

1	2	3	4	5
Never True				Very Often True

21. I believe that I was emotionally abused

1	2	3	4	5
Never True				Very Often True

22. There was someone to take me to the doctor if I needed it

1	2	3	4	5
Never True				Very Often True

23. My family was a source of strength and support

1	2	3	4	5
Never True				Very Often True

Please make sure that you only answer the questions as presented below. If you give out any additional information, such as current criminal activity then this will need to be disclosed to the Police and I will not be able to maintain the confidentiality of your responses.

Please answer these questions based on how many times in the past 12 months before today you have engaged in these activities.

These questions need to be answered based on the number of times a:
Year or
Month or
Week or
Day
You participate in these activities.

If you do not fit exactly into one of these categories please circle the one that best represents you.

How many times in the past 12 months have you?

1. **Purposely damaged or destroyed property belonging to your caregivers or other family members.**
   0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

   If more than 12 times per year, how many times a month

   2 3 4 times a month

   If more than 4 times per month, how many times a week

   2 3 4 5 6 7 times a week

   If more than 7 times per week, how many times a day

   2 3 times day

2. **Purposely damaged or destroyed property belonging to a school.**
   0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

   If more than 12 times per year, how many times a month

   2 3 4 times a month

   If more than 4 times per month, how many times a week

   2 3 4 5 6 7 times a week

   If more than 7 times per week, how many times a day

   2 3 times day

How many times in the past 12 months have you?

3. **Purposely damaged or destroyed other property that did not belong to you (not counting family or school property).**

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

4. **Stolen (or tried to steal) a motor vehicle, such as a car or motorcycle.**

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

5. **Stolen (or tried to steal) something worth more than $50.**

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

How many times in the past 12 months have you?

6. Knowingly bought, sold or held stolen goods (or tried to do any of these things).

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

7. Thrown objects (such as rocks or bottles) at cars or people.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

8. Run away from home.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

How many times in the past 12 months have you?

9. Lied about your age to gain entrance or to purchase something; for example, lying about your age to buy liquor or get into a movie.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

10. Carried a hidden weapon other than a plain pocket knife.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

11. Stolen (or tried to steal) things worth $5 or less.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

How many times in the past 12 months have you?

12. Attacked someone with the idea of seriously hurting or killing him/her.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

13. Been involved in gang fights.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

14. Sold marijuana or hashish (grass, pot, hash, oil).

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

How many times in the past 12 months have you?

15. **Cheated on school tests.**
    0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

    If more than 12 times per year, how many times a month

    2 3 4 times a month

    If more than 4 times per month, how many times a week

    2 3 4 5 6 7 times a week

    If more than 7 times per week, how many times a day

    2 3 times day

16. **Stolen money or other things from your caregivers or other members of your family.**
    0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

    If more than 12 times per year, how many times a month

    2 3 4 times a month

    If more than 4 times per month, how many times a week

    2 3 4 5 6 7 times a week

    If more than 7 times per week, how many times a day

    2 3 times day

17. **Hit (or threatened to hit) a teacher or other adult at school.**
    0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

    If more than 12 times per year, how many times a month

    2 3 4 times a month

    If more than 4 times per month, how many times a week

    2 3 4 5 6 7 times a week

    If more than 7 times per week, how many times a day

    2 3 times day

How many times in the past 12 months have you?

18. Hit (or threatened to hit) one of your caregivers.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

19. Hit (or threatened to hit) other students.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

20. Been loud, rowdy, or unruly in a public place (disorderly conduct).

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

How many times in the past 12 months have you?

21. Sold hard drugs, such as heroin, cocaine, ecstasy, or LSD.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

22. Taken a vehicle for a ride without the owner's permission.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

23. Used force (strong-arm methods) to get money or things from other students.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

How many times in the past 12 months have you?

24. Used force (strong-arm methods) to get money or things from a teacher or other adult at school.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

25. Used force (strong-arm methods) to get money or things from other people (not students or teachers).

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

26. Avoided paying for such things as movies, bus rides, or food.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

How many times in the past 12 months have you?

