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INTRODUCTION

Background

My interest in child, adolescent and family psychology began to develop during my undergraduate studies and was expanded further during my MSc thesis on sexually abusive youth (Fortune, 2000). I subsequently undertook a process and outcome study of a community programme for young offenders (18-24 years) at the Institute of Criminology, School of Law, University College Dublin, Ireland (Fortune & Young, 2002). I returned to New Zealand (NZ) a few years later with a resolve to undertake training in clinical psychology, specialising in child, adolescents and their families, and continued to develop my research interests in forensic psychology through a PhD.

Dr Ian Lambie, at the University of Auckland, had been approached by the Department of Child, Youth and Family (the national child welfare agency in New Zealand) to undertake an extensive study of the specialised community treatment programmes in New Zealand for sexually abusive youth including process, outcome and cost-effectiveness studies. My collaboration as an investigator in this study gave me the opportunity to undertake research in a field still in its infancy internationally, and never before attempted in New Zealand. I knew it would be challenging to undertake such a project on a national scale for which the methodologies used in overseas research needed to be adapted to the New Zealand context. I developed my thesis proposal (an outcome study of the specialised community treatment programmes for sexually abusive youth in New Zealand) which expands the contracted report through the inclusion of more detail of re-offending during treatment and post-treatment, additional statistical analysis of recidivism data, and greater comparison between male youth and the three special populations (female youth, children and 'special needs' youth), and the consideration of psychological models.

Aims of this study

Youths are now recognised as being perpetrators of a significant amount of sexual abuse (Aylwin et al., 2000; Boyd, Hagan, & Cho, 2000). There are increasing demands for specialised treatment for sexually abusive young people within New Zealand (Flanagan, 2003; Lambie & Seymour, 2006). To date, no systematic study of the effectiveness of community programmes has been undertaken to explore treatment outcomes for children and youth who have attended specialised community treatment programmes in New Zealand. This study included the three main specialised community treatment programmes in New

Zealand for sexually abusive children and youth; SAFE Auckland, WellStop Wellington and STOP Christchurch. Smaller centres (i.e., satellite or affiliated programmes) were excluded from the study.

The objectives of this study were to:

- Provide a description of the individual, family and offending characteristics of sexually abusive children and youth referred to the programmes, including three identified special populations; youth with 'special needs' (those with intellectual and/or development deficits), sexually abusive female youth and children (12 years or younger) who engaged in sexually abusive behaviours;
- Determine the effectiveness of the programmes in reducing sexual, general (non-sexual, non-violent) and violent recidivism.

One of the areas of growing interest, nationally and internationally, is understanding the risk of children and youth re-offending. This study aimed to:

- Explore factors which may be associated with increased risk of children and youth sexually and non-sexually re-offending,
- Explore factors associated with increased risk of children and youth dropping out of treatment prior to successful completion.

Insight into these factors would assist with ongoing risk assessment of sexually abusive children and youth as well as aid the development of existing treatments and other interventions to keep children and youth in treatment and assist them further in not re-offending once they leave treatment.

Overall this research will:

- Compare findings to international literature on overseas sexual offender treatment programmes for young people;
- Provide recommendations on how treatment effectiveness can be improved.

Structure of this thesis

This thesis is broken into three studies.

- **Study One – A Clinical Audit** that provides a description of individual, family and offending characteristics of sexually abusive children and youth referred to the programmes. This includes a description of three identified special populations: youth with 'special needs', sexually abusive female youth, and children who engaged in sexually abusive behaviours.
- **Study Two – A Naturalistic Treatment Outcome Study** that explores two approaches to measuring outcomes for sexually abusive children and youth who attend specialised

community treatment programmes. The first part of Study Two determines the effectiveness of the specialised community treatment programmes in reducing sexual, general and violent recidivism. The second part uses three psychometric measures administered pre- and post-treatment to explore measurable changes in behaviour and psychological constructs. Offending that occurred during treatment will be presented separately to that which occurred post-treatment.

- **Study Three** - **A Multivariate Prediction of Risk Study** that explores factors which may be associated with increased risk of sexual and nonsexual recidivism and factors associated with increased risk of children and youth dropping out of treatment prior to successful completion.

Each study will be presented separately including a section on relevant literature, methodology, results, and discussion. Finally, an overall discussion and recommendations from all three studies will be made.

This thesis has been presented in a simpler version in reports commissioned by the Department for Child, Youth and Family, Ministry of Social Development in New Zealand (Fortune & Lambie, 2006a; Lambie, Geary, Fortune, Willingale, & Brown, 2006). The introduction to Study Two is an abbreviated and updated version of an article published in a peer reviewed journal (Fortune & Lambie, 2006b). The recidivism results from Study Two were presented at the 2006 Australian and New Zealand Association for the Treatment of Sexual Abusers (ANZATSA) conference in Surfers Paradise, Queensland.

STUDY ONE - Characteristics of sexually abusive children and youth in New Zealand

Chapter 1

Introduction: Individual, offending and family characteristics of sexually abusive children and youth

Introduction

Sexual abuse is recognised as having significant negative effects on its victims (Briere & Runtz, 1988; Caffo, Forresi, & Lievers, 2005; Clements, Speck, A, & Faulkner, 2004; Fergusson, Horwood, & Lynskey, 1996; Mullen, Martin, Anderson, Romans, & Herbison, 1996; Ryan, 1997a; Stein, Golding, Siegel, Burnam, & Sorenson, 1988). The effects of sexual abuse include the immediate experience of the sexual behaviour but also short and long term effects (Ryan, 1997a). An individual's experience of abuse is partially defined by the nature of the sexual behaviour, and also by their perception and everything that has gone on before and after. This means that people's experiences of sexual abuse are different and the impact will also be different (Ryan, 1997a). This chapter aims to explore definitions and effects of sexual abuse. I then review the literature associated with the individual, family and offending characteristics of sexually abusive youth, children, female youth and youth with 'special needs'.

Sexual abuse

Despite the extensive research in the field, there does not appear to be a single, accepted definition of sexual abuse (Haugaard, 2000). Broadly, sexual abuse involves unwanted sexual experiences including non-contact incidents (e.g., witnessing indecent exposure) and contact incidents such as being kissed in a sexual manner, experiencing genital or non-genital fondling, being made to engage in sexual touching of someone else, intercourse and other unwanted sexual activities (Anderson, Martin, Mullen, Romans, & Herbison, 1993; Haugaard, 2000; Mullen et al., 1996). Sexual abuse involves consideration of the nature of the relationship and interaction between individuals. Lack of informed consent, lack of equality or a power differential between victim and perpetrator often exists (e.g., based on age, gender or physical strength) (Gage & Hutchinson, 2006; Grover, 2003; STOP Trust, n.d.). Incidents of sexual abuse may occur once or more often and may involve force, threats or other methods to gain

compliance (Fergusson, Horwood, & Lynskey, 1997). Sexual abuse can occur within the context of violent sexual relationships and it has been suggested that child prostitution (within the context of sexual exploitation) should be classified as sexual abuse (Fergusson et al., 1997; Lebloch & King, 2006).

For many survivors of sexual abuse their immediate goal is to protect themselves and so they may deny it happened, dissociate, block the memory, imagine it was only a dream or minimise the nature of the abuse. Victims often experience feelings of powerlessness and helplessness, and one of their early goals may be to regain control, often through thoughts of retaliation. Usually these methods of coping are short-term and act to protect them from being overwhelmed by their experience (Ryan, 1997a).

Children and youths who have been exposed to abuse are at highest risk of developing a range of behavioural, psychological and neurobiological problems when compared to non-abused populations and are over-represented in adolescent and adult mental health populations (Briere & Runtz, 1988; Caffo et al., 2005; Clements et al., 2004; Fergusson, Horwood et al., 1996; Mullen et al., 1996; Ryan, 1997a; Stein et al., 1988). As is common in reactions to trauma and stress, males tend to externalise their reactions (e.g., they often appear angry and aggressive), while females tend to internalise them (e.g., feeling guilty and responsible and often appear sad, depressed and anxious) (Ryan, 1997a). Acute effects of sexual abuse may include fear, anxiety, depression and a sense of helplessness, sleep difficulties, anger and hostility, aggression, dissociation, post-traumatic stress and sexually inappropriate behaviour (Alaggia & Kirshenbaum, 2005; Briere & Runtz, 1988; Browne & Finkelhor, 1986; Fergusson, Horwood et al., 1996; Flannery, Singer, & Wester, 2003; Ryan, 1997a; Singer, Anglin, Song, & Lunghofer, 1995). Long-term effects may include depression, self destructive behaviour, anxiety, feelings of isolation and stigma, poor self-esteem, difficulty trusting others, poor interpersonal relationships, a tendency towards revictimisation, substance abuse and sexual maladjustment (Browne & Finkelhor, 1986; Fergusson, Horwood et al., 1996; Fergusson et al., 1997; Flannery et al., 2003; Ryan, 1997a; Singer et al., 1995; Stein et al., 1988). Sexual dysfunction may either take the form of hypersexual dysfunction (e.g., promiscuity, compulsive masturbation and deviant sexual arousal) or hyposexual dysfunction or an inhibited desire or arousal (Ryan, 1997a).

Families often also experience feelings of betrayal of trust, intrusion into their lives and have thoughts of retaliation (Ryan, 1997a; Tjersland, Mossige, Gulbrandsen, Jensen, & Reichelt, 2006). As with survivors of abuse, family members cope in different ways with the disclosure of abuse which may include blame, denial, dissonance, accommodation and reactive behaviours and may also be influenced by their previous experiences of sexual abuse (Clements et al., 2004; Ryan, 1997a). A family's reaction to a disclosure may have an impact on the victims as disbelief and poor protection may add to victims' confusion and re-enforce the perpetrators'

earlier threats (Ryan, 1997a). In fact, children who experience severe and frequent abuse, especially by a family member, and expect a negative response from their family to disclosure, are more likely to delay disclosing the abuse (Hershkowitz, Lanes, & Lamb, 2007).

Historically, it was adult males who were seen as the main perpetrators of sexual abuse, and it is only more recently that adult females and male and female youth have been recognised as perpetrators of sexually abusive behaviours (Becker & Hunter, 1997). In addition, in the past, many sexually abusive youth were not held responsible for their behaviour (Becker, 1990; National Adolescent Perpetrator Network, 1993; Ryan & Lane, 1997). They tended to be neglected in the clinical and research literature as it was believed there were few youths involved in sexually abusive behaviours, that the offences they committed were less serious than those of adults, and that their sexualised behaviour was "exploratory" in nature and due to adolescent "adjustment" or emotional disturbance (Becker, 1990; National Adolescent Perpetrator Network, 1993; Ryan & Lane, 1997).

Since the 1980's, there has been increased concern internationally about the sexually abusive behaviours of children and youth (Awad & Saunders, 1991; Becker, 1990; Centre for Sex Offender Management, 1999; Glasgow, Horne, Calam, & Cox, 1994; Ryan & Lane, 1997). It is now recognised that sexual abuse perpetrated by youths is a significant and serious problem (Aylwin et al., 2000; Boyd et al., 2000; Centre for Sex Offender Management, 1999; Davis & Leitenberg, 1987; Glasgow et al., 1994; McConaghy, Blaszcynski, Armstrong, & Kidson, 1989; Tomison, 1995). It is also recognised that some adult perpetrators commence their sexually abusive behaviour during adolescence (Boyd et al., 2000; Ryan & Lane, 1997; Tomison, 1995). Sheridan et al. (1998) argued that it is desirable to treat sexually abusive behaviour while perpetrators are still adolescents, as the behaviour patterns are less entrenched and more amendable to change.

Summary

Sexual abuse is recognised as having significant short- and long-term effects for those who experience sexual abuse, their families and the community. Historically, adult males were seen as the main perpetrators of sexual abuse. However, male and female youths (approximately 13 to 19 years old) and children (approximately 12 years or younger) are now recognised as engaging in sexually abusive behaviours. Some youths continue to offend as adults.

A summary of the literature on the individual, family and offending characteristics of sexually abusive youth will be presented. Literature on youth with 'special needs' who engage in sexually abusive behaviours will then be presented followed by what is known about female youth and children.

Prevalence

Research suggests that male youths are responsible for perpetrating as much as 20% or more of child sexual abuse incidents (Centre for Sex Offender Management, 1999; Davis & Leitenberg, 1987; Ford & Linney, 1995). Studies suggest that approximately 50%, and up to 90%, of adult offenders report that their first sexual offence occurred during adolescence (between 12 and 16 years) (Boyd et al., 2000; Davis & Leitenberg, 1987; Ford & Linney, 1995; National Adolescent Perpetrator Network, 1993). If many sexual offenders first offend during adolescence it is critical to undertake research to enhance our understanding of young people who engage in sexually abusive behaviour(s).

Characteristics of sexually abusive youth

Over the last 30 years, research on sexually abusive youth has increased our understanding of the individual, family and offending characteristics of this population. Prior to reviewing the literature, it is worth noting some important issues. Within the literature, the terms “adolescent sexual offender”, “juvenile sexual offender” and, more recently, “sexually abusive youth”, “young people who sexually abuse”’ or “young people who have sexually abused” are commonly used terminology to refer to the same group (youths, approximately 13 to 17 years old). Calder acknowledged that using the term ‘young people who sexually abuse’ “is quite clumsy and long” but chose to use it as he felt the use of ‘offender’ defined the young person simply by what they have done and did not offer hope (2005, p. 1). The term “sexually abusive youth” is used within this thesis as sitting somewhere in between; it reflects the seriousness of the behaviours they have engaged in but also acknowledges that many of them have not been formally charged and/or convicted of a sexual offence(s). Methodological issues worth noting include the fact that, in most cases, the literature refers to male youth who sexually abuse and that the ages of the population sample varies between studies. These factors can lead to inconsistencies when comparing the findings of studies.

Sexually abusive youth are seen as a heterogeneous group (Becker, 1988; Tomison, 1995). However, after an extensive review of the literature, the Centre for Sex Offender Management (1999) concluded that there are some factors which are common amongst sexually abusive youth: they are typically aged 13 to 17 years and mostly male perpetrators (Centre for Sex Offender Management, 1999). Other characteristics are reviewed below.

Abuse Histories

Reviews of the literature have concluded that it is common for sexually abusive youth to have experienced some form of trauma (Becker & Hunter, 1997; Centre for Sex Offender Management, 1999; Ryan, Miyoshi, Metzner, Krugman, & Fryer, 1996). Research suggests that anywhere from 20% to 50% of sexually abusive youth have experienced physical abuse

(Awad & Saunders, 1991; Centre for Sex Offender Management, 1999; Flanagan & Hayman-White, 2000; Ford & Linney, 1995; Ryan et al., 1996).

Early research in this field by Becker (1988) found that 19% of the sexually abusive youth who attended a treatment programme indicated, during initial assessment, that they had been victims of sexual abuse. Reported rates of abuse may vary for a number of reasons, including variation in the definition used of abuse and difficulty for young people in disclosing abuse. For some youths it may not be until a secure therapeutic relationship is established that they feel able to discuss their own abuse (Becker & Hunter, 1997) (for a review also see Worling, 1995). More recent research has found rates of sexual abuse vary from 40% to 80% for sexually abusive youth (Centre for Sex Offender Management, 1999; Flanagan & Hayman-White, 2000; Ryan et al., 1996; Watkins & Bentovim, 1992).

Rates of neglect are about 25% amongst sexually abusive youth (Boyd et al., 2000; Ryan & Miyoshi, 1990) and many have witnessed domestic violence (Boyd et al., 2000; Davis & Leitenberg, 1987; Ford & Linney, 1995; Ryan et al., 1996). Awad and Saunders (1991) concluded that rates of child abuse victimisation amongst sexually abusive youth was higher than that for general juvenile delinquents.

Australian research by Flanagan and Hayman-White (2000) provided a programme and client description of children and adolescents (aged up to 17 years) who attended a specialised community treatment programme. They found that the perpetrators of abuse experienced by sexually abusive youth were usually family members (58%), most commonly a parent (47%) but also siblings and extended family. In 27% of cases, the perpetrators were known but unrelated to the victim (e.g., neighbour or family friend) and in only 4% of cases was the perpetrator a stranger (Flanagan & Hayman-White, 2000). This supports early research by Becker (1988) which found that 89% of sexually abusive youth were abused by people they knew and 11% were abused by strangers. This suggests there may be modelling of abusive behaviour (see page 21).

Co-morbid behavioural and psychiatric difficulties

In an Australian study of sexually abusive youth, Flanagan and Hayman-White (2000) found that, at referral, approximately 40% of clients had significant internalising and approximately 40% externalising behaviour problems. Externalising behaviour problems revealed themselves as aggressive and delinquent behaviour problems (Boyd et al., 2000; Flanagan & Hayman-White, 2000). Sexually abusive youth often present with significant behavioural problems and nonsexual offending histories (Boyd et al., 2000; Flanagan & Hayman-White, 2000; Ryan et al., 1996). Antisocial behaviours that these youth may have engaged in include shoplifting, theft, burglary, assault, vandalism, arson, and animal cruelty (Ryan et al., 1996).

Sexually abusive youth may have difficulties with impulse control and judgement (Centre for Sex Offender Management, 1999). The literature suggests that up to 80% of sexually abusive youth have been formally diagnosed with psychiatric disorders, most commonly conduct disorder, Attention Deficit Hyperactivity Disorder (ADHD) and adjustment disorders with depression or dysthymia (Awad & Saunders, 1991; Blaske, Borduin, Henggeler, & Mann, 1989; Boyd et al., 2000; Centre for Sex Offender Management, 1999; Davis & Leitenberg, 1987; Kavoussi, Kaplan, & Becker, 1988; Kraemer, Salisbury, & Spielman, 1998). Other problems associated with sexually abusive youth include anxiety disorders, foetal alcohol syndrome, enuresis, obsessive compulsive disorder, narcissistic personality disorder or schizotypal personality disorder (Blaske et al., 1989; Flanagan & Hayman-White, 2000; Kraemer et al., 1998).

Substance abuse

Some sexually abusive youth will have a history of and/or current problem with alcohol and drug abuse (Awad & Saunders, 1991; Centre for Sex Offender Management, 1999; Ryan et al., 1996). Research has found that sexually abusive youth who consumed alcohol have more victims compared with those who do not consume alcohol (Becker & Stein, 1991). Substances may not necessarily cause the commission of a sexual offence, but may contribute to the offence by relaxing the offender and by inhibiting the offender from fully considering the consequences of their actions (Becker & Stein, 1991).

Social competence

Sexually abusive youth have been reported as having difficulties in maintaining close interpersonal relations, have poor social skills, are often isolated from their peers and have peer relations which are characterised by low levels of emotional bonding (Awad & Saunders, 1991; Becker, 1990; Blaske et al., 1989; Davis & Leitenberg, 1987; Fehrenbach, Smith, Monastersky, & Deisher, 1986). Becker (1990) suggests that youths who are socially isolated due to social anxiety or poor social skills may be less able to form appropriate relationships with same-aged peers, and thus befriend younger children and then sexualise these relationships.

Research suggests that sexually abusive youth who experienced abuse themselves are less socially competent. Symboluk, Cummings and Leschied (2001) found that abused sexually abusive youth were more socially withdrawn and exhibited more social problems and had the lowest level of social participation compared with non-abused sexually abusive youth and juvenile delinquents.

Education / Academic performance

There is limited research which has focused on the cognitive functioning and academic ability of sexually abusive youth (Righthand & Welch, 2001). Research that is available indicates that many sexually abusive youth have truancy problems, behavioural problems at school and that

somewhere between 30% and 60% of sexually abusive young people have learning disabilities, intellectual deficits and/or academic difficulties (Awad & Saunders, 1991; Centre for Sex Offender Management, 1999; Davis & Leitenberg, 1987; Fehrenbach et al., 1986; Ryan et al., 1996).

Family characteristics

The "families of adolescent sex offenders are often very dysfunctional" (Blaske et al., 1989, p.853). Blaske et al. (1989) concluded that the family relationships of sexually abusive youth tend to be characterised by low levels of positive mood or communication, and high levels of negative affect. Families are characterised as being unstable, frequently violent and being highly chaotic (Becker & Hunter, 1997; Boyd et al., 2000; Davis & Leitenberg, 1987). However, these may not be family characteristics unique to sexually abusive youth as research has found that families of both sexual and violent nonsexual offenders have considerable negative communication (Blaske et al., 1989).

About half of sexually abusive youth were separated, at least once, from their parents during childhood (Awad & Saunders, 1991; Flanagan & Hayman-White, 2000; Ryan et al., 1996). In a United States (US) study involving 1616 sexually abusive youth across 30 states, Ryan and colleagues (1996) found that just over half (54%) of sexually abusive youth lived with two parents of whom 28% were with two natural parents and 26% with one natural parent and one stepparent. The study also found that a quarter were living in single parent households (23% with their mother only, 3% with their father only), 15% with neither parent and 6% with a parent and parents' housemate. Similar figures were found by Flanagan and Hayman-White (2000) in an Australian sample of 137 sexually abusive youth. At the time of referral, 24% lived with both parents, 15% with their mother, 4% with their father, and 5% with their mother or father in a blended family.

Parents can play an important role in the development of a youth's sexually abusive behaviour and in maintaining abuse cycles (Ryan, 1997b). Research indicates that sexually abusive youth often have absent fathers or poor relationships with their fathers (Boyd et al., 2000; Davis & Leitenberg, 1987). Loss of parental figures was common (57%) with about 12% due to the death of a parent (Davis & Leitenberg, 1987). In their review, Boyd, Hagan, and Cho (2000) concluded that sexually abusive youth often came from low socio-economic backgrounds, came from families where they had been exposed to neglect, domestic violence and parental abuse of alcohol and had fathers who had criminal histories. As an important part of youth's life, parents can influence the youth's daily activities and impact on their social and cognitive development (Zankman & Bonomo, 2004). A youth's attitude to treatment is also closely related to a parent's openness to treatment (Zankman & Bonomo, 2004).

Placement histories

As suggested above, many sexually abusive youth have experienced separation from their parents due to out-of home placements (Davis & Leitenberg, 1987). Research suggests that on average sexually abusive youth have experienced about three previous placements (Kraemer et al., 1998) and about a quarter have also run away from home or placement (Ryan et al., 1996). Foster care has been associated with significant behavioural problems in children compared to children living at home receiving adequate or inadequate care (Lawrence, Carlson, & Egeland, 2006). High levels of out-of-home placements appear to be associated with such factors as disruption and dysfunction within the family including high rates of parental separation/divorce, parental loss and substance abuse (Ryan et al., 1996).

In an Australian study, Flanagan and Hayman-White (2000) found that a large number of youths referred to treatment were living away from their families including about a third in alternative care (e.g. hostels or short term units, foster care and family group homes) and about 12% with extended family.

Summary of individual and family characteristics

The characteristics mentioned above are not necessarily unique to sexually abusive youth but may be common with delinquency generally, with childhood adjustment difficulties and psychiatric disorders (Ford & Linney, 1995; Lyn & Burton, 2005; Rich, 2003; Seto & Lalumière, 2006). Researchers have looked at a range of factors associated with delinquency and sexually abusive behaviours by youth including criminal history, individual, school and family characteristics.

Delinquency in youth (including those with Conduct Disorder and Oppositional Defiant Disorder) has been associated with a range of factors including physical and/or sexual abuse, exposure to violence, environmental influences (e.g., living in a poor and disadvantaged community), poor parenting, co-morbid psychiatric disorders (e.g., AHDH, depression), social skills deficits, substance misuse, antisocial peers and poor coping strategies (Burke, Loeber, & Birmaher, 2002; Fergusson, Horwood, & Ridder, 2005b; Ilomaki et al., 2006; Loeber, Burke, Lahey, Winters, & Zera, 2000; Pfiffner, McBurnett, Rathouz, & Judice, 2005; Wolff & Ollendick, 2006).

Factors associated with both delinquency and sexual offending amongst youth include: young age of onset of delinquent behaviours, academic underachievement and school problems, dysfunctional family environments characterised by conflict, intrafamilial violence, neglect, harsh and erratic discipline, sibling antisocial behaviour, low socioeconomic status, parent-child separation and early behavioural difficulties (Boyd et al., 2000). In combination, these factors

are part of a more general pattern of poor social functioning, isolation from peers and high levels of psychiatric co-morbidity.

Although there is no profile of sexually abusive youth, there are features that are commonly present in this population (Rich, 2003). Overall, sexually abusive youth come from multi-problem and chaotic families, have histories of abuse and neglect and co-morbid psychiatric problems (Boyd et al., 2000; Lyn & Burton, 2005). Lyn and Burton (2004) found that insecure attachment, anger, and generalised anxiety were factors associated with those who engage in sexually abusive behaviours compared with nonsexual offenders. Boyd (2000) found that past experiences of physical abuse and/or sexual abuse were associated with sexual offending. Research suggests that although both sexual and non-sexually offending youth have experienced severe abuse, it appears that sexually abusive youth may be more traumatised by these experiences (Burton, 2000).

Having reviewed the literature associated with the individual and family characteristics of sexually abusive youth, I will now turn to explore the literature around their offending behaviours.

Sexual offending

When youths were referred to specialised treatment programmes most were found to have a history of prior sexual offending (Awad & Saunders, 1991; Ryan et al., 1996). The average age of onset of the sexually abusive behaviours is about 12 years (Ryan et al., 1996) with many admitting to first engaging in sexually abusive behaviours as children (before 12 years old) (Burton, 2000).

Australian research indicates that about 40% of sexually abusive youth have one known victim (Flanagan & Hayman-White, 2000), while in New Zealand it has been found that the number of victims can range from one to ten (Lightfoot & Evans, 2000). Internationally, literature has placed the average number of victims at about seven to eight victims (Ryan et al., 1996). The younger the perpetrator when they first sexually abuse, the greater the number of known victims (Flanagan & Hayman-White, 2000).

Research does not commonly report on the duration or frequency of the abuse. However, Flanagan and Hayman-White (2000) found that the average duration of the sexually abusive behaviours was 15 months.

The majority of sexually abusive youth are known to engage in ‘hands on’ (contact) sexualised behaviours ranging from sexualised touching (fondling genitals or breasts) and oral genital contact to object, digit or penile anal and vaginal penetration (Flanagan & Hayman-White,

2000; Hunter, Figueredo, Malamuth, & Becker, 2003; Lightfoot & Evans, 2000; Ryan et al., 1996). The majority of offences perpetrated by youths involve penetration (vaginal or anal) and/or oral genital contact (Flanagan & Hayman-White, 2000; Ryan et al., 1996). Sexually abusive youth are also reported to commit 'hands off' (non-contact) offences such as exhibitionism, voyeurism, making obscene phone calls and stealing underwear (Flanagan & Hayman-White, 2000; Ryan et al., 1996).

Hunter, Hazelwood and Slesinger (2000) found that those who offended against adults and peers were more likely to commit a sexual crime in conjunction with nonsexual offences (e.g., robbery).

Victim characteristics

Sexually abusive youth are most likely to victimise children who are younger than themselves (Boyd et al., 2000; Hunter et al., 2003; Ryan et al., 1996). In their study of 1616 sexually abusive youth in the United States, Ryan and her colleagues (1996) found that 91% of victims were aged between three and 16 years, with 63% of victims younger than nine years old and the most common age being 6 years old. Within their Australian sample Flanagan and Hayman-White (2000) found that sexually abusive youths' victims ranged from 2 to 82 years, with only three victims 18 years or older. Flanagan and Hayman-White (2000) found that the mean age of the most recent victims was 8.6 years (*SD* = 7.9) or 7.7 years (*SD* = 3.5) when the adult victims were excluded from the analysis.

The Centre for Sex Offender Management has suggested that sexually abusive youth who offend against peers and adults tend to be more antisocial and violent (Centre for Sex Offender Management, 1999).

Sexually abusive youth tend to show less victim gender preference when compared with adult offenders. Adults tend to exclusively abuse either males or females (Awad & Saunders, 1991). Approximately three quarters of all victims of sexually abusive youth are female (Boyd et al., 2000; Flanagan & Hayman-White, 2000). However, when the offence is perpetrated against a child the chance of the victim being male is higher (Awad & Saunders, 1991; Boyd et al., 2000). About half of all male sexually abusive youth will exclusively victimise females, about 40% will abuse both genders and 10% show a preference for victimising males exclusively (Awad & Saunders, 1991). Aylwin and colleagues concluded that this may be less about gender preference per se but rather reflects the gender of victims available to the youth.

In most cases, sexually abusive youth are known to their victims (e.g., peers), including about half of whom are related (e.g., siblings and step siblings) (Awad & Saunders, 1991; Boyd et al., 2000; Flanagan & Hayman-White, 2000; Hunter et al., 2003). Only a small number (less than 10%) of victims are abused by strangers (Flanagan & Hayman-White, 2000; Ryan et al., 1996).

Strategies used in sexual offending

Sexually abusive youth use a range of strategies to overpower their victims and force victims to remain silent about the abuse. These include violence/aggression, physical force and the use of threats and weapons during the commission of their offence (Awad & Saunders, 1991; Fehrenbach et al., 1986; Hunter et al., 2000; Kaufman, Hilliker, Lathrop, & Daleiden, 1993; Ryan, 1997a; Ryan et al., 1996). In their Australian study, Flanagan and Hayman-White (2000) found that more than half of the perpetrators had used physical force or other less aggressive means (e.g., verbal coercion).

Many sexual perpetrators groom a vulnerability in their victims to gain their compliance. Perpetrators take advantage of such things as "[p]reexisiting conditions of neglect, parental loss, inferior self-image and lack of nurturance [which] may make potential victims … vulnerable to the advances of sexual perpetrators" (Ryan, 1997a, p.158). Victims, therefore, are vulnerable as the relationship with the perpetrator meets some emotional need that resistance or disclosure may threaten to take away (Ryan, 1997a).

Summary

Sexually abusive youth are heterogeneous in their offending patterns. They engage in both 'hands on' and 'hands off' offending against a mix of both male and female victims. The majority of victims are children (12 years and younger) but they can also victimise adolescents (13 to 18 years) and occasionally adults. Victims are commonly friends, school peers or related to the offender (e.g., full, half or step siblings). Sexually abusive youth typically use force, threats or grooming behaviours during their offending.

Characteristics of sexually abusive youth with 'special needs'

Increasing awareness that youths perpetrate a significant proportion of sexual abuse has resulted in an increased understanding that youth with intellectual and learning disabilities or education problems also perpetrate abuse (Dolan, Holloway, Bailey, & Kroll, 1996; Timms & Goreczny, 2002). Researchers have started to focus on this subgroup of sexually abusive youth with 'special needs' since the 1990s (Fortune & Lambie, 2004). There is still, however, very limited research on this subgroup of sexually abusive youth. One of the few detailed studies of this population was undertaken by Fortune and Lambie (2004) on a group of sexually abusive youth in New Zealand. Within the context of this review, sexually abusive youth with 'special needs' include those with diagnosed learning and intellectual disorders and developmental delay.

Individual characteristics

The adult population of sex offenders with 'special needs' present with such issues as sexual naivety, an inability to understand normal sexual relationships, lack of relationship skills, difficulties mixing with the opposite sex and poor impulse control (Day, 1994). In adult and adolescent males with learning disabilities, sexually abusive behaviour towards children has been associated with their developmental immaturity and lack of opportunity to develop appropriate and consensual sexual relationships with same aged peers (Ho, 1997; Timms & Goreczny, 2002). There is also some suggestion that their desire to socialise with children of a similar developmental level may also be a catalyst for their offending. It seems reasonable to expect similar presentations in sexually abusive youth with 'special needs'. Sexually abusive youth with 'special needs' have been found to have a history of academic problems, social skills deficits and behavioural problems such as anger and aggressive behaviour problems, ADHD and Conduct Disorder (Day, 1994; Fortune & Lambie, 2004; Gilby, Wolf, & Goldberg, 1989).

Abuse history

The limited research available indicates that anywhere from 20% to 83% of sexually abusive youth with 'special needs' may have experienced childhood sexual abuse and 30% to 88% physical abuse, as well as emotional abuse and neglect (Dolan et al., 1996; Fortune & Lambie, 2004; Gilby et al., 1989). Overall, sexually abusive youth with 'special needs' are more likely to have experienced abuse compared with other sexually abusive youth (Fortune & Lambie, 2004). This is consistent with the fact that all children and youth with intellectual deficits are at increased risk of abuse.

Families

Sexually abusive youth with 'special needs' often come from multi-problem families (Day, 1994; Gilby et al., 1989). The majority come from families where their parents are divorced or separated and only a small number of 'special needs' youth live with both parents (Fortune & Lambie, 2004). Almost a third of youth with 'special needs' live with their mother only, a quarter with their mother and stepfather while the remainder are in other living arrangements such as foster care or with other relatives (Fortune & Lambie, 2004). Other problems include family conflict and violence and family member(s) abusing alcohol (Day, 1994; Gilby et al., 1989).

Victim and offence characteristics

The literature indicates that sexually abusive youth with 'special needs' commit multiple offences of a variety of forms including genital touching, vaginal and anal penetration and oral contact (Fortune & Lambie, 2004; Gilby et al., 1989; Stermac & Sheridan, 1993). However, compared with other sexually abusive youth, those with 'special needs' have been found to be more likely to engage in non-assaultive, nuisance behaviours such as public masturbation, exhibitionism, and voyeurism (Stermac & Sheridan, 1993).

In comparison with other youth offenders, those with 'special needs' tend to show less specificity in terms of victim gender, age and offence type (Day, 1994; Gilby et al., 1989). Sexually abusive youth with 'special needs' are reported to offend equally against males and females (compared with other offenders who tend to victimise females) (Fortune & Lambie, 2004). This New Zealand study did not show the same low specificity for victim age, with sexually abusive youth tending to victimise children who were 12 years or younger (Fortune & Lambie, 2004). Day's (1994) findings indicated that those with 'special needs' are less likely to know their victims, though this was not replicated by the findings of Fortune and Lambie (2004) who found that 34% of 'special needs' perpetrators were related to, and 60% acquainted with, their victims. Only 6% of sexually abusive youth with 'special needs' abused strangers, compared with 7% of other sexually abusive youth (Fortune & Lambie, 2004).

Day (1994) argues that the low specificity in victim preference and offence type of 'special needs' offenders reflects their poor social skills and lack of opportunity to develop normal sexual relationships and the fact that those with 'special needs' engage in offending that is associated with opportunity and circumstance rather than sexual preference.

Compared with other sexually abusive youth, those with 'special needs' have been found to be more likely to use force or verbal threats in their sexual offending (Fortune & Lambie, 2004). 'Special needs' youth have also been found to engage in nonsexual offending behaviours such as stealing/theft, fire setting, intentional damage and assault, similar to other sexually abusive youth (Fortune & Lambie, 2004).

Summary

Research indicates that sexually abusive youth with 'special needs' often have social, behavioural and learning difficulties, and often come from multi-problem families. Although these factors do not differentiate them from other sexually abusive youth, research suggests that 'special needs' offenders have higher levels of child abuse histories and may exhibit lower levels of specificity in their offending.

Overall, there is very limited research on sexually abusive youth with 'special needs'. One of the few studies that has been conducted on this population occurred in New Zealand. As such, this is still a significantly under researched and poorly understood group of sexually abusive youth.

Characteristics of female sexually abusive youth

> *"Traditionally, sexual abuse has been viewed as a crime in which the victim is female and the perpetrator a male."*
>
> (Freeman-Longo, 1986, p. 411)

Research indicates that the rate of sexual abuse perpetrated by females is low (Glasgow et al., 1994; Kubik, Hecker, & Righthand, 2002; Tardif, Auclair, Jacob, & Carpentier, 2005). However, it is likely that estimates of sexual offences perpetrated by females (including female youth) is even more conservative than that for adolescent males, as many of their sexual offences go undetected (Lambie, McCarthy, Dixon, & Mortensen, 2001; Righthand & Welch, 2004; Tardif et al., 2005). Current research indicates that females represent between 2% and 8% of sexually abusive youth (Kubik et al., 2002; Tardif et al., 2005) which is a higher percentage of female perpetrators of sexual offences than previously thought (Centre for Sex Offender Management, 1999; Mathews, Hunter, & Vuz, 1997). Males account for the majority of sexual offences committed by adolescents, so research has almost exclusively focused on this group (Kubik et al., 2002)..

Internationally and nationally the lack of recognition of female sexual offending may be, in part, due to resistance by child welfare agencies, mental health professionals, and police to acknowledge the extent of the problem due, in part, to lack of resources and funding to address this issue (Johnson, 1989; Lambie et al., 2001). The current low instance of recorded female sexual offenders may also represent a bias in detection and/or reporting. It could also be attributable to the low number of allegations directed at females by victims (e.g., due to fear that they will not be believed) and the low level of suspicion of females by professional and criminal systems (Glasgow et al., 1994; Lambie et al., 2001; Tardif et al., 2005).

There are only a few studies that have looked at female sexually abusive youth. Research by Tardif, Auclair, Jacob, and Carpentier (2005) involved a description of 15 female sexually abusive youth (aged 12 to 17 years) who were assessed by a specialised community service in Canada. Kubrik, Hecker and Righthand (2002) carried out a study of 11 female sexually abusive youth (aged 13 to 19 years) identified by the Maine Department of Corrections in a one year period. Fehrenbach and Monastersky (1988) undertook a descriptive study of 28 females attending a specialised community sex offender treatment programme (aged 10 to 18 years). Finally, Johnson (1989) looked at a sample of 13 females aged between 4 and 13 years receiving treatment at a specialised service for children with sexualised behaviour(s). Comparative studies, including female sexually abusive youth, have been reported by Mathews, Hunter and Vuz (1997), Hunter, Lexier, Goodwin, Browne, and Dennis (1993) and Ray and English (1995). These studies are described in more detail below.

Comparative studies

There are a small number of studies which have compared female sexually abusive youth to other populations. Kubrik, Hecker and Righthand (2002) carried out a study of 11 female sexually abusive youths (aged 13 to 19 years) who represented 7% of sexually abusive youth identified by the Maine Department of Corrections in a one year period. They compared these female youths to an age-matched sample of eleven female youths with a history of nonsexual victim offences (Study I) and an age-matched group of male sexually abusive youth (Study II). Mathews, Hunter and Vuz (1997) compared 67 female sexually abusive youth (aged 11 to 18 years) who had been referred to either community or residential treatment for sexually abusive behaviours with 70 male sexually abusive youths (aged 11 to 17 years) across three areas: developmental and psychiatric characteristics, abuse histories, and sexual offence characteristics. Hunter, et al., (1993) compared ten female sexually abusive youths (aged 13 to 17 years) in a residential treatment programme to a sample of male sexually abusive youth. Ray and English (1995) compared a group of 34 females (mean age 12) and 237 male (mean age 13) children and youths who were known to have engaged in sexually abusive behaviours. The findings of these studies and other studies on this population are explored as they relate to individual, family and offending characteristics.

Individual characteristics

Female sexually abusive youth have often experienced abuse themselves including physical abuse (21% to 90%), sexual abuse (50% to 100%), and neglect (Fehrenbach & Monastersky, 1988; Johnson, 1989; Kubik et al., 2002; Mathews et al., 1997; Ray & English, 1995; Tardif et al., 2005). The majority (67% to 85%) have been found to be abused by a family member, while a smaller percentage were abused by extra-familial acquaintances (26% to 33%) and strangers (approximately 16%) (Mathews et al., 1997; Tardif et al., 2005). Many have experienced abuse by more than one perpetrator over a period of time and witnessed domestic violence (Hunter et al., 1993; Tardif et al., 2005). Compared to males, sexually abusive female youth have been exposed to more severe and pervasive child sexual and physical abuse by both female and male perpetrators (Hunter et al., 1993; Kubik et al., 2002; Mathews et al., 1997). For example, female sexually abusive youth were younger at first victimisation compared to the males, have been abused by a greater number of perpetrators (both male and female) and were more likely to have experienced force or aggression during their victimisation (Hunter et al., 1993; Mathews et al., 1997).

It is common for female sexually abusive youth to have a history of school difficulties including learning difficulties, disruptive and aggressive behaviours, conflict with teachers and peers, problems with peer relationships, school suspensions and truancy (Johnson, 1989; Kubik et al., 2002; Tardif et al., 2005). As with male sexually abusive youth, females who sexually offend often engage in other delinquent behaviours and have a range of behavioural problems (Righthand & Welch, 2004). These include conduct disorder, impulsivity, substance abuse,

suicidal behaviours and deviant sexual arousal and engaging in unprotected sex (Righthand & Welch, 2004). Other problems can include diagnoses of learning disorder, ADHD, anxiety, depression and dysthymic disorder, PTSD and serious anger problems (Kubik et al., 2002; Righthand & Welch, 2004; Tardif et al., 2005).

When compared with non-sex offending female youth, female sexually abusive youth have fewer antisocial behavioural problems (e.g., drugs and alcohol, fighting or problems at school) but begin engaging in offending behaviours at a younger age (Kubik et al., 2002). When compared with male sexually abusive youth there are few differences in psycho-social and criminal histories, antisocial behaviours and sex offence characteristics (Kubik et al., 2002)

Family characteristics

Research indicates that female sexually abusive youth tend to come from multi-problem and chaotic families (Johnson, 1989; Mathews et al., 1997). Many female sexually abusive youth come from step families (Kubik et al., 2002; Tardif et al., 2005). Some female youth have conflicted mother-child relationships, little contact with their fathers and many have experienced out-of-home placements (Tardif et al., 2005). They often have a family history of suicide attempts, have sexual offenders within the family and may have family member(s) with psychiatric diagnoses and substance abuse problems (Johnson, 1989; Kubik et al., 2002; Tardif et al., 2005). Although sexually abusive adolescent males often come from multi-problem families, females are even more likely to come from multi-problem and chaotic families, have little parental support and poor attachments (Mathews et al., 1997).

Offence histories and victim characteristics

The average age at first sexual offence is about 11 to 12 years of age (Kubik et al., 2002; Tardif et al., 2005). Female sexually abusive youth, like males, engage in a range of sexually abusive acts (Fehrenbach & Monastersky, 1988; Ray & English, 1995). Females are repeat offenders who tend to engage in intrusive acts (e.g., hands on, penetrative acts including masturbation of victims, oral-genital contact) with multiple victims (Fehrenbach & Monastersky, 1988; Hunter et al., 1993; Mathews et al., 1997; Ray & English, 1995; Tardif et al., 2005).

Female youth tend to victimise children, 12 years or younger, they are acquainted with (e.g., neighbours) or related to (Fehrenbach & Monastersky, 1988; Johnson, 1989; Mathews et al., 1997; Ray & English, 1995; Tardif et al., 2005). It is also common for offences perpetrated by females to occur within the context of baby sitting the child/ren (Fehrenbach & Monastersky, 1988; Mathews et al., 1997; Tardif et al., 2005). Many females use force or coercion to gain compliance of the victim and tend to act alone (Fehrenbach & Monastersky, 1988; Hunter et al., 1993; Johnson, 1989).

Research indicates that female sexually abusive youth victimise both males and females, but compared with males, females are more likely to victimise males (Hunter et al., 1993; Mathews et al., 1997; Ray & English, 1995). There also appears to be a difference between male and female sexually abusive youth in New Zealand, with males having a mean of three victims compared to two for females (Lightfoot & Evans, 2000).

Summary

Mathews and colleagues (1997) suggest that female sexually abusive youth are a more diverse population than males. They identified three main typologies of female sexually abusive youth. The first group "engaged in a single or a few incidents of offending to a non-related child" (Mathews et al., 1997, p. 195) and had little indication of psychopathology, past abuse or familial dysfunction. The second group had engaged in more extensive sexually abusive behaviours and presented with mild to moderate levels of individual psychopathology, past abuse or familial dysfunction. The third group of females had engaged in more extensive and repetitive patterns of sexually abusive behaviours and had significant levels of trauma and moderate to severe levels of individual psychopathology and family dysfunction.

Ray and English conclude that sexually abusive female youth are more likely than male youth to be treated as victims even though they had engaged in serious and repeated sexually abusive behaviours (Ray & English, 1995). They suggest that as the basic premise of much intervention with this population is based on accountability and responsibility and that gender may have an effect on the interpretation workers in the field have of sexually offending behaviours, this would have an impact on the treatment sexually abusive females received (Ray & English, 1995). Mathews and colleagues (1997) argue that their results supported the need for intervention and treatment along a continuum of care, similar to that advocated for male sexually abusive youth. Due to the high levels of past victimisation and family dysfunction found in their sample, the authors argue for a treatment approach that used a developmental perspective and included victimisation and trauma treatment.

Female sexually abusive youth are diverse in their individual, family and offence characteristics. There were similarities between the male and female sexually abusive youth both in their own experiences of childhood abuse and their patterns of sexually abusive behaviours. However, compared with males, the small number of available studies indicate that females have experienced higher levels of trauma: they are more likely to have experienced abuse from a younger age, by multiple male and female perpetrators, and over an extended period of time. As with males, females come from multi-problem and chaotic families with domestic violence, sexual abusers, and family members with psychiatric problems. Like male sexually abusive youth, females have other problems including school and behavioural issues. Overall, females represent only a small percentage of youth who come to official attention for their sexually

abusive behaviours. As with males, research indicates that females engage in a range of intrusive and repetitive sexually abusive behaviours with both male and female children.

Characteristics of children who sexually abuse

Historically, sexualised behaviour between children has been viewed as “innocent play” (Cantwell, 1988). Consequently the seriousness of their offending may never have been assessed and these children have often missed out on treatment (Cantwell, 1988). Too often the alleged behaviour/s of children are denied or dismissed as they are considered “too young” to be held accountable and/or the victim is blamed (Cantwell, 1988; Johnson, 1988). It is only more recently that there has been increased awareness that children (prepubescent youth) are engaging in sexually abusive behaviours (Centre for Sex Offender Management, 1999). They are now recognised as perpetrating against family members, friends and neighbours (Cantwell, 1988; Johnson & Berry, 1989). The limited research on this group defines children as being 12 years or younger (e.g., see Burton, Nesmith, & Badten, 1997; Cantwell, 1988; Friedrich & Luecke, 1988; Gray, Pithers, Busconi, & Houchiens, 1999; Pithers, Gray, Busconi, & Houchens, 1998), athough the study by Johnson (1988) did include some 13 year olds.

Individual characteristics

As with sexually abusive youth, children who engaged in sexually abusive behaviours often present with other problems including behavioural and school problems (e.g., specific learning disabilities, speech and language impairments, emotional disturbances), and social skills deficits (Friedrich & Luecke, 1988; Gray et al., 1999). Common primary diagnoses include Conduct Disorder, Attention Deficit Hyperactivity Disorder, Oppositional Defiant Disorder, Post Traumatic Stress Disorder, Schizophrenia, Adjustment Disorder and Dysthymia (Friedrich & Luecke, 1988; Gray et al., 1999).

Abuse history

As with the other populations reviewed, many children who sexually abuse were themselves the victims of abuse. Research suggests that anywhere from 50% to 80% have been sexually abused themselves (Burton et al., 1997; Friedrich & Luecke, 1988; Gray et al., 1999; Johnson, 1988). Research indicates that about half have experienced physical abuse (Gray et al., 1999; Johnson, 1988). Many sexually abused children have also been exposed to family violence and sexualised adult behaviour, and experienced emotional abuse and neglect (Friedrich & Luecke, 1988; Gray et al., 1999; Johnson, 1988; Pithers et al., 1998).

Families

Children who sexually abuse tend to come from multi-problem and highly stressed families (Pithers et al., 1998). Most children come from low income families, where adequate social support is lacking, and where parents are divorced or separated (Burton et al., 1997; Pithers et

al., 1998). Similar to sexually abusive youth, children come from families where there is parental substance abuse and family members who have been arrested for criminal activity (Burton et al., 1997; Friedrich & Luecke, 1988; Gray et al., 1999; Pithers et al., 1998). For most children these and other factors combine to result in problematic parent-child attachment relationships (Friedrich & Luecke, 1988; Pithers et al., 1998). Often there are sexual abuse victims within the immediate and extended family (Pithers et al., 1998).

Offence histories and victim characteristics

Children who sexually abuse victimise, on average, two to three children who are family members (immediate or extended) or acquaintances (e.g., neighbours, school mates or other children in foster care) (Burton et al., 1997; Gray et al., 1999; Johnson, 1988). Children who engage in sexually abusive behaviours usually first engage in these behaviours between 4 to 9 years of age (Burton et al., 1997; Johnson, 1988). Research by Burton et al. (1997) found that children are first seen in a clinical setting for their sexually abusive behaviours at about 11 to 12 years.

As with their adolescent counterparts, children engage in a range of 'hands on' and 'hands off' behaviours including penetrative acts (vaginal and anal penetration with penis, finger, and/or other objects), fondling, oral copulation, general contact without permission, simulated intercourse, exposure, sexualised statements and gestures (Burton et al., 1997; Gray et al., 1999; Johnson, 1988). Johnson (1988) found that all the male children in her sample had used coercion.

Summary

There is limited empirical research on children engaged in sexually abusive behaviours. Children who engaged in sexually abusive behaviours appear to have similar backgrounds to sexually abusive youth in that they may have experienced childhood sexual and physical abuse, come from multi-problem families and have a history of behavioural and school problems and social deficits.

Although there is a scarcity of research, the available data indicates that sexualised children are abusing male and female victims within their families and social networks. They are also using strategies in order to overpower their victims and coerce their victims into remaining silent about the abuse.

Having gained some understanding of the characteristics of sexually abusive children and youth I now turn to consider some of the theories as to how or why some children and youth engage in sexually abusive behaviours.

Theories

There are a number of theories that have been applied to account for the aetiology of sexual aggression including cognitive behavioural, social learning theory, attachment, trauma models, psychodynamic, biological and feminist explanations (Freeman-Longo, 1986; Hunter & Becker, 1994; Rich, 2003). I will briefly describe each of these below.

Cognitive-Behavioural Theory (CBT) focuses on the link between cognitions (thoughts, beliefs and assumptions), emotions and behaviour and the mechanisms causing, maintaining, and promoting problem behaviours (Beck, 1995; Persons, 2005; Rich, 2003). Until recently, CBT has been the treatment of choice for sexual offender specific treatment programmes (Rich, 2003), although attention has started to turn to other models that may assist in understanding this behaviour. Within a CBT framework, deviant sexual interests are seen as resulting from the pairing of previously neutral stimuli (e.g., thoughts of children) with sexually arousing stimuli and that over time and repeated pairing the previously neutral stimuli (e.g., thoughts of children) become sexually arousing. The cognitive aspects of CBT consider the importance of cognitive distortions or thinking errors which affect how individuals behave (Beck, 1995).

Social Learning Theory suggests that human thought, affect and behaviour can be influenced by observation or modelling as well as direct experience (Bandura, 1977). The theory explains human behaviour in terms of "reciprocal determinism" which states that behaviour is the result of "continuous reciprocal interactions between cognitive, behavioural, and environmental determinants" which also allows individuals to influence their destiny (Bandura, 1977, p.vii). Research has found childhood victimisation is associated with increased sexualised behaviour and sexual offending in adolescence which lends support to the social learning hypothesis (Aylwin, Studer, Reddon, & Clelland, 2003; Burton, 2000; Burton, Miller, & Shill, 2002; Friedrich, 1993; Ryan, 1989; Salter et al., 2003). The social learning model suggests that when physical aggression and relationship violence are modelled by significant others, or a youth has experienced abuse, they may learn that violence, physical and sexual aggression are acceptable behaviours (Boyd et al., 2000; Burton, 2003; Centre for Sex Offender Management, 1999; Davis & Leitenberg, 1987; Freeman-Longo, 1986). Less direct routes for the link between past abuse experiences and sexual offending are that parental rejection leads to lower self-esteem and sexual offending may be the young persons way of restoring self worth or they may avoid close relationships out of fear of further hurt (Davis & Leitenberg, 1987). Another possibility is that "neglect and abuse make the youth feel entitled to seek revenge on substitute targets" (Davis & Leitenberg, 1987, p.422). Thus, the youth does not learn to inhibit their aggression due to poor parental modelling.

Attachment theory looks at early relationships from which infants derive internal working models about themselves and the world around them. It is proposed that early interactional experiences have a signficant influence on the later development of emotional bonds and

relationships (Bowlby, 1978, 1988; Rich, 2003; Sroufe, 2005). Sexually abusive behaviours are therefore seen as a result of impaired attachments and lack of emotional bonds, intimacy and empathy or attempts to have their emotional/relationship needs met based on problematic models of reciprocal interactions (Kobayashi, Sales, Becker, Figueredo, & al., 1995; Rich, 2003).

The *trauma model* states that past trauma experiences and other significant events in life disrupt development (e.g., social and emotional development) and effect the neural pathways (Rich, 2003). This in turn affects the way an individual experiences the world, relationships and themselves (Rich, 2003). The main support for this theory is derived from the observation that many sexually abusive youth have experienced childhood sexual abuse and other abuse at higher rates than their nonsexual offending peers and the general population (Aylwin et al., 2003; Burton, 2000). Sexually abusive youth often have histories which include experiences of abuse and witnessing of violence (Hunter & Becker, 1994). However, not all victims of childhood abuse go on to become abusers themselves (Becker, 1988; Friedrich, 1993; Salter et al., 2003), so this is an incomplete explanatory model. Researchers have concluded that those who have experienced sexual and physical abuse and neglect themselves or have been exposed to violence, are at greater risk of becoming perpetrators, but there may be other factors operating (Becker & Stein, 1991; Centre for Sex Offender Management, 1999; Ford & Linney, 1995). Salter et al (2003) found that victims who go on to sexually offend often experienced neglect, lack of supervision and witnessed serious intrafamilial violence. There is limited research on this area in relation to adolescents and, therefore, the exact relationship between these early trauma experiences and deviant sexual interests is not clear (Hunter & Becker, 1994).

Developmental theories include Piaget's theory of cognitive development (Piaget, 1951), and Erikson's development theory (Erikson, 1968). These theories suggest that interruption of normal progression through developmental stages cause individuals difficulty. Piaget proposed four stages of cognitive development (Flavell, Miller, & Miller, 2002). In Piaget's theory fixations at unsuccessful stages of development are seen as contributing to difficulty developing empathy (Ryan, 1991). Erikson's developmental theory suggests negative outcomes if developmental goals are not achieved, thus development is not stopped but outcomes are altered (Erikson, 1982; Ryan, 1991). The developmental perspective is important when treating sexually abusive youth as childhood and adolescence are periods of rapid growth and change (Ryan, 1999) and consideration needs to be given to multiple issues such as their own abuse experiences, parenting and attachment issues and the opportunities they have had to develop empathetic behaviours (Rich, 2003; Ryan, 1999).