27. Been drunk in a public place.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

28. Stolen (or tried to steal) things worth between $5 and $50.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

29. Stolen (or tried to steal) something at school, such as someone's coat from a classroom, locker, or cafeteria, or a book from the library.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

How many times in the past 12 months have you?

30. Broken into a building or vehicle (or tried to break in) to steal something or just to look around.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

31. Skipped classes without an excuse.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

32. Failed to return extra change that a cashier gave you by mistake.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

How many times in the past 12 months have you?

33. Been suspended from school.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

34. Made obscene telephone calls, such as calling someone and saying dirty things.

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

35. Used alcoholic beverages (beer, wine, spirits, or RTD's)

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

How many times in the past 12 months have you?

36. Used marijuana-hashish (grass, pot, hash, oil)

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

37. Used hallucinogens (LSD, mushrooms, PCP, acid, ecstasy)

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

38. Used amphetamines (P, uppers, speed, crystal meth)

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

How many times in the past 12 months have you?

39. Used barbiturates (downers, sleeping pills)

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

40. Used heroin (horse, smack)

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

41. Used cocaine (coke)

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

How many times in the past 12 months have you?

42. Hitchhiked where it is illegal to do so (motorway)

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

43. Begged for money of things from strangers

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

44. Bought or provided liquor for a minor

0 1 2 3 4 5 6 7 8 9 10 11 12 times a year

If more than 12 times per year, how many times a month

2 3 4 times a month

If more than 4 times per month, how many times a week

2 3 4 5 6 7 times a week

If more than 7 times per week, how many times a day

2 3 times day

"This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 11/76. If you have any concerns about the conduct of this research, please contact Dr Nathan Matthews, Acting Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 8729, email humanethicsouthb@massey.ac.nz*."*

K. Manawatu Resources Available in the Community

- **Advocacy Services (Health and Disability)**…… 06 353 7236
  - Advice about fair health treatment
- **Alcohol and Drug Centre** …… 06 350 9130
  - Treatment for alcohol and/or drug dependency
- **Alcohol Helpline**…… 0800 787 797
  - Information and resource on drug and alcohol problems
- **Career Services**……. 06 350 1130
  - Offer workshops to help you get a job
- **Child, Adolescent, and Family Mental Health Services** 06 350 8373
  - Working with young people aged 0-19 years, family focused approach
- **Community Law Centre**……..... 06 356 7974
  - Free legal services, advice, and information
  - www.youthlaw.co.nz
- **Community Services Card**…….. 0800 999 999
  - Are you eligible for a card and how to get one?
- **Housing Advice Centre**…….. 06 358 4875
  - Finding a home to rent, supported or emergency accommodation, advice on rights and responsibilities, advocacy, and information
- **iHOW – Driver Licence Support**…… 06 353 8656
  - Free service, teaches driver licence theory to anyone who has difficulty reading, writing, lacks confidence with sitting their driver licence theory test. You pay for your test; if you fail they will pay for you to sit it again.
- **Lifeline**…… 0800 543 354
  - Free phone counseling
- **Manawatu Home Budgeting**…… 06 358 2279
  - Provides free budgeting advice 0800 2283 438
- **Man line**……. 06 358 1211
  - Free phone counseling for men
- **Methodist Social Services (Food Bank and Counseling).** 06 357 3277
  - Education programmes, counseling service, social work support, emergency food assistance
- **Open Learning Centre**…… 06 357 7882
  - Can help with reading and writing skills
- **Palmerston North Street Van**…… 06 356 3337
  - Distribute food and help people get home safely from town on Friday and Saturday night. Provide accommodation through Shepherds Rest and Ferguson House
- **PART (Prisoner Aid Rehabilitation Trust)**…… 06 357 9218
  - Justice advice, rides to the Adult prison, petrol vouchers for assistance to visit the prison, assistance at court to offenders and their families, emotional support, advocacy
- **Salvation Army (Food Bank and Accommodation)**….. 06 357 7540
  - Provides food parcels and men's hostel supported accommodation