Systems approaches consider the wider context within which a child or young person lives including community, cultural, school and peer groups (Guerin & Chabot, 1997; Rich, 2003).

Family systems approaches focus particularly on the family within which children and adolescents are situated including relationships and roles within the family (Carr, 2000; MacKinnon & James, 1987). Difficulties adjusting to transitions are associated with poor boundaries and unclear hierarchies within families and enmeshed or disengaged relationships (Minuchin, 1974). Within this model, the individual's sexually abusive behaviour is considered to reflect difficulties within the wider system (Rich, 2003).

Psychodynamic theory suggests that abnormal sexual interest in children is the result of a fixation in psychosexual development which is associated with "unresolved psychological conflict or trauma experienced in childhood" (Hunter & Becker, 1994, p. 133). Freud theorised that inappropriate sexual behaviour is due to unresolved early psychosexual development and traumatic experiences (Freud, 1910; Ryan, 1991). Based on these models, sexual aggression is understood as being caused by an interruption to normal development and as a product of an environment that did not adequately meet the individual's developmental needs (Rich, 2003).

Biological or physiological theories hypothesise that sexual aggression has biological causes (Rich, 2003). This theory suggests that deviant sexual interests are due to biochemical or hormonal imbalances or deficits in the Central Nervous System (CNS) which impair an individual's ability for impulse control (Hunter & Becker, 1994). Deviations in the serotonin system are a robust neurobiological finding associated with behavioural problems. Serotonin dysregulation may give rise to poor impulse control, which is observed in violent and impulsive behaviours. Dysregulation of serotonin function may also predispose a person experiencing stressful events to react impulsively.

Feminist theories argue that gender is the result of social, economic, cultural, historical, legal and political constructs (Hopkins & Koss, 2005). Feminist theorists focus on the social context in which sexual aggression occurs as well as institutional failure that supports the violence (Hopkins & Koss, 2005; Hunter & Becker, 1994). This theory suggests that sexual aggression by males is a result of their desire to exert power and control over females (Hopkins & Koss, 2005).

To date, no single theory has emerged that provides the best template within which to understand sexually abusive children and youth. Many theories overlap, and it appears to be an area of ongoing exploration of theoretical models (Hunter & Becker, 1994; Rich, 2003). Theories such as Family Systems, cogntive and Learning Theory have emerged as the main approaches drawn on by those offering treatment but other approaches are also used to help understand this population. In fact, evidence seems to support the notion that it is no single factor that 'causes' children and adolescents to sexually offend but, rather, a range of contextual, situational and individual factors need to be considered (Barbaree & Langton, 2006; Rich, 2003; Williams & New, 1996). Williams and New (1996) proposed multifactorial causes for

sexually abusive behaviours including risk factors (e.g., exposure to violence, victimisation, placement instability), social, family (e.g., parenting practices), individual (e.g., age, intellectually ability) and ecological factors (e.g., role of the media) in combination with contextual and situational factors. Rich (2003) suggests the biopsychosocial model may be appropriate as it brings together the physiological, psychological and social in a composite model.

Reviewing the literature has provided understanding of the development of international research and understanding of sexually abusive children and youth. However, to date, there has been no systematic and large scale research to explore the individual, offending and family characteristics of sexually abusive youth in New Zealand.

The New Zealand Context

Community studies give us some indication of the extent of sexual offending amongst children and youth in New Zealand. In a study of 1019 children from the Christchurch Health and Development Study (CHDS), it was found that 17% of females and 3% of males had experienced childhood sexual abuse before the age of 16 years (Fergusson, Lynskey, & Horwood, 1996a). In another community study of New Zealand women, Anderson, Martin, Mullen, Romans and Herbison (1993) found that 32% of women reported one or more unwanted sexual experiences before 16 years of age, of which only 7% was officially reported.

The perpetrators of the childhood sexual abuse reported in the Christchurch study ranged from 7 to 65 years (*M* = 22 years) (Fergusson, Lynskey, & Horwood, 1996b). Within the community sample of women, it was found that almost a quarter of perpetrators were younger than 18 years (Anderson et al., 1993). Martin and colleagues concluded in the Otago Women's Health Survey (Martin et al., 1991) that "teenage offenders were a large and often quite violent group, who carried out one quarter of the offences" (p. 2). Yet it is acknowledged that these figures under represent the true extent of the problem (Lambie & Seymour, 2006).

Both internationally and nationally, the research indicates children and youth are responsible for a significant amount of the sexual abuse. Some of the literature presented here (e.g., Awad & Saunders, 1991; Becker, 1988; Davis & Leitenberg, 1987; Ford & Linney, 1995; Ryan & Miyoshi, 1990; Ryan et al., 1996; Tomison, 1995) is up to 20 years old. This reflects the fact that early research on sexually abusive children and youth focused on understanding their individual, family and offending characteristics with more sophisticated research topics following. In New Zealand, research is lagging behind. To date, no research has investigated sexually abusive children and youth in New Zealand or provided a description of their individual, family or offence characteristics. With a unique youth justice system which is designed to keep children and youth out of the adult justice systems and innovative treatment

approaches being developed within specialised treatment programmes in New Zealand (e.g., the Good Way Model by Ayland & West, 2006), it is essential to understand the characteristics of this population so that interventions can be developed and later evaluated for their effectiveness in meeting the needs of these populations.

Within the New Zealand context, there is limited research on special populations of sexual offenders. A previous study by Fortune and Lambie (2004) has been conducted on sexually abusive youth with 'special needs' but there is no known research on children or female youth who were sexually abusive. Internationally, research on these populations is also limited.

This study addressed this gap in the literature by providing a detailed description of male and female youth and children, and youth with 'special needs' who engaged in sexually abusive behaviour(s) and were referred to the three main specialised community treatment programmes in New Zealand during a nine and a half year period, 1995 to July 2004.

Chapter 2

Methodology

The purpose of this clinical file audit study was to create a profile of sexually abusive male and female children (aged 12 years or younger) and youths (aged 13 to 19 years) referred to the three main specialised community treatment programmes in New Zealand between January 1995 and June 2004.

Currently in New Zealand there are ten specialist community adolescent sex offender treatment programmes and one residential unit. The three main community specialised treatments programmes for children and youths are the SAFE Youth Programme (Auckland), WellStop[2] Adolescent Programme (Wellington), and STOP Adolescent Programme (Christchurch). Smaller, satellite programmes are currently run in other regional centres; Hamilton (SAFE Network), Napier, Gisbourne, Palmerston North (WellStop) and New Plymouth (affiliated with WellStop) and Dunedin and Invercargill (STOP Trust). These programmes cater for the majority[3] of sexually abusive youth in New Zealand referred for specialised treatment (Lambie & Seymour, 2006). This study focuses on the three main sites of Auckland (SAFE), Wellington (WellStop) and Christchurch (STOP), as these three programmes provide services to the majority of youths who receive specialised community treatment in New Zealand. Over the 9½ year period this study covered, there were 886 referrals to the community programmes (an average of 93 referrals per year).

Specialised community treatment programmes in New Zealand provide assessment and therapeutic services to children and youths with sexually abusive behaviours and their families. Most programmes use a psychoeducational and cognitive-behavioural therapy (CBT) approach (SAFE Network Inc, 1998; STOP Trust, n.d.). The New Zealand programmes provide group, individual and family therapy. The treatment agencies provide a range of services, including social work services and specialised programmes for sexually abusive youth with intellectual and learning disabilities and developmental delay, children (aged 12 or younger), and females. SAFE Auckland also offers a Wilderness programme and STOP Christchurch has an Adventure Therapy component, designed to enhance group cohesion and help engage clients in the therapy (Lambie et al., 2001; Mortensen, 2006). These programmes incorporate a range of locations and challenging and interesting activities such as “hiking, canoeing, caving, rafting, rock climbing, scuba diving, sailing, mountain biking and skiing” (Lambie et al., 2001, p. 188). The treatment programmes provide specialist services for Māori clients. All the programmes in

[2] WellStop was previously called Wellington STOP
[3] There is one residential unit in NZ which can cater to up to 12 youths.

New Zealand offer individualised therapy plans when this is considered more appropriate. This may include individual and family therapy.

The conclusion of the treatment occurs when staff, in conjunction with family/whānau[4] and/or caregivers and others involved in the case (e.g., Child, Youth and Family[5] social workers) are satisfied that significant change has occurred in the client's behaviour and cognitions to result in a reduction of risk. That is, when the client has substantially reached their goals they are considered to have successfully completed treatment. Progress is assessed in each of the key treatment components (e.g., understanding their abuse cycle, developing skills to interrupt the abuse cycle and relapse prevention) in order to "determine the degree of commitment the client has to maintaining a safe and non-abusive lifestyle in the future" (Flanagan & Hayman-White, 2000, p. 66).

Sexual abuse is defined not just by sexual behaviour but also by "the nature of the interaction and the relationship" (Ryan, 1999, p. 424). Sexually abusive interactions therefore include lack of consent and inequality and/or coercion (Ryan, 1999). Children and youths who attend specialised community treatment programmes for sexually abusive youth in New Zealand have rarely been convicted of sexual offence(s) and include a mix of both mandated (that is, they have been directed to attend by external agencies such as the Police, Courts, or Department for Child, Youth and Family (CYF) and non-mandated (voluntary attendance) children and youth. All children and youths included in this study were identified as having a history of engaging in sexually abusive behaviours. Therefore, within the context of this research, they are considered to be eligible for inclusion by virtue of their sexually inappropriate behaviour meeting the criteria for referral and/or entry into the treatment programmes.

Defining sexual abuse

Children and youths were referred to specialist community sexual offender treatment programmes in New Zealand for a range of sexual behaviours including:

1. 'hands off' (non-contact) behaviours such as voyeurism (peeping), exposure and public masturbation, sexualised language, and obscene phone calls or letters/emails,
2. 'hands on' (contact) behaviours such as sodomy (anal penetration), vaginal penetration (penile, digital or object), indecent assault (e.g., sexualised touching), and genital oral contact, and
3. bestiality (sexual acts with animals).

New Zealand has a unique youth justice system which is designed to keep children and young people out of the adult justice system. Within this system young people are not necessarily charged with offences, resulting in few being convicted for their offending. The youth justice

[4] Whānau - a Māori word referring to extended family and/or family group
[5] Department for Child, Youth and Family (CYF) is the national child welfare agency

system in New Zealand sees youth being accountable to their victims, families/whānau and local community through Family Group Conferences (FGC) for their offending and attempts to keep them out of the adult justice system. Those invited to attend an FGC include the young person, their families/whānau, victims of the offence, support people, Police, social workers, schools, mental health workers, treatment programmes, etc. An FGC is designed to address offending through reaching an agreement between victims, offenders and their families and communities on how the offending should best be dealt with (Ministry of Justice, 2005). Recommendations from an FGC may include community service, treatment recommendations, reparation and apologies to victims.

Sample

This study involved an audit of clinical files of children and adolescents who had been referred for treatment at the three main community treatment programmes for sexually abusive youth in New Zealand (SAFE Auckland, WellStop in Wellington and STOP Christchurch).

To meet the inclusion criteria children and youths must have been referred to the programmes after 1 January 1995 and have left the programme (i.e., had their files closed) by 1 July 2004. All age groups, genders, ethnic groups and those with 'special needs' were included in the sample. Included were all those who during the study period were:

- referred to the programmes and/or
- commenced assessment and/or
- completed assessment and/or
- commenced treatment and/or
- completed treatment

A total of 886 individuals were identified as having been referred to the programmes within the period of interest. One hundred and eighty-four were excluded resulting in a study population of 702 individuals.

Ninety-two individuals were excluded as they fell outside the study period. Thirty-four clients were excluded as their files were held at the main treatment programme (e.g., at STOP Christchurch) but they had received treatment from a satellite programme (for example, Dunedin). Six were excluded for other reasons that made them ineligible for inclusion in the study, such as being incorrectly included on the Adolescent Programme lists but actually being referred to an Adult Programme. Fifty-two were excluded due to insufficient information being contained within the file (e.g., no full name, date of birth or offence details). This group were excluded as there was insufficient information available to identify them with any level of certainty or be sure they had engaged in sexually inappropriate behaviour/s.

Therefore, the 702 individuals included in this study represent 93% of those referred to the three main specialised community treatment programmes in New Zealand during the study period. A summary of recruitment is presented in Figure 1 below.

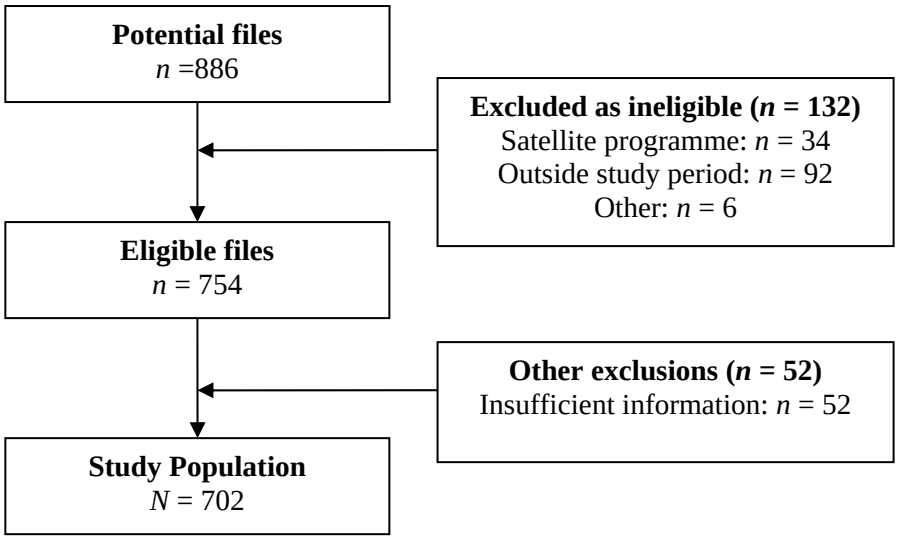

Figure 1. Summary of study inclusion and exclusion criteria

Measures

Data were collected based on a retrospective, detailed review of files held by the treatment programmes using an instrument designed for this research. This data collection form was developed based on the literature (e.g., Ford & Linney, 1995; Gretton, McBride, Hare, O'Shaughnessy, & Kumka, 2001), existing risk assessment tools (e.g., Worling & Curwen, 2000b), consideration of information collected by the programmes and entered into their databases, and the Youth 2000 Survey in New Zealand (Adolescent Health Research Group, 2000). This form was developed for this study, and feedback was obtained from a range of experts within the fields of youth justice and child protection in New Zealand, cultural advisors, academics working nationally and internationally in the field of sexually abusive youth and the management and staff of the three main treatment providers in New Zealand.

The measure was piloted on a sample of twenty files and refined. Some variables were removed as information was not adequately or consistently recorded within the programme files. The variables collected from the extensive file audit included the child or young person's age at referral, gender, sexual and nonsexual offending history, age of first known sexual offence, educational history, school achievement, family structure and history, placement history, history of sexual and physical abuse, and social, behavioural and psychological issues. See Appendix A for a copy of the data collection form.

Procedures

In order to conduct this research and to ensure that appropriate ethical standards were met, approval was obtained from a number of ethics committees. Ethical approval was granted for this project by the University of Auckland Human Participants Ethics Committee (UAHPEC). Approval was given for this project in 2004 by the UAHPEC for a period of three years (reference number 2004/163). Approval was also granted by the Research Access Committee (RAC) of the Department of Child, Youth, and Family Services.

Confidentiality agreements were also signed with Child, Youth and Family, and each of the three treatment programmes involved in this study to ensure that individuals would not be identified in any written or verbal reports or presentations that may result from the research. The researcher also underwent a police check.

New Zealand has become an increasingly information based society with associated concerns about privacy, addressed by the Privacy Act (1993) and subsequent amendments. Three types of personal records have been identified:

1. Administrative: these records are generated through an individuals various interactions and transactions with organisation such as getting married and applying for a licence. Bennett (as cited in, Longworth & Slane, 1993) in contends that this information is usually self-reported and that people usually feel that supplying this information will benefit them.
2. Intelligence: these are records that have some investigative purpose such as police records or credit reports. This information is often "collected from sources other than the individual to whom the record pertains" (Longworth & Slane, 1993, p. 1).
3. Statistical: these records provide aggregate information and do not identify individuals and can be used for general policy making (Longworth & Slane, 1993).

This study involved collection of all three forms of data. Raw data were collected from administrative records from the treatment programmes and intelligence records from the New Zealand Police and the Department for Child, Youth and Family and aggregated to create statistical data. In order to protect the confidentiality of individuals administrative and intelligence data had to be recorded without identifying them. The data entries were stripped of identifying information once each subject had been assigned a unique participant number (Longworth & Slane, 1993). The identifying information was only linked with unique participant numbers on a master list which was encrypted and password protected. This information was only used to locate individuals within each agencies records and databases.

Data contained within paper and electronic files had been collected at the point of referral, within the course of clinical assessments (including individual interviews, interviews with the parents/caregivers, family interviews and psychological testing), during treatment and at case closure. Files included assessment reports, progress and termination summaries and interview

notes, case notes, psychiatric and psychological reports. Information was contained within the files regarding the referred child or young person including social, behavioural, education, family and placement history, the history and nature of their sexually abusive behaviour and victim(s) characteristics including some police and victim statements, assessment, progress and end of treatment summaries. I abstracted all data from the treatment programme files, thereby ensuring a consistency in data collection across all sites.

Cultural considerations

Māori children and youths are referred to the specialised community treatment programmes in New Zealand. Under the Treaty of Waitangi, there was a need to be sensitive to issues of cultural difference when conducting this research (Love & Whittaker, 1997). Rawiri Wharemate, of Ngapuhi/Tainui descent, acted as a cultural consultant and Kaumatua (elder) for the study and provided oversight and ensured cultural safety. Additional consultation around research methodology involved Karen Clark of Ngati Kahungunu descent, who was the cultural advisor for the Child, Youth and Family Advisory Group. The cultural advisors provided invaluable input in the planning and design phases of this research including ensuring that items within the data collection form were culturally appropriate. Results in relation to Māori children and youth were discussed and cultural conclusions and recommendations were developed in collaboration with Rawiri Wharemate.

Analysis

All data were entered into the Statistical Package for Social Sciences (SPSS) Version 14.0, identifying each participant using their assigned study number. All discrete data (e.g., ethnicity, living situation, sexual offending) were coded, with numbers assigned to categories, and entered into SPSS. Variables were coded as “none reported” or “unknown” if the available data were missing, ambiguous or insufficient to reliably code. If information was missing on a particular variable then the “at least” rule was applied. This required using the known amount or number reported. For example, this was commonly used when coding the number of offences against an individual victim. The “other” rule was used which requires specifying the response whenever an “other” category was provided.

Data were checked for errors and the necessary corrections made using a range of consistency checks. Variables for which there was too much missing data were excluded (e.g., more than 25% missing). Descriptive data were used to check the assumptions underlying the use of parametric and non-parametric methods and homogeneity of variance and normality were checked for variables subjected to parametric statistics. Where quantitative variables met the assumptions of normality and homogeneity, parametric methods of data analysis were used to test for statistically significant differences between multiple means (e.g., Analysis of Variance – ANOVA). When the quantitative variables did not meet the assumptions of normality and homogeneity non-parametric alternative, the Kruskal-Wallis test was used. Limited post hoc

analysis for the Kruskal-Wallis test was undertaken using the Mann-Whitney tests. The most frequently used method for analysis of nominal data (e.g., categorised demographic data collected in this study) is the chi square distribution (Hinkle, Wiersma, & Jurs, 1994). Pearson chi square was used to test for statistically significant differences between expected and observed frequencies between treatment groups on selected categorical variables.

A maximum alpha of 0.05 was used for all statistical tests.

Reliability check

A sample of 35 files (5% of the study population) were independently re-coded by a researcher not involved in the initial data collection or analysis to check for inter-rater reliability. Efforts were made to select a range of small, medium and large files. Cohen's kappa coefficient was used to measure agreement between the two raters as it takes into account the level of agreement and also corrects for chance agreement (Norman & Streiner, 1999). A value of 1 indicates perfect agreement while a value of 0 indicates that agreement is no better than chance. Not all variables from the initial data collection were included; rather the reliability check focused on variables used in subsequent analysis in Studies Two and Three. In their review of inter-rater agreements Banerjee, Capozzoli, McSweeney and Sinha (1999) indicated ranges of values for kappa. The degree of agreement they suggest is based on the early work of Landis and Koch (1977), stating that "values greater than 0.75 or so may be taken to represent excellent agreement beyond chance, values below 0.40 or so may be taken to represent poor agreement beyond chance and values between 0.40 and 0.75 may be taken to represent fair to good agreement beyond chance" based on the (Banerjee et al., 1999, p. 6). Results for this study generally indicated a good to excellent level of inter-rater reliability (see Appendix B).

Chapter 3

Results - Individual, family and offence characteristics of sexually abusive children and youth in New Zealand

This chapter provides a description of the demographic, individual (e.g., educational, living and abuse histories), family, and offending characteristics of sexually abusive children and youth referred to the three main treatment programmes in New Zealand for assessment and/or treatment of their sexually abusive behaviours over a 9½ year period. Descriptions of the three special populations (i.e., females, children, and youth with 'special needs') are also provided.

Almost half (48%, *n* = 337) the total sample of children and youths included in this study were referred in Auckland (SAFE), while approximately a quarter were referred to Wellington (WellStop) (26%, *n* = 184), and approximately a quarter to Christchurch (STOP Christchurch) (26%, *n* = 181) (see Table 1) which reflects the population distribution of the country.

Table 1. Referral to treatment programmes for the three study sites

Site	Auckland		Wellington		Christchurch		Total
Group	***n***	**%**	***n***	**%**	***n***	**%**	***n***
'Special needs'	55	40.4	25	18.4	56	41.2	136
Children	29	82.9	4	11.4	2	5.7	35
Females	10	76.9	3	23.1	0	0.0	13
Youth (males)	243	46.9	152	29.3	123	23.7	518[6]
Total	**337**	**48.0**	**184**	**26.2**	**181**	**25.8**	**702**

The majority (67%, *n* = 467) of those referred for assessment and/or treatment were referred to the standard youth programmes run by the specialist community treatment programmes. Approximately 19% (*n* = 136) were referred to the programmes for youths with intellectual disabilities and/or developmental delays ('special needs'). In Auckland this is known as the "Special Needs" programmes, in WellStop as "Warriors" and as "Changing Directions" at STOP Christchurch. Five percent (*n* = 35) met criteria for referral to the Children's/Young Adolescent programmes and 2% (*n* = 13) of referrals were for the Female programme. Ten of the 13 females had been referred to Auckland and three to Wellington. About 7% (*n* = 51) of youth were not considered suitable for any of the existing programmes and so individualised programmes were developed to meet their needs. This often involved individual and/or family therapy without the group therapy component. Individualised programmes often involved shorter term therapy.

[6] Includes 51 youths who had an individualised treatment plan developed for them.

There was a statistically significant difference between sites in the type of treatment they provided (χ^2 (8) = 82.68, p < 0.000). Youth who attended treatment at Wellington were most likely to receive an individualised treatment programme and least likely to attend the 'special needs' programme. There was a significant difference in the number of referrals of children between programmes (χ2 (2) = 18.15, p < 0.000). Further analysis revealed that Auckland was significantly more likely to receive a referral for a child compared with Wellington (χ2 (1) = 8.30, p < 0.01) or Christchurch (χ2 (1) = 11.77, p < 0.000). In Auckland, individuals were most likely to attend the Youth, Female or Children's programmes. During the study period, Christchurch did not accept referrals for female children and youth.

All the 'special needs' youth were categorised as having below average intelligence (see Table 2) (e.g., based on a standardised measure such as the WISC III). The majority were functioning in the Intellectual Disability ranges. Of the 136 youth with 'special needs', twelve were re-referred to the programmes; one for individual treatment, three to the adult programme and eight to the 'special needs' programme.

Table 2. Intellectual functioning for the 'special needs' group

Intellectual functioning	***n***	**%**
Intellectual disability (IQ<70)	67	49.3
Borderline (IQ 70-79)	33	24.3
Low Average (IQ 80-89)	17	12.5
Unknown	19	14.0
Total	136	100.0

Referral source

Across all groups, the majority of referrals received were from the Child, Youth and Family Service (CYF) (68%, n = 474). Of these, it is known that 36% (n = 254) of first referrals came through Care and Protection and 17% (n = 121) through Youth Justice. Other referral sources can be seen in Table 3. Details on referral sources for children and youth who were referred to the programmes for a second time are summarised in Appendix E.

Table 3. Referral Source

Group	'Special needs'		Children		Females		Male Youth		Total	
Referral Source	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
CYF	91	66.9	31	88.6	12	92.3	340	65.6	474	67.5
Family/Whānau & self referral	10	7.4	1	2.9	1	7.7	61	11.8	73	10.4
Child, Adolescent & Family Mental Health Service	12	8.8	0	0.0	0	0.0	19	3.7	31	4.4
Police	0	0.0	0	0.0	0	0.0	27	5.2	27	3.8
School	6	4.4	1	2.9	0	0.0	17	3.3	24	3.4
Community non-governmental agency/service[7]	9	6.6	2	5.7	0	0.0	27	5.2	38	5.4
Other government agency/service [8]	7	5.1	0	0.0	0	0.0	23	4.4	30	4.3
Unknown	1	0.8	0	0.0	0	0.0	4	0.8	5	0.7
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

Legal status

Table 4 summarises the legal status of sexually abusive children and youth at referral. Overall, 49% of the total sample had no known legal status on referral to the treatment programmes. This means that 51% (*n* = 356) had some form of mandate to attend treatment including more than a third (37%, *n* = 257) of the total sample who had been directed to treatment by the Department of Child, Youth, and Family through a range of provisions including outcomes of Family Group Conferences (FGC's) and under Care and Protection provisions. It can be seen that attendance directed by CYF was higher amongst the 'special needs' (45%) and female (69%) groups.

Table 4. Mandated to attend treatment

Group	'Special needs'		Children		Females		Male Youth		Total	
Legal status	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
No known mandate	59	43.4	23	65.7	3	23.1	261	50.4	346	49.3
Directed by CYF	61	44.8	12	34.3	9	69.2	175	33.8	257	36.6
Ordered by Court (District/Family/ Youth)	10	7.4	0	0.0	1	7.7	48	9.3	59	8.4
Police (e.g., diversion)	2	1.5	0	0.0	0	0.0	20	3.9	22	3.1
Corrections (Court ordered supervision /Parole conditions)	4	2.9	0	0.0	0	0.0	14	2.7	18	2.6
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

[7] For example, Presbyterian Support Services, private counsellors, psychiatrists & Māori service provider/counsellor.
[8] For example, hospital, Community Probation Service & Department for Courts.

Individual characteristics

Gender

Ninety-eight percent (*n* = 689) of sexually abusive children and youth referred for treatment at the three main specialised treatment programmes during the study period (1995 to end of June 2004) were male. Only 13 females were referred to the programmes during the same period. All those referred to the 'special needs' and children's programmes were male.

Age

Table 6 summarises the range, mean and standard deviations of age at referral across the groups. In some cases individuals were referred to the programme for a second time during the study period. One person was re-referred to a treatment programme for a third time, aged 19.

Table 5. Age at referral

Group	Referral	*n*	Range (years)	*M*	*SD*
Children	First	35	8 - 13	11.6	1.1
	Second	2	12	12	0.0[9]
'Special needs'	First	136	12 - 19	14.7	1.5
	Second	9	14 - 20	16.7	2.1
Females	First	13	10 - 17	13.0	2.3
Male youth[10]	First	518	12 - 19	14.43	1.6
	Second	37	12 - 20	15.23	1.7
Total	**First**	**702**	**8 - 19**	**14.31**	**1.7**
	Second	**32**	**11 - 20**	**15.37**	**2.0**

In Table 5 it can be seen that some 12 and 20 year olds are included as youths and some 13 year olds included in the children's programmes. This is due to programmes also considering factors other than age when allocating individuals to a treatment group such as social skills, maturity and intellectual ability. For some 20 year olds with intellectual disabilities, the 'special needs' programme was seen as better meeting their needs. Some of the 13 year olds included in the children's programmes were often later moved to the youth programmes when it was considered appropriate.

There was a statistically significant difference between the groups on age at referral (F (3, 698) = 40.54, $p < 0.000$). On average, children were younger (M = 11.6, SD = 1.1) at first referral (as would be expected) compared with 'special needs' youth (M = 14.7, SD = 1.5) and other male youth (M = 14.4, SD = 1.6).

[9] Two individual's were re-referred to the children's programme when aged 12 years.
[10] This group refers to male youths (13+ years) who did not have 'special needs'.

Ethnicity

Ethnicity is presented here based on the prioritising of ethnic group as this allowed comparisons to be made between ethnic groups without individuals being included in more than one ethnic group (Statistics New Zealand, 2004). For example, individuals identified as Māori and Pakeha[11] were coded as Māori using the prioritising methodology. Ethnicity based on recording of multiple responses is presented in Appendix C.

Ethnicity for the total sample and each of the three special populations is presented in Table 6. More than half (56%, *n* = 395) of the children and youth referred were of European ancestry (Pakeha). The next largest ethnic group was Māori (31%, *n* = 215) and then those of Pacific Island origin (8%, *n* = 56) including Samoan, Tongan, Nuiean, Fijian, Fiji India and Cook Islanders. This pattern of ethnic distribution was consistent across the three special populations of interest.

Table 6. Ethnicity – Using prioritising of ethnic group

Group	'Special needs'		Children		Females		Male Youth		Total	
Ethnicity	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
European/Pakeha	81	59.6	18	51.4	7	53.8	289	55.8	395	56.3
Māori	35	25.7	9	25.7	6	46.2	165	31.9	215	30.6
Pacific Island	10	7.4	8	22.9	0	0.0	38	7.3	56	8.0
Other (e.g., Asian)	2	1.5	0	0.0	0	0.0	11	2.1	13	1.9
Unknown	8	5.9	0	0.0	0	0.0	15	2.9	23	3.3
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

Analysis revealed that there were statistically significant differences between the sites on ethnicity (χ^2 (10) = 69.41, $p < 0.000$). Differences were noted in that the majority (72%) of youth referred in Christchurch were European, while about half of those referred in Auckland (53%) and Wellington (47%) were European/Pakeha. About a quarter (24%) of those referred to Auckland and a fifth (20%) of those referred to Wellington were Māori compared with only 9% in Christchurch. About 11% of youth referred to Auckland were identified as being of Pacific Island ethnicity compared with 8% in Wellington and 5% in Christchurch.

Living / placement histories

Children and youth included in this study were living in a range of situations at the time of assessment (see Table 7). Overall, 50% (*n* = 350) of the total sample were living with immediate family (e.g., parent/s and step/defacto parents), 12% (*n* = 83) with extended

[11] NZ Māori word referring to New Zealanders of European descent.

family/whānau (e.g., grandparents and aunts and uncles), and a third (33%, *n* = 231) in non-familial care (e.g., Family Homes, foster care and CYF residential care facility). Other out-of-home placements included family friends, residence for those with intellectual disabilities (e.g., Spectrum Care or IHC), boarding school and independent living. Amongst the three special populations there appears to have been higher rates of 'special needs' and female youth living in non-familial placements (52%, *n* = 70; and 69%, *n* = 9 respectively) compared with children (37%) and male youth (27%).

Table 7. Living situation at time of referral

Group	'Special needs'		Children		Females		Male Youth		Total	
Placement	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Mother & Father	15	11.0	1	2.9	1	7.7	90	17.4	107	15.2
One biological parent only	29	21.3	13	37.0	2	15.4	111	21.4	155	22.1
Father & partner	2	1.5	0	0.0	0	0.0	27	5.2	29	4.1
Mother & partner	8	5.9	1	2.9	0	0.0	50	9.7	59	8.4
Extended family	10	7.4	7	20.0	1	7.7	65	12.5	83	11.8
Non-familial care	70	51.5	13	37.1	9	69.2	139	26.8	231	32.9
Other	2	1.5	0	0.0	0	0.0	24	4.6	26	3.7
Unknown	0	0.0	0	0.0	0	0.0	12	2.3	12	1.7
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

Overall, 44% (*n* = 312) of the total sample of children and youth had changed their place of residence due to the discovery/disclosure of their sexually inappropriate behaviour. Almost half (46%, *n* = 323) of sexually abusive children and youth had been, or currently were, in the guardianship and/or custody of the Department of Child Youth and Family at the time of referral to the specialised community treatment programmes (e.g., due to care and protection concerns).

Placement history

Information on placement histories contained within programme files varied from detailed through to sketchy. Data were recorded only where the information was clear; thus the information summarised here represents "at least" data. That is, if it was clear that the youth had had three out-of-home placements then these data were recorded. If information suggested more out-of-home placements but the details or number of other placements were not clear then this information was not recorded. Records indicated that many youth may also have been placed in Respite Care at various points. These data was not clearly reported in most files and so was not examined in this study. Information on out-of-home placements was available in the programme files of 679 youth.

Overall, 57% (*n* = 389) of the total sample had experienced at least one out-of-home placement prior to assessment (see Table 8). Slightly more children (63%, *n* = 22), 'special needs' youth (68%, *n* = 90) and females (77%, *n* = 10) had experienced one or more out-of-home placement compared to male youth.

Table 8. Number of out-of-home placements

Group	'Special needs'		Children		Females		Male Youth		Total	
Number of placements	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
0	42	31.8	13	37.1	3	23.1	232	46.5	290	42.7
1 to 2	52	39.4	14	40.0	4	30.8	158	31.7	228	33.6
3 to 4	24	18.2	4	11.4	3	23.1	45	9.0	76	11.2
5 to 9	12	9.1	3	8.6	0	0.0	54	10.8	69	10.2
10 to 19	1	0.8	1	2.9	2	15.4	8	1.6	12	1.8
20 to 30	1	0.8	0	0.0	1	7.7	1	0.2	3	0.4
Multiple (unspecified)	0	0.0	0	0.0	0	0.0	1	0.2	1	0.1
Total	**132**	**100.0**	**35**	**100.0**	**13**	**100.0**	**499**	**100.0**	**679**	**100.0**
Unknown	4	-	-	-	-	-	19	**-**	23	-

There was considerable variation in the number of out-of-home placements children and youth were known to have experienced, ranging from none through to one youth who was known to have experienced at least 27 out-of-home placements. The average number of out-of-home placements experienced prior to assessment was just under two (*M* = 1.9, *SD* = 4.7). The average number of out-of-home placements that female youth had experienced was 5.3 (*SD* = 8.0) compared with two placements (*SD* = 2.8) for 'special needs' youth, 1.5 placements (*SD* = 2.2) for children and 1.9 (*SD* = 8.0) for male youth. There was no significant difference between the groups (F (3, 675) = 2.26, $p > 0.05$).

At least 90% (*n* = 616) of the total sample had lived with their immediate family/whānau and 30% (*n* = 201) with extended family/whānau for at least some period of time prior to assessment. Almost a quarter (24%, *n* = 163) had lived in Family Homes, and 29% (*n* = 201) had lived with extended family. Many had also lived in foster care (22%, *n* = 153) or residential facilities (5%, *n* = 100). Other placements included living with family friends, independent living, prison and residential schools.

Educational history

Results indicate that, at the time of referral to the treatment programmes, 79% (*n* = 552) of the total sample were attending school or involved in some other education or training course. Small numbers of youth were engaged in full or part-time employment or were unemployed (i.e., those of working age and available to work, yet without paid employment) (see Table 9).

Educational and training venues included primary, intermediate and secondary schools, polytechnics, 'special needs' schools/classes, Correspondence School, residential schools, working training courses and apprenticeships.

Table 9. Education, training or employment status

Group	'Special needs'		Children		Females		Male Youth		Total	
Status	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Education/training	112	82.3	32	91.4	12	92.3	396	76.4	552	78.6
Working (full/part time)	3	2.2	0	0.0	0	0.0	18	3.5	21	3.0
Unemployed	6	4.4	0	0.0	1	7.7	39	7.5	46	6.6
Unknown	15	11.0	3	8.6	0	0.0	65	12.5	83	11.8
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

Just over 8% (*n* = 59) of the total sample had left school by the time they were referred to one of the specialist community treatment programmes. The average age of the total sample when they left school[12] was 15.14 years (*SD* = 1.444), with more than half (61%, *n* = 36) of school leavers leaving school at 15 or 16 years of age (see Table 10). Nine (7%) of the 'special needs' youth, two females and 9% (*n* = 48) of male youth were known to have left school prior to referral to the treatment programmes.

Table 10. Age when children and youth left school

Group	'Special needs'		Children		Females		Male Youth		Total	
Age left school (years)	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
10 to 13	1	0.7	-	-	-	-	5	1.0	6	0.9
14	0	0.0	-	-	-	-	10	1.9	10	1.4
15	1	0.7	-	-	-	-	16	3.1	17	2.4
16	5	3.7	-	-	2	15.4	12	2.3	19	2.7
17	1	0.7	-	-	-	-	4	0.8	5	0.7
18	1	0.7	-	-	-	-	1	0.2	2	0.3
Unknown	18	13.3	3	8.6	-	-	94	18.1	115	16.4
Still attending school	109	80.1	32	91.4	11	84.6	376	72.6	528	75.2
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

School factors

Table 11 summarises reported histories of truancy, expulsions and suspension, and bullying experienced by the sexually abusive children and youth prior to referral. It can be seen that females had the lowest rates of reported expulsion/suspensions from schools and experiences

[12] Since 1993 the legal school leaving age in New Zealand has been 16 years.

of bullying compared to 'special needs' youth, male youth and children. Compared to the other groups, youth in the 'special needs' group appear to have been more vulnerable to experiencing bullying.

Table 11. History of truancy, expulsions and suspensions, and victim of bullying

Group	'Special needs'		Children		Females		Male Youth		Total	
Variable	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Expelled/suspended	38	27.9	11	31.4	2	15.4	140	27.0	191	27.2
Truancy	16	11.8	5	14.3	2	15.4	97	18.7	120	19.1
Bullying	34	25.0	6	17.1	0	0.0	75	14.5	115	16.4

Abuse histories

Childhood sexual abuse

As can be seen in Table 12, more than a third (38%) of the total sample were reported as having experienced childhood sexual abuse (CSA). There was a significant difference between treatment groups (χ^2 (3) = 17.74, $p < 0.000$). It can be seen that females had higher rates of experiencing CSA when compared with all the other groups. Further analysis indicated that females were significantly more likely to have experienced CSA compared with 'special needs' youth (χ^2 (1) = 4.23, p < 0.05), children (χ^2 (1) = 4.41, $p < 0.04$) and male youth (χ^2 (1) = 10.52, $p < 0.002$). 'Special needs' youth were also more likely to have experienced CSA compared with male youth (χ^2 (1) = 8.44, $p < 0.005$). There was no significant difference in levels of CSA between children and male youth (χ^2 (1) = 1.25, $p > 0.05$) and children and 'special needs' youth (χ^2 (1) = 0.20, $p > 0.05$).

Table 12. Victims of Child Sexual Abuse (CSA)

Group	'Special needs'		Children		Females		Male Youth		Total	
Victim of CSA	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
No report of CSA	72	52.9	20	57.1	3	23.1	344	66.4	439	62.5
Yes	64	47.1	15	42.9	10	77.0	174	33.6	263	37.5
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

The average age at which children and youth reportedly first experienced CSA was 7 years (*SD* = 3.8), with a range from less that 12 months old through to 17 years (see Table 13). Approximately 80% were first sexually abused before 13 years of age.

Table 13. Approximate age when first sexually abused

Group	'Special needs'		Children		Females		Male Youth		Total	
Age (years)	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
1 to 11 months	3	4.7	1	6.7	-	-	5	2.9	9	3.4
1 to 4	12	18.8	4	26.7	-	-	38	21.8	54	20.5
5 to 9	22	34.4	3	20.0	5	50.0	66	37.9	96	36.5
10 to 12	14	21.9	2	13.3	3	30.0	31	17.8	50	19.0
13 to 17	5	7.8	0	0.0	0	0.0	12	6.9	17	6.5
Unknown	8	12.5	5	33.3	2	20.0	22	12.6	37	14.1
Total	**64**	**100.0**	**15**	**100.0**	**10**	**100.0**	**174**	**100.0**	**263**	**100.0**

The average age at first experiencing CSA among 'special needs' youth was 7 years (*SD* = 3.9) and 7 years (*SD* = 3.8) amongst male youth. The average age for those referred to the children's programme when they first experienced CSA was 5 years (*SD* = 4.0), while the age females were first victims of CSA averaged 8 years (*SD* = 2.5). There was no significant difference in the mean age between groups at age of first CSA (F (3, 222) = 0.90, $p > 0.05$).

Overall, more than half (*n* = 139, 53%) of the total sample were sexually abused by an adult (18 years and older), 27% (*n* = 72) by an adolescent (aged 13 to 17 years) and 5% (*n* = 12) by a child (under 13 years). For the 'special needs', female and children's groups, the majority of perpetrators were also adults (see Table 14). Small numbers of children (under 13yrs) were reported to be perpetrators of CSA against the total sample and 'special needs', and children groups. None of the females were reported to have sexually abused by a child/ren.

Table 14. Age group of perpetrators of Child Sexual Abuse (CSA) experienced

Group	'Special needs'		Children		Females		Male Youth		Total	
Perpetrators age	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Child/ren	2	3.1	1	6.7	0	0.0	9	5.2	12	4.6
Adolescent/s	17	26.6	3	20.0	1	10.0	51	29.3	72	27.4
Adult/s	34	53.1	10	66.7	8	80.0	87	50.0	139	52.9
Mixed age	6	9.4	0	0.0	1	10	15	8.6	5	1.9
Unknown	5	7.8	1	6.7	0	0.0	12	6.9	35	13.3
Total	**64**	**100.0**	**15**	**100.0**	**10**	**100.0**	**174**	**100.0**	**263**	**100.0**

Data on the gender of the perpetrators of the CSA indicated that 78% (*n* = 206) of the total sample had been sexually abused by males, 11% (*n* = 28) by females and 5% (*n* = 13) by both males and females. Within the 'special needs' group, the figures were 77% (*n* = 49) male, 11% (*n* = 7) female and 5% (*n* = 3) were abused by both male and female perpetrators. All those in the female and children's groups had been sexually victimised by male offenders.

The duration of the CSA experienced is summarised in Table 15. Forty-five percent (*n* = 75) of children and youth had experienced CSA for less than 12 months, while more than a third had experienced CSA over a one to five year period (39%, *n* = 64). Due to the amount of missing data (37%, *n* = 97), data on the duration of CSA victimisation are not reported separately for each group.

Table 15. Duration of CSA

Minimum duration	*n*	%
0 - 6m	70	42.2
7 – 12m	5	3.0
1 to 2 years	15	9.0
2 to 5 years	49	29.5
5 to 10 years	14	8.4
10+ years	6	3.6
Ongoing (period not specified)	7	4.2
Total	**166**	**100.0**

Most children and youth (95%, *n* = 304) knew the perpetrator of their own CSA with more than half (*n* = 171, 53%) of the known perpetrators of CSA related to the children and youth including biological, adoptive and whāngai mothers and fathers, stepfathers (includes mothers' de facto partner), grandparents and biological, half and step siblings. Approximately 41% (*n* = 133) of perpetrators were known to the children and youth but were unrelated (e.g., family friends, teachers, baby sitters and foster siblings). These data are summarised in Table 16. It can be seen that children and females were more likely to be sexually abused by a relative compared with 'special needs' and male youth.

Table 16. Relationship of perpetrator of sexual abuse to children and youth

Group	'Special needs'		Children		Females		Male Youth		Total	
Relationship	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Known – relative/s	30	46.9	9	60.0	7	70.0	125	47.5	171	65.0
Known – unrelated	26	40.6	6	40.0	3	30.0	98	37.3	133	50.6
Stranger/s	5	7.8	0	0.0	0	0.0	11	4.2	16	6.1

For those who had experienced CSA, the nature of the abuse was not recorded for 139 children and youth; therefore only data for the total sample are reported. It was known that 96% (*n* = 119) of the total sample were victims of 'hands on' offences such as vaginal and anal penetration, sexualised touching, and oral genital contact, 2% (*n* = 2) were victims of 'hands off' offences (e.g., voyeurism, indecent exposure) and 2% (*n* = 3) were victims of both 'hands on' and 'hands off' offences.

Childhood physical abuse

Of the total sample, 39% (*n* = 272) had records indicating they had experienced childhood physical abuse (CPA) (see Table 17). A higher percentage of females (62%, *n* = 8) had a history of CPA but there was no significant difference in CPA between the groups (χ^2 (3) = 6.68, *p* > 0.05).

Table 17. Victim of Childhood Physical Abuse (CPA)

Group	'Special needs'		Children		Females		Male Youth		Total	
Victim of CPA	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
No report of CPA	74	54.4	22	62.9	5	38.5	329	63.5	430	61.3
Yes	62	45.6	13	37.1	8	61.5	189	36.5	272	38.7
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

Table 18 provides a summary of the age at which children and youth were first victims of CPA. The average age at which the total sample first experienced CPA was 4 years (*SD*= 4.1). The average age at which 'special needs' youth first experienced CPA was 2.9 years (*SD* = 3.4). The average age of first experience of CPA among children was 3.9 years (*SD* = 3.3, aged less than one year to 11 years). The age the females were first physically abused ranged from 3 to 9 years with an average of 6.4 years (*SD* = 2.7). The average male youth' first experienced CPA was 4.7 years (*SD* = 4.3). There was no significant difference in the mean age between groups at age of first CPA (*F* (3, 176) = 2.44, *p* > 0.05).

Table 18. Approximate age when first physically abused

Group	'Special needs'		Children		Females		Male Youth		Total	
Age (years)	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
1 to 11 months	16	25.8	1	7.7	0	0.0	31	16.4	48	26.7
1 to 4	10	16.1	6	46.2	2	25.0	35	18.5	53	29.4
5 to 9	10	16.1	1	7.7	3	37.5	42	22.2	56	31.1
10 to 12	1	1.6	1	7.7	0	0.0	13	6.9	15	8.3
13 to 15	1	1.6	0	0.0	0	0.0	7	3.7	8	4.4
Unknown	24	38.7	3	23.1	3	37.5	61	32.3	92	33.8
Total	**62**	**100.0**	**13**	**100.0**	**8**	**100.0**	**189**	**100.0**	**272**	**100.0**

There was considerable variability in the length of time that children and youth were reported to have been victims of CPA, and, in many cases, it was reported as a minimum period (e.g., "a minimum of 4 years duration"). For many children and youth, their experience of being victims of CPA was ongoing, with half the youth being victims for more than 5 years (see Table 19).

Programme files recorded that 68% 'special needs' youth who experienced CPA were physically abused for more than one year and up to 16 years. Programme files recorded that

92% (*n* = 12) of children who were sexually abusive who experienced CPA were physically abused for more than two years and up to 12 years. The duration of the physical abuse female youth had experienced ranged from once through to 3 years. Overall, reports indicated that females were exposed to physical abuse for shorter periods of time compared with the total sample, children and 'special needs' youth experienced CPA over extended periods. Statistical analysis of the difference between groups in CPA duration is not possible due to the small numbers in some cells (e.g., for females).

Table 19. Duration of CPA

Group	'Special needs'		Children		Females		Male Youth		Total	
Minimum duration	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
0 - 6m	2	3.2	-	-	1	12.5	3	1.6	6	2.9
7 – 12m	0	0.0	-	-	1	12.5	19	10.1	20	9.7
1 to 2 years	2	3.2	-	-	1	12.5	7	3.7	10	4.9
2 to 5 years	4	6.5	4	30.8	3	37.5	16	8.5	27	13.1
5 to 10 years	12	19.5	2	15.4	0	0.0	36	19.0	50	24.3
10+ years	15	24.2	3	23.1	0	0.0	34	18.0	52	25.2
Ongoing (period not specified)	9	14.5	3	23.1	2	25.0	27	14.3	41	19.9
Unknown	18	29.0	1	7.7	0	0.0	47	24.9	66	24.3
Total	**62**	**100.0**	**13**	**100.0**	**8**	**100.0**	**189**	**100.0**	**272**	**100.0**

File details indicated that the vast majority of children and youth were physically abused by adults (96%, *n* = 250). This was consistent with figures for the children, 'special needs' and female youth groups (see Table 20). A small number of children and youth were physically abused by adolescent(s) and by both adolescent(s) and adult(s).

Table 20. Age of perpetrator of CPA

Group	'Special needs'		Children		Females		Male Youth		Total	
Age	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Adolescent/s	2	3.2	0	0.0	0	0.0	4	2.1	6	2.2
Adult/s	52	83.9	13	100.0	8	100.0	177	93.7	250	91.9
Adolescent & adult	2	3.2	0	0.0	0	0.0	2	1.1	4	1.5
Unknown	6	9.7	0	0.0	0	0.0	6	3.2	12	4.4
Total	**62**	**100.0**	**13**	**100.0**	**8**	**100.0**	**189**	**100.0**	**272**	**100.0**

Data was contained within 259 files on the gender of the perpetrators of the physical abuse. It indicated that 67% had been physically abused by males, 15% by females and 17% by both males and females. The gender of perpetrators of CPA experienced by children, 'special needs', females and male youth are also included in Table 21.

Table 21. Gender of perpetrators of CPA experienced by sexually abusive children and youth

Group	'Special needs'		Children		Females		Male Youth		Total	
Perpetrator gender	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Male/s	40	64.5	8	61.5	4	50.0	122	64.6	174	64.0
Female/s	8	12.9	2	1.4	4	50.0	22	11.6	36	13.2
Male/s & female/s	8	12.9	2	15.4	0	0.0	37	19.6	47	17.3
Unknown	6	9.7	1	7.7	0	0.0	8	4.2	15	5.5
Total	**62**	**100.0**	**13**	**100.0**	**8**	**100.0**	**189**	**100.0**	**272**	**100.0**

The relationship of the perpetrator/s of the CPA that the total sample had experienced indicated that the majority of perpetrators were biological, adoptive or whāngai parents, or people in parental rolls (e.g., step parents) (see Table 22). It also appeared that females were more likely to be reported to have been physically abused by their mother (63%, *n* = 5) as opposed to their father (13%, *n* = 1).

Table 22. Relationship of perpetrator of physical abuse to children and youth

Group	'Special needs'		Children		Females		Male Youth		Total	
Relationship	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**[13]
Mother	16	25.8	4	30.8	5	62.5	46	24.3	71	26.1
Father	28	45.2	9	69.2	1	12.5	82	43.4	120	44.1
Step/de facto mother or father	17	27.4	5	38.5	3	37.5	63	33.3	88	32.4
Extended family member/s	7	11.3	0	0.0	0	0.0	31	16.4	40	14.7
Friend/Acquaintance/Family friend	0	0.0	1	7.7	0	0.0	3	1.6	4	1.5
Non-familial caregiver[14]	1	1.6	0	0.0	0	0.0	8	4.2	9	3.3

Overall, it was found that 20% (*n* = 143) of the total sample had experienced both CSA and CPA. More females (46%, *n* = 6) and 'special needs' youth (27%, *n* = 36) had experienced both CSA and CPA compared with children (17%, *n* = 6) and male youth (18%, *n* = 95).

Other childhood abuse

Other forms of abuse were not as regularly reported within children and youth files. Available information indicated that children and youth had also experienced a range of other forms of abuse (see Table 23). Females appear to be particularly vulnerable to also experiencing other forms of abuse.

[13] Some youths were physically abused by more than one perpetrator so multiple responses are included.
[14] Non-familial caregivers (e.g., CYF foster parent(s), orphanage caregiver) and others in positions of trust (e.g., teacher, baby sitter, crèche worker).

Table 23. Other abuse experienced

Group	'Special needs'		Children		Females		Male Youth		Total	
Victim of abuse	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Neglect	25	18.4	4	11.4	2	15.4	56	10.8	87	12.4
Emotional/Verbal	13	9.6	3	8.6	3	23.1	53	10.2	72	10.3
Neglect & emotional/verbal	27	19.9	8	22.9	4	30.8	75	14.5	114	16.2
No other abuse recorded	71	52.2	20	57.1	4	30.8	334	64.5	429	61.1
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

Socialisation and activities

Programme file records indicated that 46% (*n* = 326) of the total sample had social skills deficits (see Table 24). As would be expected, youth with 'special needs' were more likely to have social skills and peer relationship difficulties compared with all other groups.

Table 24. Socialisation problems and low self-esteem

Group	'Special needs'		Children		Females		Male Youth		Total	
Problem	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Social skills deficit	94	69.1	13	37.1	6	46.2	213	41.1	326	46.4
Poor peer relationships	88	64.7	15	42.9	2	15.4	201	38.6	306	43.6
Socially isolated	72	52.9	11	31.4	1	7.7	160	30.9	244	34.8
Low self-esteem	39	28.7	9	25.7	3	23.1	141	27.2	192	27.4

Over a quarter (27%, *n* = 192) of sexually abusive children and youth referred to the treatment programmes were reported to have low self-esteem. This was consistent across those with 'special needs', females and male youth and children.

Sports and hobbies

Approximately 55% (*n* = 389) of the total sample were involved in at least one sporting activity and 52% (*n* = 364) were actively engaged in at least one hobby at the time of assessment. Rates were similar for the children and 'special needs' groups, with 57% (*n* = 20) of children involved in sport and 54% (*n* = 19) reported to have at least one hobby. Data indicated that 55% (*n* = 75) of 'special needs' youth were involved with at least one sporting activity and 52% (*n* = 71) had at least one hobby and 56% (*n* = 289) male youth were involved in sport and 52% (*n* = 269) had at least on hobby. Compared to other groups, fewer females were involved in sporting activities (39%, *n* = 5) and had at least one hobby (39%, *n* = 5). The differences

between the groups were not statistically significant in terms of levels of engagement in sporting activities (χ^2 (3) = 1.59, $p > 0.05$) or hobbies (χ^2 (3) = 1.02, $p > 0.05$).