- **Sexual Health Centre**……. 06 350 8602
  - Sexual health counseling about sexuality, gender issues, STI's, HIV, sexual compulsion, sexual abuse. They also do sexual health checks and safe sex advice
- **Te Aroha Noa Family Services**……. 06 358 2255
  - Counseling, support groups, male community development groups
- **Te Wakahuia Manawatu Trust (Maori Health)**…… 06 357 3400
  - Health care and health education
- **Victim Support** …….. 06 351 3873
  - Support for victims of crimes
- **Whakapai Hauora (Family Health Care and AOD)**…… 06 353 6385
  - Affordable medical care – visit a GP for $10-$35
- **Youthline**…… 0800 376 633 or Text 234
  - Phone and text counseling and face to face support programmes

L. Wellington Resources Available in the Community

- **Advocacy Network Services**…… 04 389 2502
  - Advocates offer advice & support regarding any concerns about your rights.
- **Alcohol Helpline**…… 0800 787 797
  - Information and resource on drug and alcohol problems
- **Aro Valley Budget Service** ……. 04 384 2241
  - Assistance with budget planning and financial problems and/or check that clients are receiving benefits they are entitled to. This service is free.
- **Aspire Inc …….** 04 4734433
  - Advocacy and support for people who have, or who have had a mental illness.
- **CATT (Crises Assessment and Treatment Team)** …… 04 494 9169
  - The Wellington and Hutt CAT Teams provide 24 hour, 7 day a week urgent assessment and treatment. In a crisis they will provide professional support and where required will link you to other mental health services.
- **Child and Adolescent Mental Health Services** …… 04 385 5999
  - Working with young people aged 0-19 years, family focused approach
- **Citizens Advice Bureau** …… 0800 367 222
  - Free, confidential advice and information: legal, budgeting, employment, tenancy, consumer advice, and personal issues.
- **Community Services Card**……. 0800 999 999
  - Are you eligible for a card and how to get one?
- **Just Youth** …… 022 0933 747
- **Lifeline**…… 0800 543 354
  - Free phone counseling
- **MASH Trust (Mental Health and Addiction Services)** 0800 6274 878
  - Residential support, youth crisis respite, workmates, living plus, friendship facilitation service
- **Mission for Youth** …… 04 389 2033
- **Na Ahi Kaa Wellington** …… 04 568 1000
  - Kaupapa Maori organisation working with rangatahi 'at risk' and their whanau.
- **Newtown Community & Cultural Centre** …… 04 389 4786
  - Free counseling service, school holiday programme, English classes, family support services and community drop-in. Citizens Advice Bureau. Introductory computer tuition and community education classes and workshops available on request. Affiliated to the Newtown Youth Workers Network.
- **SF Wellington – Mental Illness Family Support** …… 04 499 1049
  - Offer support, education and advocacy for families of people with any major mental illness.
- **Salvation Army** …… 04 389 0594
  - Provides affordable counseling for individuals and couples, food parcels, cheap household goods and clothing, and other services.

- **Te Atiawa Whanau Services** …… 04 569 7502
  - Social service programmes for youth at risk, family group conferences, counseling, youth justice, information and advocacy.
- **Wellingtons People Centre** …… 04 385 8596
  - Low cost or no cost health care
- **Wesley Wellington Counseling Centre** …… 04 384 7695
  - Available to all people throughout the community but particularly to those with limited financial resources
- **Whitireia Community Law Centre** …… 04 237 6811
  - Free legal advice, information and advocacy to the Whitireia community.
- **Youthline**…… 0800 376 633
  or Text 234
  - Phone and text counseling and face to face support programmes.