Co-morbid mental health, physical health and behaviour problems

Programme files indicated that 63% (n = 442) of children and youth had some level of generalised behavioural problems (see Table 25). Overall, 38% of the children and youths' behavioural problems were evident before the age of 10 years. There was a statistically significant difference in reported levels of generalised behaviour problems (e.g., anger problems, aggressive, violent and physically abusive behaviour) between groups (χ^2 (3) = 11.91, $p < 0.01$) with 'special needs' youth (74%, n = 100) having significantly higher reported levels of behaviour problems compared with children (χ^2 (1) = 4.87, $p < 0.03$) and male youth (χ^2 (1) = 8.17, $p < 0.05$). Rates of behavioural problems were also high amongst the females (85%, n = 11). Other problems included animal cruelty, fire-setting behaviours and symptoms consistent with Attention Deficit Hyperactivity Disorder (ADHD), Conduct Disorder, and Oppositional Defiant Disorder.

Table 25. Behaviour problems, mental health problems and suicide/self-harm history

Group	'Special needs'		Children		Females		Male Youth		Total	
Problem	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
History of generalised behaviour problems	100	73.5	19	54.3	11	84.6	312	60.2	442	63.0
History of one or more mental health problem/s	118	86.8	16	45.7	8	61.5	315	60.8	457	65.1
History of suicidal thoughts, suicide attempts &/or deliberate self-harm	24	17.6	7	20.0	6	46.2	150	29.0	187	26.6

Data indicated that 65% (n = 457) of the total sample had a history of one or more mental health problem(s) (see Table 25). There was a statistically significant difference between the groups (χ^2 (3) = 38.15, $p < 0.000$). Rates were significantly higher amongst 'special needs' youth compared with children (χ^2 (1) = 27.67, $p < 0.000$), females (χ^2 (1) = 5.78, $p < 0.02$) and male youth (χ^2 (1) = 32.43, $p < 0.000$). Children and youth presented with a range of psychological symptoms including 21% with symptoms of depression, 12% with anxiety problems, 7% with significant symptoms of post traumatic distress and 16% had difficulties forming secure attachments. Four percent of children and youth were recorded as having an Autistic Spectrum Disorder (Autism and Asperger's).

Approximately 6% (n = 45) of children and youth had suffered from a head injury. About 5% (n = 33) had health problems including diabetes and epilepsy. A quarter (28%, n = 197) of the

total sample had a learning/literacy deficit, 2% (*n* = 17) had speech and language difficulties and 5% (*n* = 38) had developmental disorders.

Other problems noted included enuresis, encopresis, physical disabilities, chromosomal abnormalities, motor co-ordination problems, effects of Foetal Alcohol Syndrome, and hearing impairments.

As seen in Table 25, records indicated that 27% (*n* = 187) of the total sample had a history of suicidal thoughts, attempted suicide and/or deliberate self-harm. Approximately 9% of the total sample were reported to have had suicidal thoughts, attempted suicide and/or deliberate self-harm while they were attending the treatment programmes. There were statistically significant differences between subgroups in terms of history of suicidality and deliberate self-harm (χ^2 (3) = 10.37, $p < 0.02$). 'Special needs' youth were significantly less likely to have a reported history of suicidality and deliberate self-harm compared with females (χ^2 (1) = 6.00, $p < 0.02$) and male youth (χ^2 (1) = 7.06, $p < 0.01$).

Records indicated that 22% (*n* = 156) of the total sample had and/or currently used substances. The most common substances that children and youth were misusing were alcohol (19%, *n* = 131) and hallucinogens (17%, *n* = 123). Other drugs that the children and youth reported using included speed and opiates (see Table 26).

Table 26. Reported history of substance misuse

Drug	*n*	%
Alcohol	131	18.7
Hallucinogens (Marijuana, Hashish, Cannabis oil)	123	17.2
Other Hallucinogens (LSD, Acid, Magic Mushrooms)	8	1.1
Solvents (e.g., glue, paint, petrol, fly spray)	26	3.7
Amphetamines / Methamphetamines	7	1.0
Pills – unspecified	3	0.4
Opiates	1	0.1
Other – unspecified	1	0.1
Unknown	17	2.4

Reported rates of substance misuse were highest amongst male youth (21%, n = 109) and 'special needs' youth (19%, *n* = 26), compared with children (6%, *n* = 21) and females (none had a reported substance abuse problem).

Offending histories

The children and youth who were referred to the three main specialised community treatment programmes in New Zealand had a varied history of offending. This section summaries their known history of sexual and nonsexual offending.

The main characteristics of the victims of their sexual offending are presented. The offences and victims described here are representative only and are likely to indicate a minimum level of offending. Details for many offences and/or victims were unclear and so could not to be included. This was particularly true for children and youth involved in indecent exposure and other 'hands off' offences. For example, at the extreme end, one youth was estimated to have approximately 65 victims; however, only five victims were identified in any detail within their file. Another youth was reported as rubbing himself against girls (frottage) at school numerous times and indecently exposed himself to other boys in care facilities, but details of many of his victims were not recorded in the programme file. Anecdotal evidence suggests that reasons for this are that children and youth may not clearly recall all their victims, children and youth exposing themselves and masturbating in public may not be aware of all their victims and may not remember them all and so only representative offences may be recorded in files.

Sexual offending histories

Use of pornography

Overall, approximately half (48%, n = 334) of the total sample admitted to using pornographic material at least once (e.g., movies/TV, magazines, 0900 numbers and internet). Rates amongst the special populations were lower with 36% (n = 49) of 'special needs' youth having access to pornography, 31% (n = 4) of female youth and 37% (n = 13) of children compared with male youth (52%, n = 268). Statistically there was a significant difference in use of pornography between groups (χ^2 (3) = 13.87, p < 0.004), with significantly higher use of pornography by male youth compared with those with 'special needs' (χ^2 (1) = 10.64, p < 0.002).

Justice involvement for sex offending prior to treatment

In Table 27, it can be seen that half (49.7%, n = 349) of the total sample had involvement with the justice system for sexually abusive behaviour(s) before entering the programme. This may have been for a previous offence(s) and/or the current index offence(s). Compared with all other groups, children had less prior contact with the justice system (14%, n = 5); all had attended an FGC. The total sample was recorded as having been involved with a range of youth and adult justice systems including; CYF Family Group Conferences (FGC's) convened under both Care and Protection and Youth Justice provisions of the Children, Young Persons and Their Families Act (1989), Police involvement (e.g. Youth Aid, Police diversion, cautions

and warnings, charges) and Youth, District and High Court appearances resulting in a conviction or case proven[15] outcome. Due to the structure of the Youth Justice system in New Zealand, youth may have Court involvement as well as having attended an FGC for their offending. It is not statistically appropriate to explore any statistically significant differences between the groups as some cells had an expected count of less than five.

Table 27. Justice system involvement for sexually abusive behaviour(s) prior to assessment

Group	'Special needs'		Children		Females		Male Youth		Total	
Agency	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**[16]
FGC[17]	49	36.0	5	14.3	7	53.8	189	36.5	250	35.6
Police involvement	5	3.7	0	0.0	0	0.0	62	12.0	67	9.5
Court– Convicted	22	16.2	0	0.0	1	7.7	63	12.2	86	12.3
No known justice system involvement	72	52.9	30	85.7	6	46.2	245	47.3	353	50.3

Number of victims of inappropriate sexualised behaviour

There was a large range in the number of known and identifiable human victims of sexual abuse and these are summarised in Table 28. One youth referred to the programmes had no human victims as all his offending had involved bestiality. For the remaining 701 children and youth the range was from 1 to 31 identifiable victims (*M* = 3.2, *SD* = 3.0, *Mdn* = 2). Overall, one third (33%) had one known and identifiable victim, 19% had at least two victims, 16% had at least three, 11% had at least four, 9% had at least five victims, and 4% had at least six victims. The remaining 7% had seven or more identified victims.

The number of known victims ranged between one and thirty-one victims (*M* = 4.6, *SD* = 4.1, *Mdn* = 4) for those in the 'special needs' group, with 80% having six or less identified victims. The number of known victims ranged between one and four victims (*M* = 2, *SD* = 1.1, *Mdn* = 2) for female sexually abusive youth. The number of victims for children who engaged in sexually abusive behaviours ranged from one to 13 victims (*M* = 4.6, *SD* = 4.1, *Mdn* = 3). For male youth the average number was 3 victims (*M* = 2.8, *SD* = 2.5, *Mdn* = 2).

[15] Youth Court outcomes are reported as 'proven' but these equate to a guilty outcome in the adult justice system
[16] Some youth were involved with more than one justice agency so multiple responses are included.
[17] Family Group Conferences (FGC)

Table 28. Number of identified human victims

Group	'Special needs'		Children		Females		Male Youth		Total	
Number of victims	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
1	27	19.9	8	22.9	4	30.8	191	36.9	230	32.8
2	19	14.0	9	25.7	5	38.5	99	19.1	132	18.8
3	19	14.0	5	14.3	2	15.4	85	16.4	111	15.8
4	15	11.0	4	11.4	2	15.4	57	11.0	78	11.1
5 to 10	48	35.3	6	17.1	-	-	73	14.1	127	18.1
11 or more	8	5.9	3	8.6	-	-	12	2.3	23	3.3
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**517**	**100.0**	**701**	**100.0**

As the data did not meet the assumptions of a normal distribution, and the groups are of unequal size, the Kruskal-Wallis non-parametric test was used to assess difference in means between the groups. There was a difference in the number of identified victims between the groups (H (3) = 38.32, p > 0.000). Mann-Whitney tests were used to follow-up this finding. A Bonferrori correction was applied and so all effects are reported at a 0.0125 level of significance. It appeared that the 'special needs' group (Mdn = 4) had a greater number of identified victims compared with the female (Mdn = 2) (U = 492.5, r = -0.22) and male youth (Mdn = 2, U = 23749, r = -0.23) groups.

Victim and offence preferences

As seen in Table 29, more than half (52%, n = 367) of the total sample victimised females only, while just over a third (34%, n = 236) victimised both male and females and 12% (n = 85) only had male victims. 'Special needs' youth had less gender preference for their victims and were more likely to abuse both males and females (48%, n = 65) compared with all other groups.

Table 29. Victim gender preferences of sexually abusive children and youth

Group	'Special needs'		Children		Females		Male Youth		Total	
Gender preference	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Male only	10	7.4	8	22.9	3	23.1	64	12.4	85	12.1
Female only	59	43.4	13	37.1	5	38.5	290	56.0	367	52.3
Male and female	65	47.8	14	40.0	5	38.5	152	29.3	236	33.6
Bestiality only	0	0.0	0	0.0	0	0.0	1	0.2	1	0.1
Unknown	2	23.5	0	0.0	0	0.0	11	2.1	12	1.9
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

The type of sexually abusive behaviours ('hands on' or 'hands off') children and youth engaged in is presented in Table 30. Overall, preferences were distributed fairly equally across 'hands on' sexually abusive behaviour only (e.g., vaginal penetration, sexualised touching), 'hands off' sexually abusive behaviour only (e.g., voyeurism, exposure) and those who engaged in both

'hands off' and 'hands on' sexually abusive behaviours. When looking at the special populations, females appear to have engaged in more 'hands off' behaviours while children engaged in higher rates of both 'hands on' and 'hands off' behaviours.

Table 30. Sexually abusive behaviour preferences of sexually abusive children and youth

Group	'Special needs'		Children		Females		Male Youth		Total	
Offence type	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
'Hands on' offences only	32	23.5	12	34.3	4	30.8	143	27.6	191	27.2
'Hands off' offences only	51	37.5	9	25.7	6	46.2	189	36.5	255	36.3
'Hands on' & 'hands off'	51	37.5	14	40.0	3	23.1	164	31.7	232	33.0
Bestiality only	0	0.0	0	0.0	0	0.0	1	0.2	1	0.1
Unknown	2	1.5	0	0.0	0	0.0	21	4.1	23	3.3
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

Age when first engaged in sexually abusive behaviour(s)

See Table 31 for a summary of the age (years) of the children and youth when they were known to have first engaged in sexually abusive behaviour(s). The average age at which children and youth were first known to have engaged in sexually abusive behaviour was 11.9 years (*SD* = 3.1, aged 2 to 19 years). The most common ages for the total sample to have been sexually abusive were 12 years (15%), 13 years (17%) and 14 years (16%) years. Data indicated that 1% first engaged in sexually abusive behaviour before the age of five, and 20% between the ages of five and nine years.

The average age of the 'special needs' youth's first known sexual offence was approximately 12.0 years (*SD* = 2.9, aged 5 to 17 years); the average age of the female youth's first known sexual offence was 12.8 years (*SD* = 2.6, aged 7 to 16 years); the average age of children when they were known to have first engaged in sexually inappropriate behaviour was 9.4 years (*SD* = 2.4, aged 4 to 13 years); and the average age for the male youth was 12.0 years (*SD* = 3.1, aged 2 to 19 years). There was a statistically significant difference between the groups at the mean age for first known sexually abusive behaviour(s) (F (3, 595) = 7.31, $p < 0.000$). Post hoc analysis indicated that, on average, those in the children's group (*M* = 9.4 years, *SD* = 2.4) were younger at first identified offence compared with females (*M* = 12.8 years, *SD* = 2.6), 'special needs' (*M* = 12.0 years, *SD* = 2.9) and male youth (*M* = 10.0 years, *SD* = 3.1).

Table 31. Age at first known sexually inappropriate offence

Group	'Special needs'		Children		Females		Male Youth		Total	
Age first offence (years)	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
2	-	-	-	-	-	-	1	0.2	1	0.1
3	-	-	-	-	-	-	2	0.4	2	0.3
4	-	-	1	2.9	-	-	4	0.8	5	0.7
5	2	1.5	0	0.0	-	-	10	1.9	12	1.7
6	3	2.2	2	5.7	-	-	18	3.5	23	3.3
7	6	4.4	6	17.1	-	-	17	3.3	29	4.1
8	10	7.4	1	2.9	-	-	19	6.7	30	4.3
9	4	2.9	4	11.4	1	7.7	16	3.1	25	3.6
10	7	5.1	5	14.3	1	7.7	24	4.6	37	5.3
11	5	3.7	1	2.9	1	7.7	32	6.2	39	5.6
12	18	13.2	8	22.9	2	15.4	64	12.4	92	13.1
13	26	19.1	1	2.9	0	0.0	74	14.3	101	14.4
14	17	12.5	-	-	1	7.7	77	14.9	95	13.5
15	9	6.6	-	-	1	7.7	40	7.7	50	7.1
16	7	5.1	-	-	2	15.4	35	6.8	44	6.3
17	4	2.9	-	-	-	-	6	1.2	10	1.4
18	-	-	-	-	-	-	3	0.6	3	0.4
19	-	-	-	-	-	-	1	0.2	1	0.1
Unknown	18	13.2	6	17.1	4	30.8	75	14.5	103	14.7
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

Gender and age of victims

A total of 2259 victims could be identified within programme files for the total sample of children and youth. Sixty-eight percent (*n* = 1567) of victims were female and 30% (*n* = 692) were male. The gender of 31 victims (1.4%) was unknown.

A total of 655 victims were identified as having been sexually abused by the 'special needs' youth offenders. Half of victims were known to be male and 37% (*n* = 244) were female (the rest were unknown). A total of 129 victims were identified as having been sexually abused by the 35 children who were sexually abusive. Thirty-four percent (*n* = 44) of victims were male, 64% (*n* = 83) were female and two (2%) abused both male and female victims. A total of 28 victims were identified as having been sexually abused by the 13 female offenders, ten (36%) of whom were male and 16 (57%) were female.

Table 32. Age of victims at first offence

Group	'Special needs'		Children		Females		Male Youth		Total	
Offence type	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
0 months to 4 years	62	17.2	19	16.5	5	17.9	214	15.9	300	14.8
5 to 9 years	190	52.8	46	40.0	9	32.1	500	37.3	745	36.8
10 to 12 yrs	101	28.1	34	29.6	5	17.9	222	16.5	362	17.9
13 to 17 years	115	31.9	9	7.9	4	14.3	232	17.3	360	17.8
Adult (18+ years)	69	19.2	7	6.1	5	17.9	169	12.6	250	12.3
Mix of ages[18]	3	0.8	0	0.0	0	0.0	5	0.4	8	0.4
Total	**540**	**100.0**	**115**	**100.0**	**28**	**100.0**	**1342**	**100.0**	**2025**	**100.0**
Victims' age unknown	115	-	14	-	0	-	124	-	234	-

Table 32 presents details on the age of victims. This information was recorded in some cases but in other instances the exact age was less clear. Victims ranged in age from infants under 12 months of age to adults. Overall, 12% (*n* = 250) of known victims of sexually abusive children and youth were adults (aged 18 years or older), while 87% of victims were 17 years or younger. Across all groups the most common victim age was 5 to 9 years.

Relationship of victim to perpetrator

The relationship between perpetrator and victim is summarised in Table 33. Similar patterns were evident amongst the three special populations, although 'special needs' youth had the highest rate of stranger victims (9%, *n* = 58). Almost a third (32%, *n* = 730) of the total sample were related to their victim/s including siblings (full, half, step or adoptive/whāngai), cousins and aunts. More than half (57%, *n* = 1295) were acquainted with their victims including friends and neighbours, school peers, other children in care placements and teachers/tutors. The most common relationship (36%) was that of friend/school peers (including four youth who sexually abused their girlfriends). Overall, only 7% (*n* = 148) of victims were unknown to their perpetrators. It is also worth noting that, overall, three percent (*n* = 61) of victims were recorded as having 'special needs'.

Table 33. Relationship of victim to perpetrator[19]

Group	'Special needs'		Children		Females		Male Youth		Total	
Relationship	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Family	150	22.9	27	24.5	10	35.7	543	37.0	730	32.3
Known, unrelated	400	61.1	76	69.0	17	60.7	802	54.7	1295	57.3
Strangers	58	8.9	2	1.8	1	3.6	87	5.9	148	6.6
Unknown	47	7.2	5	4.5	0	0.0	34	2.3	86	3.8
Total	**655**	**100.0**	**110**	**100.0**	**28**	**100.0**	**1466**	**100.0**	**2259**	**100.0**

[18] This was due to the offending involving flashing in public.

[19] For a more detailed breakdown of the relationship between perpetrator and victim see Appendix D.

Type of offending

Less than a fifth (19%, *n* = 419) of victims experienced 'hands off' offences only. Seventy-two percent (*n* = 1624) of victims experienced some form of 'hands on' offending. Approximately 8% (*n* = 175) were the victims of both 'hands on' and 'hands off' offences. More detailed description of the sexual offending is summarised in Table 34. For 60% (*n* = 1343) of victims their abusive experience involved indecent assault including touching of the breasts and genital areas. Other common forms of abuse included vaginal and anal penetration and oral contact (both perpetrator to victim and victim to perpetrator). The most common form of 'hands off' offending involved exposure by the perpetrator followed by stealing underwear and clothing and sexualised comments/language. These patterns of sexual offending were also seen amongst the victims of the children, 'special needs' and female and male youth. The only exception was that the victims of female youth did not engage in many penetrative acts.

Table 34. Type of sexual offences perpetrated on victims

Group	'Special needs'		Children		Females		Male Youth		Total	
Offence type	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**[20]
'Hands off'										
Stealing clothing	31	4.7	5	3.9	0	0.0	80	5.5	116	5.1
Exposure	66	10.1	21	16.3	2	7.1	180	12.3	269	11.9
Voyeurism	11	1.7	1	0.8	0	0.0	73	5.0	85	3.8
Sexualised comments	29	4.4	17	13.2	4	14.3	96	6.5	146	6.5
Self masturbation (while victim present)	16	2.4	3	2.3	1	3.6	51	3.5	71	3.1
Calling 0900 numbers	0	0.0	0	0.0	0	0.0	2	0.1	2	0.1
Obscene phone calls or letters	3	0.5	1	0.8	0	0.0	8	0.5	12	0.5
Stalking	4	0.6	0	0.0	0	0.0	3	0.2	7	0.3
Asking for sex	2	0.3	0	0.0	0	0.0	6	0.4	8	0.4
Forced victim to engage in sexual behaviour with another	0	0.0	2	1.6	0	0.0	0	0.0	2	0.1
'Hands on'										
Vaginal penile penetration	98	15.0	13	10.1	0	0.0	245	16.7	356	15.8
Anal penile penetration	97	14.8	7	5.4	0	0.0	168	11.5	272	12.0
Oral contact	76	11.6	12	9.3	4	14.3	267	25.3	359	15.9
Sex violation/indecent assault	271	41.4	87	67.4	21	75.0	998	68.1	1377	61.0
Digital penetration	45	6.9	10	7.8	1	3.6	106	7.2	162	7.2
Frottage	26	4.0	3	2.3	0	0.0	100	6.8	129	5.7
Simulating intercourse	11	1.7	0	0.0	0	0.0	28	1.9	39	1.7
Object penetration	1	0.2	0	0.0	2	7.1	15	1.0	18	0.8
Unknown	34	5.2	3	2.3	2	7.1	80	5.5	119	5.3

[20] Some victim's experienced more than one form of sexual abuse therefore multiple responses are included. Percentages are calculated as a percentage of the total number of identified victims.

Frequency and duration of sexual offending

Data on the frequency (see Table 35) and duration (see Table 36) of the sexually abusive behaviour experienced by victims was not available in all cases. As offending frequency and duration data were missing for some victims (25%, *n* = 561 and 34%, *n* = 773 respectively), it is not reported here separately for the three special populations. Information that was available indicated that more than half (56%, *n* = 950) of known victims were victimised once, and 22% (*n* = 380) were victimised between 2 and 5 times.

Table 35. Frequency of sexual offending incidents

Frequency	*n*	%
Once	950	55.9
2 to 5	380	22.4
6 to 10	121	7.1
11 to 20	51	3.0
21 to 50	40	2.4
50 to 99	10	0.6
100+	37	2.2
Multiple (unspecified, included 'extensive' to over 9 years)	109	6.4
Total	**1698**	**100.0**
Missing	561	-

As seen in Table 35, most victims were victimised once. However, some were victimised more than once. Data in Table 36 indicates that about 6% (*n* = 93) experienced sexual abuse by the same perpetrator for between one day to 3 weeks, about 12% (*n* = 180) were abused for between 1 to 11 months and 12% (*n* = 173) for 1 to 2 years. A small percentage experienced more extensive sexual abuse and were abused for 3 or more years (see Table 36).

Table 36. Duration of sexual offending

Frequency	*n*	%
Less than one day (i.e., once)	950	63.9
1 day to 6 days	46	3.1
1 week to 3 weeks	47	3.2
1 month to 11 months	180	12.1
1 year to 2 years	173	11.6
3 years to 5 years	70	4.7
6+ years	20	1.3
Total	**1486**	**100.0**
Missing	773	-

Strategies to overcome human victims during sexual offending

File information indicated that children and youth had used a number of strategies in their sexual offending, with 34% (*n* = 240) using a single strategy (e.g., non-threatening grooming

behaviours) and a quarter (24%, *n* = 166) using more than one strategy to overcome or gain the co-operation of their victim(s). Overall, 43% (*n* = 301) of the total sample were not reported as using any strategies to overcome or gain the co-operation of their victims. It may be that, in some cases, the use of strategies may not have been disclosed and/or recorded in programme files.

The most common strategies (see Table 37) were the use of overt force during at least one offence, non-threatening grooming behaviours (e.g., engaging in sexually abusive behaviours within the context of game) and threats (physical, verbal or implied threats, threatening with a weapon). A small number of offenders took advantage of a victim's intoxicated state or had co-offenders. Females were less likely to be reported as having used force, grooming behaviours or threats during the commission of their inappropriate sexualised behaviours.

Table 37. Strategies to overcome victims during sexual offending

Group	'Special needs'		Children		Females		Male Youth		Total	
Strategy	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**[21]
No strategies reported	50	36.8	19	54.3	8	61.5	224	43.2	301	42.9
Force (includes violence)	52	38.2	6	17.1	1	7.7	125	24.1	184	26.2
Non-threatening grooming	24	17.6	8	22.9	1	7.7	125	24.1	158	22.5
Threats (physical, verbal)	36	26.5	6	17.1	2	15.4	111	21.4	155	22.1
Coercion	13	9.6	4	11.4	2	15.4	48	9.3	67	9.5
Bribes	4	2.9	1	2.9	1	7.7	23	4.4	31	4.4
Co-offenders	1	0.7	0	0.0	0	0.0	5	1.0	6	0.9
Victim intoxicated	0	0.0	0	0.0	0	0.0	3	0.6	3	0.4

Nonsexual offending histories

Justice involvement for non-sexual offending prior to treatment

Approximately 13% (12.7%, *n* = 89) of children and youth included in the study had involvement with the justice system for nonsexual offending before being referred to treatment programmes. The children and youth were recorded as having been involved with a range of both youth and adult justice systems, and some had been involved with more than one. The most common were CYF Family Group Conferences (FGC), Police involvement and Youth, District and High Court appearances (see Table 38).

[21] Some sexually abusive children and youths used more than one strategy therefore multiple responses are included.

Table 38. Justice system involvement for nonsexual offending prior to referral to programme

Group	'Special needs'		Children		Females		Male Youth		Total	
Agency	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**[22]
CYF - FGC	9	6.6	0	0.0	0	0.0	31	6.0	40	5.7
Police	12	8.8	1	2.9	0	0.0	31	6.0	44	6.3
Court	2	1.5	0	0.0	0	0.0	13	2.5	15	2.1
No known justice system involvement	117	86.1	135	99.3	12	100.0	496	95.8	613	87.3

As can be seen in Table 38, most children and youth had not had contact with the justice system for nonsexual offending. One individual (3%) in the children's group and none of the females had had justice system involvement for nonsexual offending. It was 'special needs' youth and male youth who had prior contact with the justice system, though the majority of both these groups (86% and 96% respectively) had not had justice involvement for nonsexual offending.

Type of nonsexual offending behaviours

As many children and youth had not had justice involvement for nonsexual criminal activities, much of this information was based on self or family/whānau disclosure and only represents the number of youth involved in each type of offence, *not* the frequency of offending.

File information indicated that 43% (n = 299) of the total sample were known to have been involved in non-sexual[23] offending prior to referral to the specialist community treatment programmes. Figures indicated that 54% (n = 73) of the 'special needs' youth, 40% (n = 14) of children, 40% (n = 207) of male youth and 5 female youth had engaged in nonsexual offending behaviours prior to referral. There was a statistically significant difference between groups in relation to levels of prior nonsexual offending (χ^2 (3) = 8.49, p < 0.04). Further analysis revealed that 'special needs' youth were significantly more likely to have a history of nonsexual offending compared with male youth (χ^2 (1) = 8.28, p < 0.005).

[22] Some youth were involved with more than one justice agency so multiple responses are included.

[23] Escape from lawful custody offences have been excluded from this study as protocol usually dictates that youth who are under the custody of the Chief Executive of CYF and runaway from their place of residence (e.g., Family Home or Residential Centre) are usually reported to the Police. Thus reports of escape from lawful custody may represent a youth who frequently absconded from care and not represent youth who escape from Police or prison custody.

Table 39. Nonsexual offending behaviours prior to referral

Group	'Special needs'		Children		Females		Male Youth		Total	
Offence(s)	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**[24]
Dishonesty	49	33.8	11	31.4	5	38.5	228	44.0	293	41.7
Assault and violence	15	11.0	3	8.6	0	0.0	98	18.9	116	16.5
Property damage	19	14.0	3	8.6	1	7.7	82	15.8	105	15.0
Drugs & anti social behaviour	1	0.7	0	0.0	0	0.0	14	2.7	15	2.1
Traffic, driving & motor vehicle licensing offences	2	1.5	0	0.0	0	0.0	5	1.0	7	1.0
Cruelty to animal	0	0.0	0	0.0	0	0.0	1	0.2	1	0.1
Other – unspecified	0	0.0	1	2.9	1	7.7	1	0.2	3	0.4

As seen in Table 39 the most common offences were dishonesty offence(s) which included theft, burglary, car conversion and fraud/embezzlement. Assault or violent offence(s) included possession of an offensive weapon, threatening to kill/injure and aggravated robbery and property offences including wilful damage and fire setting.

Family characteristics

Parents' marital status

The marital status of parents at the time children and youth were referred is shown in Table 40. More than half (55%, *n* = 387) of the overall sample came from families where their biological, adoptive or whāngai[25] parents were either divorced or separated. Almost a quarter (24%, *n* = 120) of biological, adoptive or whāngai parents were married or in *de facto* relationships. Patterns were similar across the child and female groups. The level of divorce or separation of parents was approximately 10% higher for females compared with the male youth, children and youth with 'special needs'. Female youth also had the highest level (15%) of having a deceased parent(s) compared with all other groups. More male youth had parents married or in *de facto* relationships compared to females and children by 7% to 10%.

Table 40. Parents' marital status

Group	'Special needs'		Children		Females		Male Youth		Total	
Marital status	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Divorced/Separated	79	58.1	21	60.0	9	69.2	278	53.7	387	55.1
Married/de facto relationship	29	21.3	6	17.1	2	15.4	133	25.7	170	24.2
Never married	12	8.8	5	14.3	0	0.0	33	6.4	50	7.1
Mother &/or father deceased	11	8.1	2	5.7	2	15.4	45	8.7	60	8.5
Unknown	5	3.7	1	2.9	0	0.0	29	5.6	35	5.0
Total	**136**	**100.0**	**35**	**100.0**	**13**	**100.0**	**518**	**100.0**	**702**	**100.0**

[24] Some youth were involved in more than one type of non-sexual offending so multiple responses are included.

[25] Whāngai is a NZ Māori word referring to the fostering or adoption of a child/ren with extended family/whānua groups

Family co-morbidities

Table 41 summarises data on sexual and nonsexual offending, substance misuse and psychiatric problems amongst extended family members including parent(s), siblings, grandparents, uncles and aunts and exposure to domestic violence within their immediate family perpetrated by parent(s) and siblings.

Data indicated that 19% (*n* = 132) of the overall sample came from families where a family member(s) had been arrested and/or convicted for sexual offences and 14% (*n* = 95) from families with a history of nonsexual offending (see Table 41). 'Special needs' youth had higher rates of family histories of sexual offending (27%, *n* = 36) compared with children and male youth. Female youth had higher rates of family histories of both sexual (46%, *n* = 6) and nonsexual (31%, *n* = 4) offending compared with all other groups. Family members identified as being involved in sexual and nonsexual offending tended to be males including fathers (biological/adoptive/whāngai), uncles, grandfathers, great uncles and great grandfathers, step/de facto fathers and brothers. Two mothers and one stepmother were identified as being involved in sexual abusive behaviour(s) and ten mothers and a sister were identified as being involved in criminal nonsexual activities. From Table 41 it appears that the families of female youth have higher rates of criminal behaviour.

Table 41. Summary of family forensic, psychiatric and social history

Group	'Special needs'		Children		Females		Male Youth		Total	
Family history	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Sexual offences	36	26.5	6	17.1	6	46.2	84	16.2	132	18.8
Nonsexual offences	17	12.5	6	17.1	4	30.8	68	13.2	95	13.5
Mental health issues	27	19.9	9	25.7	3	23.1	94	18.1	133	18.9
Suicide ideation &/or attempts	4	2.9	4	11.4	1	7.7	42	8.1	51	7.3
Substance misuse	39	28.7	10	28.6	4	30.8	169	32.6	222	31.6
Domestic violence	60	44.1	15	42.9	5	38.5	187	36.1	267	38.0

Table 41 also summarises data on family history of mental health problems. Overall, approximately 19% (*n* = 133) of the total sample had family members with a history of mental health problems including mothers and fathers, siblings and extended family such as aunts, uncles and grandparents. Data indicated that there was a history of suicide or self-harm behaviour in about 7% of children and youths' families including parents, siblings, aunts and uncles, and other extended family/whānau members. It can be seen that rates of mental health problems were higher within the families of children and female youth compared with male youth and youth with 'special needs'.

As can be seen in Table 41 rates of substance abuse within families were consistent across the three groups, totalling approximately one third, while as many as 38% (*n* = 267) of the overall sample had witnessed domestic violence (not as victims). Rates of domestic violence were a little higher for those in the 'special needs' (44%) and children's (43%) groups compared with females and male youth.

Chapter 4

Discussion and Recommendations

The current study was an audit of client files held by the three main specialised community sexual offender treatment programmes in New Zealand. The overall profile of sexually abusive children and youth in New Zealand compares well to international data. The majority of children and youth referred to specialised community treatment programmes in New Zealand during the study period were males (less than 2% were female) aged between 8 and 19 years (mean age of 14 years). The majority of the children and youth were identified as European/Pakeha (68%), followed by Maori (31%) and Pacific Island (8%) ethnicities. The vast majority were referred by Child, Youth and Family (CFY) who are the statutory child protection agency in New Zealand. This chapter summarises these findings, provides illustrative case examples and ends with relevant recommendations to enhance future research

Consistent with international research (e.g., Awad & Saunders, 1991; Boyd et al., 2000; Flanagan & Hayman-White, 2000) many New Zealand children and youth who sexually offend came from multi-problem and chaotic families. They sometimes had family members who had a history of sexual (19%) and nonsexual offending (14%), mental health issues (19%) and substance abuse (32%) and had been exposed to domestic violence (38%). These results are similar to a community sample of New Zealand young people (aged 11 and 18 years olds) followed up as part a New Zealand longitudinal study (Christchurch Health and Development Study, Fergusson, Horwood, & Ridder, 2007; Fergusson, Lynskey et al., 1996a). The Christchurch study found that 25% of parents had used illicit drugs, 12% of parents (youth aged 15 years) had a history of alcoholism or alcohol problems, 30% had a parental history of psychiatric problems and/or suicide attempts and 12% had a parental history of offending. The current study found much higher levels of witnessing domestic violence (38%) compared with 22% in the community sample.

More than half (55%) of the sexually abusive children and youth in the current study came from families where their parents were separated and/or divorced. Due to the way data is recorded, it was not possible to find information on the number of children and youth in the general population who came from families where their parents were separated and/or divorced. Parental separation during childhood has been associated with increased risk of conduct disorder, mood disorder and substance abuse (Fergusson, Horwood, & Lynskey, 1994). Research suggests that parents play an important role in a youth's daily activities and impact on their social and cognitive development, as well as the development of a youth's sexually abusive behaviour and in maintaining abuse cycles (Ryan, 1997b; Zankman & Bonomo, 2004). Parents who are coping with a number of other stressors may find it harder to support their

child in treatment. A parent's openness to treatment can also impact on a youth's attitude towards, and engagement in, treatment (Zankman & Bonomo, 2004).

The majority of children and youth had experienced at least one out-of-home placement, with many experiencing multiple placements with extended family, and other non-familial care arrangements such as CYF foster care, Family Homes and residential facilities as well as family friends, and residential centres for those with intellectual disabilities. High levels of out-of-home placements have been associated with such factors as disruption and dysfunction within the family including high rates of parental separation/divorce, parental loss and substance abuse (Ryan et al., 1996).

In a longitudinal study carried out on a community sample of over 1000 children born in Christchurch, New Zealand, retrospective reports indicated that 10% (17% of females and 3% of males) had experienced CSA before 16 years of age (Fergusson, Lynskey et al., 1996a). It is common for sexually abusive children and youth to have experienced some form of trauma (Becker & Hunter, 1997; Centre for Sex Offender Management, 1999; Ryan et al., 1996). Approximately 40% of children and youth referred to specialised community treatment programmes in New Zealand have experienced childhood sexual abuse, and 40% had experienced childhood physical abuse. These rates are in keeping with international research which has found that between 20% to 50% of sexually abusive youth had experienced childhood physical abuse and 40% to 80% sexual abuse (Centre for Sex Offender Management, 1999; Flanagan & Hayman-White, 2000; Ford & Linney, 1995). This New Zealand study found that half (48%) of those who were victims of CSA had first been victimised between 4 to 8 years of age (mean 7 years) and were sexually abused for 1 year or more. More than half (56%) of those who had experienced physically abused were first abused before 4 years of age, over 1 year or more. Both in New Zealand and overseas, the perpetrators of sexual and physical abuse were most often adult males who were parents or in a parental role or acquainted with their victims. Children and youth in this sample had also experienced high rates of other forms of abuse including neglect and emotional abuse.

Children and youth referred to programmes in New Zealand often had poor social skills, struggled to establish peer relationships and were socially isolated. Many were reported to have low self-esteem. This finding of low levels of social competence is consistent with international literature which suggests that these deficits may contribute to sexually abusive children and youth befriending younger children as they are unable to form age appropriate friendships (Awad & Saunders, 1991; Becker, 1990; Davis & Leitenberg, 1987; Fehrenbach et al., 1986). Although, in the current study, the age of sexually abusive children and youth was not specifically compared with the age of their victims, findings of the current study would suggest this may also be true in New Zealand as many victims were under 10 years.

Findings indicated that 63% had generalised behavioural problems (e.g., symptoms of ADHD, CD and ODD) and 65% of sexually abusive children and youth had mental health issues (e.g., symptoms associated with depression, anxiety and attachment disorders). At the time of referral to treatment programmes about a quarter of youths were reported as having a history of suicide ideation, deliberate self-harm behaviours or attempted suicide. This was consistent with international literature which reports sexually abusive youth often present with significant behavioural problems, often externalising problems and have been diagnosed with psychiatric condition such as ADHD, conduct disorder, depression and anxiety (e.g., Boyd et al., 2000; Centre for Sex Offender Management, 1999; Flanagan & Hayman-White, 2000). They often have a history of school problems including truancy, expulsions and/or suspensions. Rates of mental health problems were higher within this clinical sample of sexually abusive children and youth compared with the general adolescent population. In a New Zealand community sample, Fergusson and Horwood (2001) found that 22% of 15 year olds (28% of females and 16% of males) had one or more psychiatric disorder. In particular, they found that 13% of 15 year olds had an anxiety disorder (19% of females and 7% of males), 6% had mood disorders (9% of females and 3% of males), 5% had conduct disorders (3% of females and 7% of males), and 6% had substance abuse problems (7% of females and 5% of males).

Consistent with international literature (e.g., Centre for Sex Offender Management, 1999; Ryan et al., 1996), some sexually abusive children and youth were found to have abused drugs and alcohol. Available figures from the New Zealand longitudinal research suggests that approximately 5% of 15-year-olds and 10% of 18 year-olds in population samples will meet the diagnostic criteria for alcohol abuse (Feehan, McGee, Nada-Raja, & Williams, 1994; Fergusson, Lynskey, & Horwood, 1994). The current study found that 22% of children and youths were reported to have substance abuse problems; though it is not known how many of these would have meet criteria for a diagnosable substance disorder.

International researchers have concluded that it is common for sexually abusive youth to also have nonsexual offending histories including dishonesty, property and animal cruelty offences (Ryan et al., 1996). The current study found that 43% were reported as having engaged in nonsexual offending behaviours (predominantly dishonesty offences) while only 13% had prior justice involvement for their nonsexual offending. Half the children and youth included in this study had justice involvement for their sexually abusive behaviours. Research on a New Zealand population sample suggests that 4% to 11% of young people aged 15 to 18 years would have engaged in property, dishonesty and/or violent offences and anywhere between 3% to 11% might have been arrested and/or convicted for a criminal offence (based on self-report) (Fergusson, Horwood, & Ridder, 2005a). Even though the current sample were younger when prior offending information was collected, this suggests that sexually abusive children and youth included in this study were involved in higher levels of offending than would be expected in the general population.

Many of the individual and family characteristics of this population are associated with negative mental health outcomes in young people and with general delinquency (Ford & Linney, 1995; Lyn & Burton, 2005; Rich, 2003). For example, past experiences of CSA are associated with poor mental health outcomes including increased risk of developing psychiatric disorders such as depression, anxiety disorders, conduct disorder, substance abuse problems and suicidal behaviours (Fergusson, Horwood et al., 1996). Children who have been exposed to childhoods with multiple social and family issues such as economic disadvantage, family dysfunction and poor parenting are at greater risk of developing behaviour problems (Fergusson & Horwood, 2001). Therefore, those responsible for the care and treatment of these children and youth (e.g., programmes and CYF) need to be aware that, besides their sexualised behaviour, these children and youth present with multiple risk factors. Although there do not appear to be factors unique to sexually abusive youth there are individual and historical factors that are shared by many (Rich, 2003). These include high levels of exposure to abuse, family environments that are high on risk factors and lacking in protective factors, poor attachments and bonding and an inability to make 'prosocial judgements' (Rich, 2003). Rich suggests that sexually abusive behaviours emerge due to a complex interaction of "individual psychological, sociological, and possibly physiological processes, mediated and shaped by the developmental-learning environment" (Rich, 2003, p. 81).

The programmes included in this study were specialised sexual offender treatment programmes and therefore it was not expected that they provide treatment for all the other issues youth were presenting with. However, programmes need to continue to ensure they are aware of the range and extent of the multiple issues clients may present with and seek assistance from other services as appropriate (e.g., CYF, iwi services, mental health providers and Group Special Education, Ministry of Education).

Most of the children and youth who engaged in sexually abusive behaviours were still attending school or in some other form of training when they were referred to treatment. Half of children and youth were reported as having at least one sporting activity and one hobby they were actively engaged in at the time of assessment. Factors such as these represent potential protective factors for these children and youth. In order to encourage resiliency protective factors should be enhanced as a means of deterring delinquent behaviour (Carr & Vandiver, 2001; Fergusson & Lynskey, 1996).

Two-thirds of the children and youth included in this study had two or more victims. Half had a preference towards victimising females only and a third male and female victims. International literature suggests that the majority of sexually abusive youth engage in 'hands on' or 'contact' offending (e.g., penetrative acts, oral contact, indecent assault), although acknowledge that some commit 'hands off' or 'non-contact' offences (e.g., voyeurism, exposure) (Flanagan &

Hayman-White, 2000; Hunter et al., 2003; Lightfoot & Evans, 2000; Ryan et al., 1996). Within the current study, there was less clear evidence of a particular preference for a single offending type with approximately a third engaging in 'hands on' offences only, a third 'hands off' offences only and a third both 'hands on' and 'hands off' offences.

Sexually abusive children and youth in New Zealand primarily victimised children 12 years or younger (particularly high at risk were children aged 5 to 9 years). Children and youth victimised both female and male victims. The majority victimised acquaintances or relatives, with very few victimising strangers. Most victims were abused on one occasion; however, there were some sexually abusive children and youth who abused their victims repeatedly over an extended period of time. Victim characteristics found in the current study were in keeping with the findings of overseas researchers (e.g., Awad & Saunders, 1991; Boyd et al., 2000; Flanagan & Hayman-White, 2000; Hunter et al., 2003; Ryan et al., 1996).

Nico - Case study of a male youth[26]

Nico is a 14–year-old adolescent attending high school. He started treatment about 2 months ago after being referred by his CYF social worker.

Nico plays rugby and has a "few friends". Nico's mum and school report that he has difficulty concentrating at school, can get very angry and lashes out aggressively. Nico admitted experimenting with drugs and alcohol in the past.

Abuse history: Nico reports being physically abused from a young age for about 4 years by an adult male relative.

Family: Nico lived with his parents up until his sexually abusive behaviour became known when he moved to live with whānau[27]. Nico had been exposed to domestic violence within his family. He also had family members who had substance abuse problems and male relatives who had been arrested for nonsexual offences.

Offending history: Nico was about 10 years when he first engaged in sexually abusive behaviours. Both his victims were females, aged 7 to 11 years; one was the victim of 'hands off' offences only and the other both 'hands on' and 'hands off' offences. One victim was abused once while the other was abused over a period of about 1 to 2 years. Nico was also reported to have a history of stealing.

Treatment: Nico is currently attending the Youth programme. The treatment programme had recently suggested he move into a specialised Family Home which he did about a month ago.

More than half the children and youth in this study used some form of strategy during their sexual offending including physical force, grooming behaviours and threatening their victims. Overseas research (e.g., Davis & Leitenberg, 1987; Hunter et al., 2003) has concluded that it is not common for youths to be under the influence of drugs or alcohol at the time of committing a sexual offence and this was supported by the current study.

[26] Based on the information that was available within the programme files a profile has been created of a sexually abusive male youth. This does not represent a single case but rather is presented as an illustration of the 'average' male youth who engage in sexually abusive behaviours in New Zealand.
[27] Extended family.

Special populations

The special populations included in this study had similar individual, family and offending characteristics as those of the more typical sexually abusive male youth. As with male youth those in the children's, female and 'special needs' youth groups tended to be referred by Child, Youth and Family. All those in the 'special needs' and children's groups were male, with only 13 females in the female group. Those in the female (13 years) group and, as would be expected, those in the children's (11.6 years) group were younger at referral compared with 'special needs' youth (14.7 years) group and male youth (14.4 years) This is positive as it has been suggested that focusing on children when the sexually abusive behaviour is first recognised may be critical in the prevention of them continuing to engage in this behaviour as adolescents (Burton, 2000).

Mary - Case study of a female youth[28]

Mary is a 15-year-old European girl. Mary started treatment when she was just nearing the end of her time at intermediate school with her friends.

Mary enjoyed playing netball and said she had about four or five friends that she "hung out" with after school. Her mum and school reported that Mary sometimes got angry and lashed out aggressively. In the past there have been concerns about Mary being depressed and reports that she has engaged in deliberate self-harm.

Abuse history: Mary was sexually abused when she was 7-years-old by a male relative over approximately two years. Mary was physically abused by a parent when she was about 6 years old. Mary remembers seeing her dad hit her mum. When Mary first attended therapy she presented with symptoms consistent with Post-traumatic Stress Disorder (PTSD).

Family: Mary's parents are divorced and she has little contact with her father. Since her dad left, Mary's mum has had two long-term partners who are the fathers of her half siblings. Mary's dad has been arrested for sexual offences and her uncle is known to the Police for nonsexual offending. Mary reported that her mum has had some problems with depression in the past and that her cousins are 'into' drugs.

Offending history: Mary was about 12 when she first engaged in sexually inappropriate behaviours. Both her victims were females, aged approximately 5 years to 9 years. One victim was her younger half sister and the other was a neighbour. Mary's offending involved both 'hands on' and 'hands off' offences.

Treatment: Mary was referred for treatment by CYF following an FGC when she was 13-years-old for her sexually inappropriate behaviours. She has attended therapy for almost two years and her clinicians report that she was actively engaged in treatment over this period. She successfully completed treatment.

[28] Based on the information that was available within the programme files a profile has been created of a sexually abusive female youth. This does not represent a single case but rather is presented as an illustration of the 'average' female youth who engage in sexually abusive behaviours in New Zealand.

As with male youth, those in the three special populations came from multi-problem and chaotic families with high rates of divorce/separation amongst parents, family members with mental health problems, substance abuse and witnessing domestic violence within the family. Within their families there were also family members with histories of involvement in sexual and nonsexual offending. Figures were slightly higher for family forensic histories for female youth compared with the male youth, children and 'special needs' groups. These findings are consistent with previous international research which has found children, females and 'special needs' youth tend to come from multi-problem and chaotic families (Day, 1994; Gilby et al., 1989; Johnson, 1989; Mathews et al., 1997; Pithers et al., 1998).

Those in the 'special needs' youth, children and female youth had higher rates of experiencing placements outside their family/whānau compared with male youth. The average number of out-of-home placements was five amongst female youth which was higher compared with all the other groups; two for those in the 'special needs', and one to two for children, and two out-of-home placements for male youth.

Marcus - Case study of a 'special needs' youth[29]

Marcus is a 14½ year old European adolescent with an intellectual disability who was referred to treatment by his CYF social worker following an FGC for his sexual offending. Marcus had a history of significant behavioural problems and had received a diagnosis of ADHD. He has social skills deficits and has no friends. Marcus was attending a 'special needs' class at his local high school.

Abuse history: Marcus experienced childhood sexual abuse over an 18 month period by an adult male who was known to him. He was also physically abused from before he was 5 years of age by an adult male relative.

Family: During his early life Marcus had been exposed to extensive domestic violence. Marcus' parents separated when he was 6-years-old. Marcus initially lived with his mother and stepfather but moved to live with his father and stepmother after disclosure of his sexualised behaviour. Marcus had an adult male relative who had previously been arrested for sexual offences, his father had a history of misusing drugs and his mother had suffered from episodes of depression.

Offending history: Marcus first sexually offended when he was 12-years old. He had four identified victims; three males (two neighbours and a school peer) aged 7 to 13 years and his younger half sister. He engaged in a both 'hands on' and 'hands off' offending with his victims.

Treatment: Marcus was accepted into the 'special needs' programme but did not complete treatment.

Like male youth, many of those within the three special populations had experienced childhood sexual abuse (CSA) and childhood physical abuse (CPA). Overall, female youth (77%) were more likely to have experienced CSA compared with male youth (34%), 'special needs' youth

[29] Based on the information that was available within the programme files a profile has been created of a sexually abusive 'special needs' youth. This does not represent a single case but rather is presented as an illustration of an 'average' sexually abusive youth with 'special needs' in New Zealand.

(47%), and children (43%). 'Special needs' youth were also more likely to have experienced CSA compared with male youth. Perpetrators of the CSA and CPA were similar across all groups with most being adult males who were known to their victims. This is consistent with previous research which has found that many children, females and 'special needs' youth have experienced abuse themselves including childhood sexual, physical and emotional abuse and neglect (Burton et al., 1997; Fehrenbach & Monastersky, 1988; Fortune & Lambie, 2004; Friedrich & Luecke, 1988; Gray et al., 1999; Johnson, 1988, 1989; Kubik et al., 2002; Mathews et al., 1997; Ray & English, 1995; Tardif et al., 2005).

Children had similar levels of social skills deficits and difficulty with peer relationships as male youth, while females had lower reported rates of experiencing social isolation and peer relationship difficulties compared with male youth. Youth with 'special needs' had higher rates of social skills deficits, peer relationship difficulties and social isolation compared with all the other groups. Consistent with male youth, approximately half of each of the special populations were reported to have been involved with sport and have at least one hobby.

Joshua - Case study of a child[30]

Joshua, an 11½-year-old, was referred for treatment by CYF. Joshua went to intermediate school and had been suspended previously due to inappropriate sexual behaviour at school. Joshua has a few friends but tends to have difficulty establishing peer relationships. He had a history of behavioural difficulties.

Abuse history: Joshua disclosed being sexually abused by a male relative over a two year period. Joshua had not been physically abused but had witnessed domestic violence when he was younger.

Family: Joshua's parents were separated. Joshua used to live with his maternal grandparents but two years ago moved into CYF foster care. Since then he had had three different placements. Joshua had no contact with his dad. His mother suffered from depression and he saw her regularly.

Offending history: Joshua had no known history of any nonsexual offending. He first engaged in sexually abusive behaviour when he was about 9-years-old. He disclosed details of sexually abusive behaviours with five victims; three male and two females, aged between 4 and 9 years old. Joshua was related to two of his victims and was acquainted with the other three. He engaged in a range of 'hands on' and 'hands off' offences.

Treatment: Joshua was assessed and referred onto a private counsellor to address his own trauma.

Co-morbid issues were also common amongst the male youth and the three special populations. 'Special needs' youth had significantly higher reported levels of behaviour problems compared with children and male youth. Reports of suicidal ideation, suicide attempts

[30] Based on the information that was available within the programme files a profile has been created of a child who engaged in sexually abusive behaviour. It does not represent a single case but rather is presented as an illustration of the 'average' child who is referred to the programmes in New Zealand for their sexually abusive behaviours.

or deliberate self harm were also present, with ‘special needs’ youths having lower reported levels of suicide ideation compared with females and male youth. Those in the ‘special needs’ group had similar levels of substance abuse problems compared with male youth while children and females had lower reported levels of substance abuse. This finding of multiple co-morbid problems is consistent with previous research on children, females and ‘special needs’ youth who engage in sexually abusive behaviour which has found they often have behavioural problems, social deficits, school problems and diagnosed psychiatric problems (e.g., Conduct Disorder, ADHD, Oppositional Defiant Disorder, PTSD, anxiety disorders and depression) (Day, 1994; Friedrich & Luecke, 1988; Gilby et al., 1989; Gray et al., 1999; Johnson, 1989; Kubik et al., 2002; Righthand & Welch, 2004; Tardif et al., 2005).

Few females, compared with the males, ‘special needs’ youth and children, had a history of being expelled/suspended from school or having a truancy problem. This finding deviates from overseas research which has found females commonly had a history of school suspensions and truancy problems (see Johnson, 1989; Kubik et al., 2002; Tardif et al., 2005). This could be that girls are less likely to be excluded from school and/or due to under reporting of these problems.

As with the male youth, ‘special needs’ and female youth had prior justice involvement for their sexual and nonsexual offending while children had lower rates of justice involvement. As with the male youth, children, females and ’special needs’ youth victimised those they knew or were related to. Many were victimised only once but for those who were victimised more than once, they were often abused over an extended period of time, up to years. Consistent with the male youth, children and females tended to victimise female children (at highest risk were those aged 5-9 years) mostly through ‘hands on’ offending but also some ’hands off’ offending. These offending characteristics are consistent with previous research on these populations (e.g., see Burton et al., 1997; Fehrenbach & Monastersky, 1988; Gray et al., 1999; Johnson, 1988; Mathews et al., 1997; Ray & English, 1995; Tardif et al., 2005).

There was some indication that ‘special needs’ youth were slightly less specific in their offending preferences targeting both male and female children, with a slightly wider age range and with both ‘hands on’ and ’hands off’ offences. This is consistent with previous research which has found that sexually abusive youth with ‘special needs’ commit multiple offences of a variety of forms and sometimes show less specificity in terms of victim gender, age and offence type (e.g., see Day, 1994; Fortune & Lambie, 2004; Gilby et al., 1989; Stermac & Sheridan, 1993).

Many children, females and ‘special needs’ youth used force or coercion to gain the compliance of their victims which is consistent with previous research (e.g., Fehrenbach & Monastersky, 1988; Hunter et al., 1993; Johnson, 1988, 1989).