M. Taranaki Resources Available in the Community

- **Advocacy Services (Health and Disability)** …… 06 759 2112 or 0800 555 050
  - advice about fair health treatment
- **Addictions treatment** …… 06 753 7790 or 06 278 7109
  - free treatment for alcohol and/or drug dependency www.trippin.co.nz
- **Alcohol Helpline** …… 0800 787 797
  - information and resource on drug and alcohol problems
- **Alpha training and development centre** ……. 0800 300 022
  - free courses in engineering and NZQA Level 1
- **Anorexia and bulimia support group** ……. 06 753 6139
- **Budget advisory services** ……. 06 758 5996 or 06 278 8448
- **Child, Adolescent, and Family Mental Health Services ....** 06 753 7790
  - working with young people aged 0-19 years, family focused approach, located in New Plymouth and Hawera
- **Citizens advice bureau** …… 06 758 9542 or 06 278 3156 or 0800 367 222
  - advice on your rights, education and training, employment, housing, and budgeting www.cab.org.nz
- **Community mental health** …… 06 278 9917
- **Community Law Trust** ……. 0800 529 878
  - free legal services, advice, and information www.communitylawtaranaki.org
- **Community Services Card** …….. 0800 999 999
  - are you eligible for a card and how to get one
- **Emotions anonymous** ……. 06 755 3375
  - support, training, and friendship
- **Employment Catalyst** …… 06 753 4584
  - provides young people with work experience
- **Family planning association** ……. 06 759 8269 or 06 278 7109
- **Family Works** …… 06 758 5037, or 06 278 6385, or 06 765 0531
  – Taranaki - Hawera, Stratford, and New Plymouth
- **Food bank** ……... 06 758 2757 or 06 272 8243
  - provides housing and food
- **Friends Plus – Nga Hoa Apiti** ……... 06 758 6984
  - friendship and support
- **Hawera training centre trust** …….. 06 278 0099
  - industry training in sales and retail, employment skills, career planning and CV writing
- **Healthy lifestyles** …….. 06 769 9178
  - free health promotion and support services www.tuiora.co.nz
- **Like Minds Taranaki** …… 06 759 0966
  - promoting mental health, demystifying mental illness and countering discrimination
- **Lifeline** …… 0800 543 354
  - free phone counseling
- **Life skills Taranaki** …… 06 278 8955
  - to enhance the well-being and independence of people with disabilities

- **Mahia Mai A Whai Tara**…….. 06 754 4669
  - Youth/whanau advocacy, support for youth in trouble with the law, drug and alcohol counseling, mental health support, and social services
- **Ngati Ruanui Iwi Social Services** ……... 06 278 3169
- **Opunake Youth Wave** …… 06 761 8808
  - support for youth in Opunake
- **Prisoner Aid Rehabilitation Society (PARS)** …… 06 758 1361
  - justice advice, rides to the adult prison, petrol vouchers for assistance to visit the prison, assistance at court to offenders and their families, emotional support, and advocacy
- **Quit line** …… 0800 778 778
  - advice and support to stop smoking
- **Salvation Army (Food Bank and Accommodation)**…… 06 758 9338 or 06 278 8516
  - provides food parcels and counseling
- **Samaritans** ……. 0800 72 66 66
  - free phone counseling
- **Sexual Health Centre** …… 06 759 8269 or 06 278 9929
  - sexual health counseling about sexuality, gender issues, STI's, HIV, sexual compulsion, and sexual abuse. They also do sexual health checks and safe sex advice
- **South Taranaki District Council** ……. 06 278 0555 or 0800 111 323
  - Youth Development Facilitator
- **S.T.A.R.T Taranaki** …….. 06 764 6225
  - supporting at risk teenagers that are referred through Child, Youth, and Family
- **Supporting Families** …….. 06 757 9300
  - mental health support and information
- **Taranaki adult/youth literacy services** ……... 06 759 4650
  - free reading, writing, and math's services
- **Taranaki Community Law** …….. 0800 529 878
  - free confidential legal advice, assistance, information, and education services to young people throughout Taranaki
- **Te Kokiritanga o Te Rau Pani** …… 06 759 7306 or 06 278 6603
  - whanau based kaupapa Maori specialist mental health and employment services
- **Victim Support** ……. 06 759 5519 or 06 278 0274
  - support for victims of crimes
- **Waves Youth Health Service** …… 06 757 9901
  - free doctor, nurse, clinical psychologist, and peer support, youth health development and support service
  www.wavestaranaki.org.nz
- **Youthline** …….. 0800 376 633 or Text 234
  - phone and text counseling and face to face support programmes
- **Youth transitional services** …… 06 759 7727 or 06 278 9065 or 0508 210 3222
  - free employment assistance, education and training, and support