Implications for prevention and policy development

The average age at referral to the specialised community treatment programmes was 14 years, although the average age at first known sexually abusive behaviour was 13 years. This indicates a delay of approximately one year between they are first known to have engage in sexually abusive behaviours and referral to an appropriate specialised treatment service. This is in keeping with international research that has identified a 1 to 2 year delay (Flanagan & Hayman-White, 2000). The delay between onset of offending behaviour and referral could be due to a number of factors including delays by child and youth services (e.g., CYF) and families/whānau in referring youths on to specialised treatment programmes. Alternatively it could be that the behaviour remains undetected for a period of time (Flanagan & Hayman-White, 2000). Older age at initial assessment by specialised treatment programmes has been associated with increased risk of sexual recidivism (Nisbet, Wilson, & Smallbone, 2004). Early detection and intervention may prevent the escalation of the behaviour and reduce the number of victims (Flanagan, 2003; Flanagan & Hayman-White, 2000; Tomison, 2000). Early intervention for sexually abusive behaviours has also been associated with "better outcomes for the young person" (Flanagan, 2003, p. 147). This suggests there needs be increased awareness that sexual abuse is not just perpetrated by adults but that adolescents and children, females and youth with 'special needs' are also perpetrators of sexually abusive behaviours. Such awareness would assist in early disclosure and identification of children and youth who engage in sexually abusive behaviours and assist in the promotion of prompt referrals to specialised treatment providers. This awareness needs to be increased amongst the public, community organisations (e.g., churches and schools), statutory agencies (e.g., Child, Youth, and Family, Ministry of Education, and New Zealand Police) and others working with children and victims of abuse.

Parents and caregivers need to be aware that children and youth are most likely to victimise children and peers that they know or are related to. Programmes need to ensure regular contact with other agencies (e.g., Child, Youth and Family, Ministry of Education, Police Youth Aid), service providers (NGOs) and other organisations (e.g., churches and schools, youth groups etc.) and provide education and support. Some agencies may have a rapid turnover of staff, so regular education and liaison sessions may be warranted (e.g., having liaison meetings every 6 months with staff from local CYF offices).

Although most the referrals to the community treatment programmes originate with Child, Youth and Family, referrals are received from a range of other sources, including self and family/whānau referrals, child, adolescent and family mental health services and non-governmental agencies. This range of referral sources indicates that the programmes are doing

well at ensuring the wider community knows about their existence; however there needs to be an ongoing programme of promotion and education.

Implications for treatment programmes

This study found that most victims of children and youth who engaged in sexually abusive behaviours were children or same aged peers. Programmes need to recognise the risk sexually abusive children and youth present to children and peers and educate others involved in their care about this risk. Until an assessment of risk is undertaken and safety plans are in place, contact by perpetrators with children and same aged peers needs to be carefully monitored. Safety plans introduced by programmes need to be supported by all those involved including youths, families and caregivers, and agencies involved with the young person such as CYF.

In order for a treatment plan to be developed for children and youth who have engaged in sexually abusive behaviours, it is essential that a comprehensive assessment be conducted with the youth and their family, including a clinical interview and psychometric assessment (Becker & Hunter, 1997). In addition, as children and youth present with a range of issues other than their sexually abusive behaviours, a review of records (e.g., victims' statements, court records, mental health records, school reports) should be undertaken (Becker & Hunter, 1997). In New Zealand, assessments often also include reports from the Department of Child, Youth and Family. The audit of client files held by specialised community treatment programmes in New Zealand suggested a number of limitations in the data collected by the programmes. There was great variability in the consistency, accuracy and completeness of the data collected and recorded within clients' programme files. Clinicians appeared to often record data in the affirmative. For example, clinicians recorded if it was reported that the child or youth had experienced childhood sexual abuse (CSA). However, if it was not recorded in the file is it safe to assume that they did not experience CSA? It could simply be the case that it was not asked during assessment and/or not recorded. Research of this nature can only be as accurate as the information recorded. Programmes need to ensure that detailed information around individual, family and offending factors are recorded consistently, accurately and as completely as possible in client files. During assessment both affirmative and negative responses to all questions should be recorded on assessment forms. This is important as it is following assessment that a comprehensive and individualised treatment plan can be developed (Becker & Hunter, 1997).

Service provision

More than half the youths referred to treatment programmes in New Zealand were of European ancestry. Approximately a third were Māori or part Māori. This supports the need for treatment programmes that offer services that are culturally appropriate to this latter group. This is

especially true for Auckland and Wellington programmes, both of which had high percentages of Māori clients referred for treatment.

Another group of children and youths being referred to the programmes were Pacific Island youth. Christchurch had a Pacific Island worker for a one year pilot period during 2004/2005 (this did not continue due to lack of funding); however, Auckland and Wellington had the highest referral rate of Pacific Island youth. Anecdotal evidence suggests that the presence of a Pacific Island worker at Christchurch was associated with increased Pacific Island referrals and client and family/whanāu involvement (D. Mortensen, personal communication, 4 September 2006).

All the treatment programmes currently offer Māori programmes, but Auckland and Wellington, in particular, may need to consider developing culturally appropriate services for Pacific Island youths. Although acknowledging the diversity of Pacific cultures, the number of youths being referred from these communities highlights that there is a need for these youth to receive treatment. All programmes should continue to develop or start developing relationships with and offering education and support to Pacific Island communities. Including Pacific Island workers on their staff and the development of culturally appropriate services is warranted.

This study indicates that services for children and females are warranted and need to be supported by the treatment programmes and other stakeholders such as the Department for Child, Youth and Family. Research into these populations is very recent and so ongoing development of these programmes will need to occur as our understanding increases.

In more recent times specialised community treatment programmes in New Zealand have developed separate services for youth with ‘special needs’, children and females. Those in the ‘special needs’ programmes have below average intellectual functioning with the majority functioning in the ‘Borderline’ to ‘Intellectual Disability’ range indicating significant intellectual impairments. This means that this group would need to have information presented to them using simplified language and ideas. Due to their intellectual deficits it would take them longer to progress through the programme. This group of youth also had the greatest level of social skills deficits, peer relationship difficulties and were more socially isolated than the other groups. This would mean that time would need to be spent assisting them in understanding appropriate relationships and developing social skills. This group was also found to have high levels of school problems, behavioural problems and mental health issues.

Females were found to come from families with higher levels of family histories of sexual and nonsexual offending, have low levels of school problems, high levels of out-of-home placements, behavioural problems and significant trauma histories, often having been sexually abused by males. Overall, females tended to present with fewer social skills deficits. Those in

the children's groups were younger at referral and younger when they first sexually abused, had high levels of school problems, less nonsexual offending and justice involvement and used fewer strategies during their offending.

There are differences between these groups and male youth (13 to 19 years). There is little difference in the sexual offending across the groups as they all tend to victimise children who are acquaintances or relatives using both 'hands on' and 'hands off' offending. In contrast to the other groups of children and youth, youth with 'special needs' require special attention as they are a high needs group with significant mental health, academic, behavioural and social presenting issues who will need the programme material to be targeted to meet their reduced intellectual abilities. Children are younger and so developmentally less mature than the older youth. Targeting the language and ideas to their developmental level would be necessary for them to engage and benefit fully from treatment. Females were found to be more socially capable but had marked trauma histories and behavioural difficulties. Treatment would need to be adjusted to manage their behaviour while being sensitive to their trauma backgrounds. As many were abused by males, including them with sexually abusive male youth may not be therapeutically appropriate. The findings of this study suggest it is appropriate to have separate programmes for these groups.

Given the family context within which children and youth exist, and that many of their families have multiple problems (e.g., domestic violence, parental divorce/separation, parental mental health issues, etc.,), it is positive that treatment programmes in New Zealand provide family therapy and have a systems focus as part of their treatment package. A recent Cochrane review indicates that family and parenting interventions are effective for children and youth (aged 10 to 17 years) with conduct disorder and delinquency problems (Woolfenden, Williams, & Peat, 2001). This provides support for the treatment programmes to continue to offer family/systems-focused interventions and indicated that programmes may want to further develop this aspect of their programmes (Lambie & Seymour, 2006).

Limitations and strengths of study

Review of files gives an indication of the characteristics of clients who attended specialised community adolescent sexual offenders treatment programmes and of their victims. It cannot necessarily be generalised to children and youth who engaged in sexually abusive behaviours in New Zealand who do not receive specialist community treatment.

This study involved the collection of data from paper and electronic programme client files. There was variability in the consistently, accuracy and completeness of the data collected and recorded within clients' programme files. The quality and accuracy of the data is only as accurate as the programme staff recording of client and offending information. Those attending

these programmes may also under-report the extent of their offending during assessment with further disclosures occurring during treatment. Therefore, the data included within this report most likely represents an under-reporting of actual victims and/or offences.

This study involved extensive consultation in the development phase in order to maximise expert input into such things as the data collection form. Data were collected from all three programme sites (Auckland, Wellington and Christchurch) by the same researcher in order to ensure consistency. Data were checked for accuracy. This study involved a large sample of children and youth referred to the three main specialist community treatment programmes in New Zealand over a 10 year period which gives the study greater statistical power and increases confidence in the reliability of results.

Conclusion

This study provides a detailed description of the individual, family and offending characteristics of sexually abusive children and youth in New Zealand. It is the first time a study of this nature, using a large sample, has been conducted in New Zealand and allows us to better understand how sexually abusive children and youth in New Zealand compare to international populations.

Sexually abusive children and youth presented to the programmes in New Zealand with a range of individual, family and offending factors. These factors include engaging in significant sexually abusive behaviours and also a range of other problems and issues. This research found that sexually abusive children and youth in New Zealand have similar individual, family and offence characteristics to overseas samples. However, not all of the children and youth presented with all of the same issues (e.g., only 40% had a history of childhood sexual abuse). This suggests a heterogeneous group of children and youth, and lends support to the notion that there is no single factor that “causes” children and adolescents to engage in sexually abusive behaviours but, rather, a range of contextual, situational and individual factors need to be considered (Barbaree & Langton, 2006; Rich, 2003; Williams & New, 1996). Community programmes need to be supported in providing intensive and ongoing treatment for these at-risk children and youth; not just for their sexually abusive behaviours but also for their other issues including nonsexual offending and significant histories of trauma.

STUDY TWO - Treatment outcomes

Chapter 5

Introduction to treatment outcomes

Specialised treatment programmes

Recognition of adolescents as perpetrators of sexual abuse has resulted in a growth of specialised treatment programmes for sexually abusive youth since the late 1970's (Burton & Smith-Darden, 2000; Freeman-Longo & Knopp, 1992) and, more recently, an increased body of research (O'Shaughnessy, 2002).

A youth's attitude, their openness to engaging in treatment and level of accountability is often seen as one of the best predictors of treatment outcome (Zankman & Bonomo, 2004). Youth who are mandated to attend treatment may have lower levels of motivation. For youths to participate and benefit from treatment, they must be willing to address their inappropriate sexual behaviour and comply with "therapeutic directives" (Centre for Sex Offender Management, 1999). Youths need to be fully aware of what they can expect from treatment and their therapist, and what is expected of them (Becker, 1990).

Goals of sexual offender specific treatment include developing a clear definition and understanding of sexually abusive behaviour, recognising patterns within the abuse cycle, developing skills to interrupt the abuse cycle, relapse prevention, development of empathy in daily living and developing and maintaining "safe" relationships (Ryan, 1999). Treatment for sexually abusive youth has been heavily influenced by the theories and treatment approaches from adult sex offender treatment programmes and research (Hunter & Becker, 1994; Ryan, 1999).

Over the last 20-30 years programmes have developed to meet the needs of children, adolescents and their families. Therapeutic interventions with young people commonly include group, individual and/or family therapy (American Academy of Child & Adolescent Psychiatry 2000; Centre for Sex Offender Management, 1999; Newbauer & Blanks, 2001). Most programmes use a psychoeducational, individually focused Cognitive-Behavioural Therapy (CBT) approach with a focus on changing a youth's thoughts, behaviours and patterns of arousal, identifying the abuse cycle, cognitive restructuring through challenging

thinking errors in the cycle, isolating and decreasing risk factors, and developing a relapse prevention plan (American Academy of Child & Adolescent Psychiatry 2000; Hunter & Becker, 1994; Zankman & Bonomo, 2004). They may include interventions such as satiation therapy and covert sensitisation (American Academy of Child & Adolescent Psychiatry 2000; Bourke & Donohue, 1996; Fanniff & Becker, 2006). Dynamic factors are those that can change and these include low self-esteem, social isolation and deviant sexual arousal and so are often addressed during treatment (Zankman & Bonomo, 2004). CBT interventions may include social skills training, anger management, sex education and relapse prevention (American Academy of Child & Adolescent Psychiatry 2000; Bourke & Donohue, 1996; Fanniff & Becker, 2006). In a review of international research, Fanniff and Becker (2006) concluded that there is empirical support for use of CBT in treatment with sexually abusive youth.

Youth do not exist in isolation, rather within a socio-ecological context (Zankman & Bonomo, 2004). In order to fully understand their development, and ensure that treatment suitably meets their needs, their wider context must also be examined (Zankman & Bonomo, 2004). Parents can play an important role in the development of a youth's sexually abusive behaviour and in maintaining their abuse cycle (Ryan, 1997b). There is an increasing recognition that treatment needs to include at least some level of parental and family involvement as they can play a key role in interrupting the cycle and stopping abusive behaviour (Newbauer & Blanks, 2001; Zankman & Bonomo, 2004). When parents are involved in treatment they can be part of the process of change and help maintain this change when treatment has ended through the development of a support system (Ryan, 1997b; Zankman & Bonomo, 2004). This contributes to the development of a meaningful relapse prevention plan (Zankman & Bonomo, 2004). No other published studies on family therapy with this group were found.

Psycho-education for youth and their families may be offered in isolation or in combination with other interventions such as CBT (Fanniff & Becker, 2006; Newbauer & Blanks, 2001). Offering psycho-education to youth and their parents can result in changes in the knowledge and attitudes of youth (Fanniff & Becker, 2006). No conclusions were made about the effect this intervention had on the knowledge and attitudes of their parents.

This introduction includes a brief review of outcome studies of specialist treatment programmes for sexually abusive youth. For a full and detailed critique of the literature, see Fortune and Lambie (2006b), on which this introduction is based.

Defining recidivism

One of the problems in recidivism research on sexually abusive youth is the lack of a clear and consistently used definition of the term 'recidivism'. For example, some studies have

defined recidivism in relation to subsequent incarceration, new arrests, re-convictions and self-reported disclosure from clients, self-reported re-offending and re-referrals to treatment. This results in low rates of re-offending being reported in some studies, and/or produces conservative results in others. There has been a tightening in definitions of recidivism used in the literature in the last 15 years.

In early research by Smets and Cebul recidivism was defined as “repeated his offenses” (1987, p. 253), while Kahn and Lafond (1988) did not clearly define recidivism (although in his review Weinrott (1996) states they used ‘juvenile convictions’). Use of youth records alone would result in a very conservative estimate of actual re-offending. Since then researchers have used stricter definitions of recidivism, mostly relying on some form of official records to determine subsequent arrests and/or convictions for sexual and/or nonsexual offences. Still others have used subsequent incarceration. Worling and Curwen (2000a) and Lab, Shields and Schondel (1993) all defined recidivism as criminal charges for sexual offences as well as nonsexual offences. Kahn and Chambers (1991) and Hagan and colleagues (Hagan & Cho, 1996; Hagan & Gust-Brey, 2000; Hagan, Gust-Brey, Cho, & Dow, 2001; Hagan, King, & Patros, 1994a, 1994b) restricted their definition to include only those new sexual and nonsexual offences which resulted in convictions. Alexander (1999), Borduin, Henggeler, Blaske, and Stein (1990) and Smith and Monastersky (1986) looked at arrests for both sexual and nonsexual offences. Re-arrest rates are commonly used, as offenders may not get a conviction, thus reducing the risk of positive treatment effect bias. Schram, Milloy and Rowe (1991) included both new convictions and arrests when calculating recidivism among their sample. Gretton, McBride, Hare, O’Shaughnessy and Kumka defined re-offending in terms of “any charges or convictions that occurred in the follow-up period” (2001, p. 435).

Definitions of recidivism vary among studies. The most consistent criteria throughout the research is a definition of recidivism that includes convictions and/or arrests for sexual and nonsexual offences. Variation in defining recidivism means that direct comparisons between studies can be difficult. Official records will produce conservative estimates of re-offending, but this may be balanced out if triangulation of data were to occur. Triangulation could be partially achieved through obtaining self- and family reports of re-offences as well as using official records. However, the accuracy of self-reports may be biased by such things as social desirability and the fear of possible official sanctions if new offending is disclosed.

Table 42. Studies of recidivism among sexually abusive youth and nonsexual offenders (adapted from Weinrott, 1996; Worling and Curwen, 2000a)

Study	Country	Young sex offenders group N	Young non-sex offenders group N	Follow-up Period	Recidivism Measure(s)	Rates of Sexual Recidivism	Rates of Nonsexual Recidivism
Långström & Grann (2000)	Sweden	46	0	Mean 5 years	Convictions	20%	65% - General
Långström (2002)	Sweden	117	0	Mean 116 months	Convictions	30%	42% - violent
Nisbet, et al., (2004)	Australia	292	0	Mean 7.3 years	Adult arrests & convictions	9% - arrests 5% - convictions	61% - convictions
Rasmussen (1999)	USA	170	0	Up to 5 years	Convictions	14%	54%
Rubenstein, et al., (1993)	USA	19	58	Approx 8 years	Adult criminality (arrests & incarcerations)	37% - SO 10% - Violent NSO	89% - SO 69% - Violent NSO
Sipe, Jensen & Everett (1998)	USA	124	132	1 to 14 years	Adult arrests	10% - SO [31] 3% - NSO [32]	**SO** 6% - Violent 16% - Property 15% - Other **NSO** 12% - Violent 33% - Property 23% - Other

[31] SO = Sexual offender group
[32] NSO = Non-sexual offender group

Review of recidivism research

Despite the rapidly growing number of treatment programmes, published outcome studies for sexually abusive youth remain relatively rare. Table 42 (adapted from Weinrott, 1996; Worling and Curwen, 2000a) provides a summary of the main published studies that investigate recidivism amongst sexually abusive youth. Table 43 (adapted and updated from Weinrott, 1996; Worling and Curwen, 2000a) summarises the main outcome studies on specialist treatment programmes for sexually abusive youth that were published between 1986 and 2006. Studies that included a clear definition of recidivism, a large sample, and a relatively long follow-up period represent the most stringent design. Drawbacks include small sample size, short follow-up periods, and limited choice and use of populations for comparison/control groups.

Recidivism studies by Rasmussen (1999), Rubenstein, Yeager, Goodstein, and Lewis (1993) and Sipe, Jensen, and Everett (1998) illustrate the difference in rates of sexual and nonsexual re-offending by sexually abusive youth. The studies by Långström and Grann (2000), and Långström (2002) also indicate expected levels of sexual and nonsexual recidivism among sexually abusive youth. However, although some of their sample had received treatment, no details were given of the treatment and no analysis was included on differences in recidivism between treatment and non-treatment groups. Therefore, although these studies (Långström, 2002; Långström & Grann, 2000; Rubenstein et al., 1993; Sipe et al., 1998) indicate the levels of re-offending that can be expected from sexual and nonsexual offenders, nothing is learned about the effectiveness of specialised programmes for the treatment of sexually abusive youth. We now turn to look more closely at outcome studies which have attempted to explore the efficacy of specialised treatment programmes and look at sexual and/or nonsexual re-offending amongst sexually abusive youth who have received specialised treatment.

Outcome Studies

Outcome studies with relatively large sample size and follow-up of offenders into adulthood have examined prevention plans, community treatment programmes, identified variables which predict re-offence risk, and compared outcomes between groups. Problems relative to these studies include poor descriptions of methodologies, small samples size and few studies comparing treatment completers, non-completers and no treatment groups.

Table 43. Published recidivism rates from follow-up studies of specialised adolescent sexual offender treatment (updated and adapted from Weinrott, 1996; Worling & Curwen, 2000a)

Study	Country	Treatment type & setting	Treatment Group N	Comparison Group N	Follow-up Period	Recidivism Measure(s)	Rates of Sexual Recidivism	Rates of Nonsexual Recidivism
Alexander (1999)	USA	Meta-analysis [33]	79 studies, 10,988 subjects (1025 juveniles)	0	1 year - 5+ years	Rearrest for new sexual offences	Treated – 7%[34]	Not measured
Allan et al. (2003)	Australia	Unclear	326 (included treated, referred, assessed only & no contact groups)		Mean = 4.2 years	Convictions	Total sample – 10% (Treated – 11%, Referred – 0%, Assessed only – 33%, No contact – 8%)	Total sample - 66%
Becker (1990)	USA	Outpatient, specialised, multi-component	52	0	1 year	Self-report or re-referral	10%	Not measured
Borduin, Henggeler et al. (1990)	USA	Outpatient, specialised, MST & individual therapy	16 (8 in MST & 8 in IT)	0	M = 3 years (21-49 months)	Arrests	MST – 13% IT – 75%	MST – 25% IT – 50%
Borduin et al., (2000)	USA	Outpatient, specialised, MST & individual therapy	24	24	8+ years	Criminal charges	Treatment-13% Comparison-42%	Treatment-30% Comparison-63%
Brannon & Troyer (1995)	USA	Inpatient, group	36	0	4+ years (not clear)	Adult correctional care	3%	14%

[33] Meta-analysis of sex offenders, including a small group of adolescents
* Denotes that official records from the child welfare agencies were used
[34] This meta-analysis included adult and adolescent studies. The recidivism rates from the adolescent studies are reported here.

Table 43 continued

Study	Country	Treatment type & setting	Treatment Group N	Comparison Group N	Follow-up Period	Recidivism Measure(s)	Rates of Sexual Recidivism	Rates of Nonsexual Recidivism
Bremer (1992)	USA	Inpatient, specialised, primarily group, also family and individual	193	0	Several months to 8.5 years	Sexual convictions & self-report of sex offences	Convictions - 6% Self-report - 11%	Not measured
Edwards, et. al. (2005)	UK	Inpatient, specialised, CBT group & individual therapy	24 (treatment completers)	25 (treatment dropouts)	6 to 107 months	Conviction or caution for sexual, violent & non-violent general offences	Completers – 0% Dropouts – 16%	Completers: violent – 8% & general 25% Dropouts: violent – 32% & general 68%
Gretton, et al. (2001)	Canada	Specialised, outpatient.	220	0	7-106 months (m = 55 months)	Charges or convictions	15%	General – 51% Violent – 30%
Hagan & Cho (1996)	USA	Inpatient, specialised, group, sex education, & some individual & family therapy.	100 (50 rapists & 50 molesters)	0	2-5 years	Convictions for offending	Rapists – 10% Molesters – 8%	Rapists – 54% Molesters – 38%
Hagan & Gust-Brey (1999)	USA	Inpatient, specialised, group, sex education, & some individual & family	50 rapists	0	10+ years	Convictions, sentences & dispositions	After 5 years- 8% After 10 years - 16%	After 5 years – 74% After 10 years - 90% (0verall criminal behaviour)
Hagan & Gust-Brey, Cho & Dow (2001)	USA	Inpatient, specialised, group, sex education, & some individual & family	50 rapists, 50 child molesters & 50 delinquents	50	8 years	Convictions	Rapists - 16% Child molesters- 20% Delinquents - 10% Control - 0.4% (est)	Not measured
Hagan, King & Patros (1994a)	USA	Inpatient, specialised, group, sex education, & some individual & family	50 rapists	0	2 year	Convictions	10%	58% (overall criminal behaviour)

Table 43 continued

Study	Country	Treatment type & setting	Treatment Group N	Comparison Group N	Follow-up Period	Recidivism Measure(s)	Rates of Sexual Recidivism	Rates of Nonsexual Recidivism
Hagan, King & Patros (1994b)	USA	Inpatient, specialised, group, sex education, & some individual & family	50	0	2 year	Convictions	8%	38%
Kahn & Chambers (1991)	USA	Specialised, multisite (8 outpatient, 2 institutional)	221	0	M = 20 months	Convictions	8%	General – 45%
Kahn & Lafond (1988)	USA	Inpatient, specialised multifaceted group	350	0	Few weeks – 6 years	Juvenile convictions	9%	8%
Lab et al. (1993)	USA	Specialised, group, CBT, family & individual	46	109	0-3 years	Convictions	Treatment[35] – 2% Control – 4%	Treatment – 22% Control - 13%
Lambie et al. (2000)	NZ	Specialised, community-based, wilderness, group, individual & family	14	0	2 years	Self report	0%	Not measured
Mazur & Michael (1992)	USA	Outpatient family and group also sex education & relapse prevention	10	0	6 months	Self report and parent report	0%	Not measured
Miner (2002)	USA	Inpatient, specialised "Minnesota Dept of Correction JSOP"	96	0	19 months	Arrests	8%	38%
Miner (1997)	USA	Inpatient & specialised	86	0	Mean 4.3 years	Arrest, conviction or parole violation	8%	General – 47% Criminal – 55%
Prentky, et al. (2000)	USA	Specialised, outpatient	75	0	12 months	Re-offence	4%	Nonsexual – 7%

[35] Sexual Offender Treatment programme group (SOT)

Table 43 continued

Study	Country	Treatment type & setting	Treatment Group N	Comparison Group N	Follow-up Period	Recidivism Measure(s)	Rates of Sexual Recidivism	Rates of Nonsexual Recidivism
Ryan & Miyoshi (1990)	USA	Multisite, specialised, inpatient & outpatient	69	0	12-30 months	Re-arrest & self and parent report	9%	Not measured
Schram, et al. (1991)	USA	Multisite, specialised, outpatient & inpatient	197	0	5 years	Adult & adolescent convictions & arrests	Arrests - 12% Convictions –10%	Arrests – 51% Convictions – 48%
Seabloom, et al. (2003)	USA	Outpatient, specialised, group & individual psychotherapy, family therapy & family group psychotherapy, 'marathons'([36]) & "Family Journal" ([37])	52	Referred – 18 Withdrawn - 52	14 to 24 years (mean 18 years)	Arrests, charges & convictions	Treated – 0%, 0% Referred – 6%, 0% Withdrawn – 10%, 8%	Treated – 8%, 8% Referred – 44%, 39% Withdrawn – 22%, 18%
Smets & Cebula (1987)	USA	Outpatient sexual offender group therapy with follow-up family and individual	21	0	2 years	Re-offending	5%	Not measured
Smith & Monastersky (1986)	USA	Outpatient, family and group	112	0	M = 29 months (17 to 49)	Criminal charges	14%	35%

[36] See text for further description of this type of treatment
[37] See text for further description of this type of treatment

Table 43 continued

Study	Country	Treatment type & setting	Treatment Group N	Comparison Group N	Follow-up Period	Recidivism Measure(s)	Rates of Sexual Recidivism	Rates of Nonsexual Recidivism
Waite (2005)	USA	Inpatient, specialised, CBT group & individual therapy	144 (self contained treatment group) 112 (prescriptive treatment group)	0	5 to 125 months	Adult & juvenile re-arrests	Self contained group – 5% Prescriptive group – 5%	Self contained group: Nonsexual assault - 31%, Property – 11% Prescriptive group: Nonsexual assault - 47%, Property – 19%
Worling & Curwen (2000a)	Canada	Specialised, outpatient, group, individual & family, CBT & relapse prevention	58	90	2-10 years (M = 6 years)	Criminal charges	Treated – 5% Comparison – 18%	Treated – 40% Comparison - 82%

Treatment Type and Setting Key

Abbreviations	Definition
Treatment Type	
CBT	Cognitive behaviour therapy
Family	Family therapy
Group	Group therapy
Individual	Individual therapy
MST	Multisystemic therapy
Multi-component	Includes group, covert sensitisation, satiation, social skills training, sex education, relapse prevention, CBT model
Wilderness	Wilderness component included in treatment programme
Treatment Setting	
Inpatient	Inpatient, residential and institutional correction facility treatment programme
Multisite	Multiple site treatment outcome study
Outpatient	Outpatient and community-based treatment programme
Specialised	Specialised sexual offender treatment programme

Outcome studies show that re-offending by sexually abusive youth who have completed a specialised treatment programme vary for sexual and nonsexual re-offences. Where small sample sizes are used, results should be viewed with caution (e.g., Lambie et al., 2000; Mazur & Michael, 1992). Overall, the literature suggests levels of sexual recidivism anywhere from 0% to 42% post treatment. In a recent meta-analysis of nine published and unpublished recidivism studies on sexually abusive youth (*n* = 2986 youth), Reitzel and Carbonell (2006) stated that, on average, sexual recidivism was 12.5% based on an average 59 month (4.9 years) follow-up period. Nonsexual offending recidivism is higher, ranging between 8% and 52%, even as high as 90% after 10 years. In their meta-analysis, Reitzel and Carbonell (2006) found the average violent (non-sexual) recidivism rate was 25% and 29% for general (non-violent, non-sexual) recidivism. Overall, their meta-analysis indicated a statistically significant positive treatment effect on sexual recidivism (odds ratio effect size of 0.43, *CI* = 0.33-0.55).

In most of the research reviewed the age range of samples were similar, ranging from approximately 12 to 18 years (plus or minus a year) (for example, see Becker, 1990; Brannon & Troyer, 1995; Hagan & Cho, 1996; Mazur & Michael, 1992; Smets & Cebula, 1987). However, some studies included younger offenders. For example, Schram, et al. (1991) and Kahn and Chambers (1991) both included sex offenders as young as 8 years old.

Another factor to consider is the variability in follow-up length. In the studies reviewed, follow-up was as short as a few weeks (Kahn & Lafond, 1988) through to 14 years (Sipe et al., 1998) and as long as 24 years (Seabloom et al., 2003). It would be expected that, the longer the follow-up period, the greater the opportunity the youth has to re-offend. This was highlighted by Hagan and Gust-Brey (1999) who found sexual re-offending was 8% after 5 years and 16% after 10 years. Therefore, comparisons between studies with short follow-ups (e.g., Becker, 1990; Mazur & Michael, 1992) and with longer follow-ups (e.g., Borduin et al., 2000; Rubenstein et al., 1993) should be done cautiously.

Sample size has implications for the power of the sample and the certainty we have that the results found are not due merely to statistical errors. For this reason, results from studies with small samples (e.g., Borduin, Henggeler et al., 1990; Lambie et al., 2000; Mazur & Michael, 1992; Rubenstein et al., 1993) should be viewed cautiously and also compared to other, larger, studies with care.

The studies reviewed cover a range of treatment settings. Treatment settings included residential and inpatient correctional settings and community-based and outpatient. No study was found which included a comparison of the effectiveness of these different treatment settings on long-term outcomes. Treatment programmes also offer a range of therapy types (e.g., family, individual, group therapy). Once again, comparisons between outcome studies of different treatment settings and therapy types should be done with care.

Few studies have included a control group (sexually abusive youth who had not received treatment or treatment dropouts). Control groups are needed in order to see the actual effectiveness of treatment in reducing re-offending and, in particular, sexual recidivism. Those studies that have included a control group indicate that untreated sexually abusive youth have higher rates of sexual and nonsexual re-offending than those who have received treatment. However, both treated and untreated sexually abusive youth show higher rates of nonsexual re-offending than sexual recidivism. It is those studies that have included a comparison group to which we now turn.

Utilization of comparison groups

Few recidivism studies on sexually abusive youth have used well defined comparison groups. To be meaningful, re-offending by those who received specialised treatment needs to be considered in conjunction with recidivism amongst sexually abusive youth who do not receive treatment.

The first, and to date only, randomised published study on sexually abusive youth treatment was carried out by Borduin, Henggeler, Blaske and Stein (1990). They followed up 16 sexually abusive youth (mean age 14 years) and randomly assigned each client to multi-systemic therapy (MST) or individual therapy (IT) conditions (8 clients in each group). MST treatment uses strategies that are derived from Strategic and Structural Family Therapies, Behavioural Therapy and Cognitive-Behavioural Therapy (Borduin & Schaeffer, 2001). It draws on Bronfrenbrenner's (1979) socio-ecological theory and considers the youth's familial and extrafamilial (e.g., school, peers, community) systems, with interventions occurring in one or more system (Borduin, Henggeler et al., 1990; Borduin & Schaeffer, 2001). Individual therapy (IT) focused on personal, family, and academic issues and included psychodynamic, humanistic, and behavioural models of therapy. Individual therapy (IT) did not include any sex offender specific treatment. Borduin et al. (1990) defined recidivism as sexual or nonsexual re-offences and checked for the history of arrests using youth and adult court records and police records. Follow-up was carried out an average of three years (range 21-49 months) after leaving treatment and showed that recidivism amongst the MST group was 12.5% for sexual offences, and 25% for nonsexual offences, compared to 75% for sexual offences, and 50% nonsexual offences for the IT group. Borduin and colleagues (Borduin, Henggeler et al., 1990; Borduin & Schaeffer, 2001) found that multisystemic therapy was more effective in reducing sexual and nonsexual re-offending than individual therapy three years after leaving treatment. However, the sample size was very small (n = 16) and this study fails to show re-offending among both treatment groups compared to sexually abusive youth who received no treatment. The most recent research (Borduin & Schaeffer, 2001) has tried to overcome this shortcoming by including a comparison group of sexually abusive youth who did not receive treatment.

As Marshall, et al., (1991) point out, deliberately withholding treatment from a group of sexual offenders would be ethically unacceptable, so making use of untreated offenders allows comparisons to be made and aids in the estimation of recidivism when treatment is not received. Recidivism amongst treated sexually abusive youth must be compared to outcomes for those who do not receive treatment and/or those who did not complete treatment in order to be able to convincingly conclude that treatment programmes for sexually abusive youth are effective in reducing re-offending. Research has started to include other forms of comparison methodologies when investigating recidivism in sexually abusive youth. Studies such as those by Alexander (1999) and Worling & Curwen (2000a) investigated programme efficacy by comparing recidivism amongst sexually abusive youth who have received treatment with those who did not. Both these studies showed, by the inclusion of treated and untreated populations, that treatment helps reduce re-offending by sexually abusive youth up to ten years after treatment completion.

There are valid ethical reasons for not randomly allocating sexually abusive youth to treatment and non-treatment groups. This presents researchers with the challenge of identifying sexually abusive youth who did not receive treatment. One option is a comparison group of those sexually abusive youth who were referred for treatment, were assessed, but did not attend treatment. Another is sexually abusive youth who did not complete treatment. However, researchers using these youth as comparison groups need to be aware that there may be selection factors operating and that these youth may systematically vary in some way from those who attend and/or complete treatment.

Directions for research

Research into recidivism among sexually abusive youth is a relatively new field with much of the early research not being published until the 1990s (e.g., Becker, 1990; Bremer, 1992; Kahn & Chambers, 1991; Lab et al., 1993; Mazur & Michael, 1992; Schram et al., 1991). For this reason, many studies to date have been weak in design and are not randomised controlled studies (e.g., very few studies have included a control group). It is argued that studies need to consider the following main points: the population being studied and the utilisation of comparison groups, the criteria used for recidivism and follow-up period. A fourth point to consider is other measures of programme effectiveness which may be worth utilising when evaluating programme efficacy. Table 44 summarises some of the main methodological issues for recidivism research on sexually abusive youth.

1. Study population and the use of comparison groups

Researchers need to consider the characteristics of the study group and carefully select an appropriate comparison group to be used in the study. Most reviewers of the research on recidivism are critical of the lack of comparison or matched control groups (United States General Accounting Office, 1996). Studies need to compare treatment and non-treatment groups

(Marshall et al., 1991; United States General Accounting Office, 1996). This would allow for the examination of recidivism for sexually abusive youth who did not receive treatment and also enable the investigation of factors associated with re-offending (Marshall et al., 1991).

Table 44. Methodological checklist for conducting outcome studies with sexually abusive youth

Criteria	Types	Problems	Use
Comparison group	Randomised	▪ Ethics: should a control group of equally in need individuals be denied treatment?	▪ Can be used with group greater than approx. 100. ▪ May be suitable when individuals are randomised to different treatment conditions.
	Matched	▪ Ethical problems as above if matched prior to selection ▪ Selecting the most appropriate variables to match.	▪ May be used for post-hoc study when untreated offenders can be located. ▪ Suitable for samples of less than approx. 100.
	Untreated	▪ Selected. May be different to treatment group in important pre-existing characteristics.	▪ When randomised or matched group unavailable.
	Treatment dropouts	▪ Self-selected. May be different to treatment group on important pre-existing characteristics.	▪ When randomised or matched group unavailable.
Recidivism measure	Official arrests	▪ Conservative. Underestimates rates of re-offending. ▪ Access to official records.	▪ Suitable with large numbers and long period of time since treatment.
	Official Convictions	▪ Likely to be even more conservative than arrests. ▪ Access to official records.	▪ Suitable with large numbers and long period of time since treatment.
	Adult incarceration	▪ The most conservative measure. ▪ Criteria for incarceration may vary over time and in different locations. ▪ Access to official records.	▪ Unlikely to be suitable.
	Youth offending	▪ Would be conservative estimate if used alone. ▪ May be under reported in official records.	▪ Suitable to include with records of adult offending.
	Self-report: interview and/or survey	▪ Self-report biases such as social desirability & fear of official sanctions.	▪ Suitable for small numbers and with new programmes.
	Wider system: family, social workers etc.	▪ May not have complete information about offender's thoughts and behaviour.	▪ Suitable in conjunction with other measures, such as self-report, especially for new programme with small numbers.
Offences	Sexual	▪ Conservative. Narrow criteria increases chances of falsely showing no programme effect.	▪ Suitable with large numbers and long period of time since treatment.
	Non-sexual	▪ May only be indirectly related to sexual offending. ▪ May not be targeted by treatment	▪ Suitable as additional measure to sexual offending.
Other measures	Standardised psychological tools	▪ Self-report biases. ▪ May not be relevant to programme aims. ▪ May be measuring static (fixed) personally characteristics not dynamic (changeable) dimensions.	▪ Suitable for small groups and little or no follow-up period post-treatment. ▪ Must be used prior to **and** after treatment. ▪ Should be used in conjunction with other measures.
Follow-up	Short-term <2 yrs Medium-term 2 - 5 yrs Long-term >5 yrs	▪ Often too short to be useful.	▪ Less than 5 years considered preliminary. ▪ Will be more meaningful with large numbers.

What criteria will be used to match “treatment” and “no treatment” group needs to be considered. Criteria for matching may need to include variables beyond the normal criteria of age, gender and SES. Groups could be matched on the following factors; sexual and nonsexual offending behaviours, risk level, abuse histories, psychological diagnosis, family characteristics (e.g., parental divorce/separation) and the presence or absence of other co-morbid factors such as social skills deficits, academic problems and substance abuse.

There is some suggestion that comparisons between treatment completers and matched untreated controls may be misleading without including treatment dropouts (Quinsey, Harris, Rice, & Laumiere, 1993). Differences between treatment completers and controls may reflect more about selection than treatment effects and so Quinsey et al. suggest it is important to include treatment “‘dropouts” in the control group. However, untreated controls and treatment dropouts are both problematic and have their own biases of which researchers must be aware.

A strength of the research reviewed is that large samples of more than 100 are common. The strongest design would be a randomised controlled study with sexually abusive youth randomly assigned to various treatment and non-treatment groups. However, even in randomised studies, systematic differences can be found between groups (Hanson, 1997; Miner, 1997), and there are the ethical considerations in relation to withholding treatment. However, efforts should be made to include a treatment group and non-treatment/comparison group even if assignment is not random. Though initial selection may cause some bias, matching can be used to control some of these and problems with differential mortality in the groups can be described (Miner, 1997).

2. Criteria for recidivism

Many of the studies reviewed utilised official records when determining recidivism among sexually abusive youth (Alexander, 1999; Borduin, Mann et al., 1990; Brannon & Troyer, 1995; Bremer, 1992; Hagan & Cho, 1996; Hagan et al., 1994a, 1994b; Kahn & Chambers, 1991; Lab et al., 1993; Schram et al., 1991; Smith & Monastersky, 1986; Worling & Curwen, 2000a). However, some of these studies used arrests as the criteria for recidivism, others used convictions since leaving treatment, while still others report both arrests and convictions in their definition of recidivism.

Self-reports were rarely used. Mazur and Michael (1992) used self-report and parent-report of re-offending, while Lambie et al. (2000) supported computer data from the child protection services with self-reports of re-offending. Despite their obvious weaknesses, confidential self-reports can provide data on offending for which the young person has been neither arrested nor convicted. Therefore, they do have a role in outcome studies and can be used in conjunction with recidivism data from statutory records. Family reports of offending can also be another useful source of information.

Weinrott (1996) suggests that as young people in the United States are so geographically mobile, recidivism data gathered from official records in a single jurisdiction or even state-wide would not include arrests occurring elsewhere. A study in New Zealand would be able to circumvent this problem faced by researchers in North America as we have a smaller population, a country-wide law enforcement agency, and official records are held by a single agency.

3. Follow-up period

Many reviewers are critical of the follow-up periods used in research on sex offender recidivism (United States General Accounting Office, 1996). Most research on sexually abusive youth has used a single follow-up point which results in varying lengths of follow-up for individual participants. Data indicate that the longer the follow-up period, the more likely an offender is to re-offend therefore outcome studies need to use long-term follow-up (Hagan & Gust-Brey, 1999; Marshall et al., 1991).

4. Other outcome measures

Efficacy of sex offender programmes needs to be assessed. However, it has been suggested that recidivism should not be the sole measure of program effectiveness (Freeman-Longo & Knopp, 1992; Marshall et al., 1991). Sexual abuse can have long-range effects on victims' lives and so any treatment effort to reduce the amount and severity of sexual violence, for any period of time and for any person, is a worthwhile endeavour and can be cost effective (Freeman-Longo & Knopp, 1992; Marshall et al., 1991). In this case, the aim of treatment would be the reduction and control rather than the total elimination of the offending behaviour. Other measures that could be explored include attitudinal changes, changes in level of responsibility for offending, changes in family functioning and psychological and behavioural changes.

Conclusion

It is important that sexually abusive youth receive the type and level of intervention that is appropriate to their offending and that services provided meet the needs of the youth and their family, while also ensuring community safety (National Adolescent Perpetrator Network, 1993). Treatment is often developed to meet the needs and context of an individual youth's current life situation (Zankman & Bonomo, 2004).

In their review, the Centre for Sex Offender Management concludes that; "the most cost effective intervention consists of a combination of legal sanctions and specialised clinical programming" (1999, p.12). It is also suggested that adjudication and supervision of youth is useful in ensuring accountability and treatment compliance as well as being a way in which to prevent any further offending (Centre for Sex Offender Management, 1999). Further they suggest "that the suspension of the youth's sentence is contingent upon his or her successful completion of a treatment program is a particularly effective motivator" (1999, p. 6).

Research on sexually abusive youth has increased in the last two decades, expanding our knowledge of individual, system and offence characteristics. It has also resulted in a marked increase in the number of programmes available to treat sexually abusive youth. However, it is only in the last 10 years that research has turned to look at the efficacy of these programmes.

This review has focused exclusively on recidivism among sexually abusive youth and most of the research included came out of the United States. A few emanate from Canada (e.g., Gretton et al., 2001; Worling & Curwen, 2000a), fewer from other countries such as New Zealand (Lambie et al., 2000) and Australia (Allan et al., 2003). No published studies from the United Kingdom were identified. Differences in the contexts in which programmes were developed, operated and evaluated will have implications on the generalisability of findings. Recidivism found in different studies may be complicated by a number of other factors of which the reader needs to be aware when comparing studies. These include variations in the age of samples, sample sizes, follow-up periods, treatment settings and treatment type.

Research has been comprised of almost exclusively male samples, and sexually abusive females have been largely left out of the research to date. Some studies have included females but usually their numbers are too small for any meaningful statistical analysis to be conducted (e.g., Allan et al., 2003; Rasmussen, 1999). This is an area that warrants further research.

As outcome research is in its infancy there are a number of weaknesses in design which need to be addressed by researchers prior to conducting research rather than relying exclusively on past studies which may be limited in the generalisability of their findings. The key issues explored here have been the use of comparison groups in order to assist in the interpretation of recidivism findings, definitions of recidivism and the follow-up length. Until such methodological issues are addressed it is impossible to determine with any accuracy whether traditionally based group and residential interventions are effective and/or more effective than programmes which use more ecologically based models such as multi-systemic and wrap around services (Borduin & Schaeffer, 2001). This highlights aspects of existing recidivism research which could be improved to strengthen future research.

Systematic exploration of the outcomes for New Zealand specialised community treatment programmes has not previously been undertaken. The present study sought to address this by exploring the efficacy of specialised community treatment programmes for sexually abusive children and youth in New Zealand, while also being cognisant of the limitations identified in previous research and addressing these where possible within the study design (see Table 44).

Chapter 6

Methodology

Specialist treatment programmes in New Zealand

Specialist community treatment programmes in New Zealand provide assessment and therapeutic services (standard programmes are approximately 18 to 24 months in duration) to children and youth with sexually abusive behaviours and their families. Treatment programmes in New Zealand accept mandated[38] and non-mandated or voluntary clients. The programmes accept children and youth who have been assessed as medium to high risk of sexual offending. Those referred to the programmes and subsequently considered low risk are often referred to counsellors and psychologists for individual and/or family counselling.

In other countries (e.g., United States), many youth attend specialist residential sexual offender treatment programmes (Lambie & Seymour, 2006). Within New Zealand, specialist treatment programmes are still predominantly community-based and cater for the majority of sexually abusive children and youth in New Zealand. Only a small number of youth (up to 12 at any given time) access the specialist residential treatment programme in New Zealand (Lambie & Seymour, 2006). It has been suggested that some high risk youth who are treated in the community in New Zealand would most likely be put into residential treatment in the United States (Lambie & Seymour, 2006).

In New Zealand, there are currently ten specialist community sex offender treatment programmes for sexually abusive children and youth and one residential unit. The three main community specialised treatments programmes are the SAFE Programme (Auckland), WellStop[39] Adolescent Programme (Wellington), and STOP Adolescent Programme (Christchurch). Smaller, satellite, programmes are currently run in regional centres; Hamilton and Northland (affiliated with the SAFE Network), Napier, Gisborne, Palmerston North and New Plymouth (affiliated with WellStop) and Dunedin and Invercargill (affiliated with STOP Christchurch). STOP Christchurch also provides an outreach service to the West Coast (South Island) with a particular focus on assistance for children who have engaged in sexually abusive behaviour and their families.

The treatment programmes provide a range of services, including specialist programmes for sexually abusive youth with intellectual disabilities and developmental delay, children (aged 12 or

[38] Mandated client's are required to attend treatment. This may be due to a Court order, conditions imposed by Community Corrections, Department of Corrections, or as the part of the recommendations of a CYF Family Group Conference.
[39] WellStop was previously called Wellington STOP

younger), female youth and social work services. SAFE Auckland also offers a Wilderness programme and STOP Christchurch have an Adventure Therapy component both of which are designed to enhance group cohesion and help engage clients in the therapy (Lambie et al., 2001; Mortensen, 2006). These programmes incorporate a range of locations and challenging and interesting activities such as "hiking, canoeing, caving, rafting, rock climbing, scuba diving, sailing, mountain biking and skiing" (Lambie et al., 2001, p. 188).

Specialist community treatment programmes in New Zealand use assessment and therapeutic techniques which are similar to those used by programmes in North America and the United Kingdom. Most programmes use a psycho-educational, Cognitive-Behavioural Therapy (CBT) approach with relapse prevention. They offer group, individual and family therapy. The importance of families/whānau[40] in a child and youths life and their role in treatment are recognised by New Zealand specialist programmes which have a strong family/systems focus (Lambie & Seymour, 2006). Families are offered psycho-education, therapy and social work support. The services offered by the New Zealand programmes are similar to the multi-faceted interventions offered as part of Multi-Systemic Therapy (MST) yet do not offer intensive, 24 hour care and is predominantly office based (Littell, Popa, & Forsythe, 2005).

The Good Way model has been developed at WellStop (Ayland & West, 2006). This model was initially developed for use with youth with intellectual disabilities who had sexually abused. Ayland and West describe it as a strengths-based model using a narrative therapy approach. No study has formally studied effectiveness of this model, though initial indications are that youth and their families easily understand and integrate the concepts into their lives (Ayland & West, 2006).

All the programmes in New Zealand cater to individual needs and offer individualised therapy plans which may involve therapy over a shorter period of time (e.g., over 6 months). Individualised plans often include individual and family therapy. This is commonly offered to youth where it is felt it would be inappropriate for them to participant in group therapy as it may expose them to more severe offending.

New Zealand has a diverse cultural population. Under the Treaty of Waitangi, the rights, lands and properties and cultural practices of Māori are recognised as important. The treatment programmes in New Zealand have recognised the need to provide culturally appropriate services for Māori clients in order to facilitate change. This has resulted in the development of Māori programmes which are staffed by Māori clinicians and that meet the needs of Māori children, youth and their whānau more fully. More recently, programmes for Pacific Island youth are being developed.

[40] Whānau - a Māori word referring to extended family and/or family group

The conclusion of the treatment occurs when programme staff, in conjunction with family/whānau and/or caregivers and others involved in the case (e.g., Child, Youth and Family[41] (CYF) social workers), are satisfied that significant change has occurred throughout all aspects of treatment as well in other aspects of the clients' life. That is, when the child or youth has substantially reached their goals they are considered to have successfully completed treatment. Progress is assessed in each of the key modules in order to "determine the degree of commitment the client has to maintaining a safe and non-abusive lifestyle in the future" (Flanagan & Hayman-White, 2000, p. 66).

Ethical considerations

Ethical approval was granted for this project by the University of Auckland Human Participants Ethics Committee (UAHPEC) on 19 May 2004 for a period of three years (reference number 2004/163). This project was funded by Child, Youth and Family, and access to Child, Youth and Family records was being sought. For this reason ethical approval was sought and granted by the Research Access Committee (RAC) of the Department of Child, Youth, and Family. Approval for access to Police databases was sought and granted by the Research and Evaluation Steering Committee, Office of the Commissioner, New Zealand Police. In each case, the study design was scrutinised to ensure that the research methodology ensured privacy and that ethical standards were maintained.

Individual confidentiality agreements were signed with Child, Youth and Family, New Zealand Police, and each of the programmes involved in this study with an undertaking that individuals would not be identified in any written or verbal reports or presentations that may result from the research. I also underwent a Police check and was given security clearance by the NZ Police.

A. Recidivism

Sample

Power analysis was undertaken utilising the techniques outlined by Cohen (1992). A previous study by Worling and Curwen (2000) had used similar methodology when investigating recidivism among sexually abusive youth and indicated a medium effect size (calculated at 0.34). Based on these data the total sample size was estimated at 107 to establish a power level of 80%, with a significance level of 0.05.

Initially, a total of 886 children and youths were identified. Exclusion criteria used in Study One remained in place for Study Two (e.g., excluding those who attended satellite programmes, files with insufficient information, etc) resulting in a total of 702. For Study Two, an additional criterion excluded sexually abusive children and youth who were referred for residential treatment at Te

[41] Department for Child, Youth and Family (CYF) is the national child welfare agency

Poutama Araahi Rangitahi (TPAR),[42] as the focus of the outcome study was the effectiveness of community treatment programmes in reducing recidivism. It would not be possible to ascertain which portion of change that occurred could be attributed to community-based treatment and which was due to the residential treatment received at TPAR, whether or not they completed residential treatment. There was also a separate study being conducted of TPAR. Those youths who had been referred to TPAR were identified through programme files and CYF records, resulting in the exclusion of 20 individuals.

A total of 682 individuals who had been identified as sexually abusive children and youth were included in Study Two. All children and youth in the study population were referred to the treatment programmes after 1 January 1995 and completed their involvement with the programmes on or before 30 June 2004.

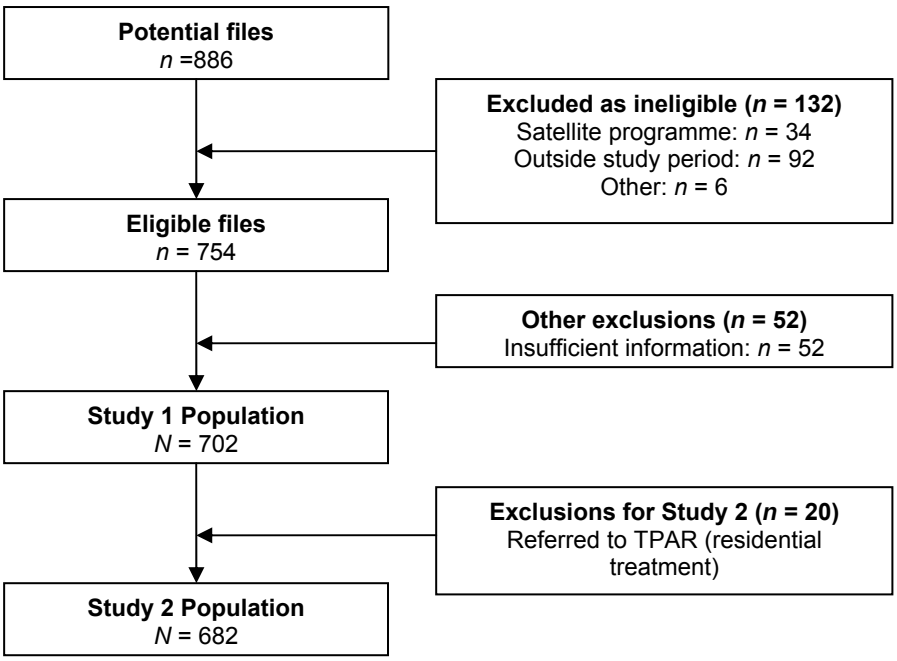

Figure 2. Summary of study inclusion and exclusion criteria

Procedure

Treatment data were collected from programme files (see Appendix A). Information on the programme individuals were referred to (e.g., 'special needs', Children's or Female programmes) were recorded. Reasons why youths did not commence or complete assessment or treatment are also reported. For those who commenced treatment, the length of time in treatment was calculated using treatment start and end dates.

Based on the treatment outcome information, all those in the study population were categorised into three groups:

[42] Te Poutama Araahi Rangitahi (TPAR) is the residential treatment unit in New Zealand for sexually abusive youths.

1. **Comparison** group – included those who were referred to the programmes and/or assessed only. This group did not receive treatment at a **specialised community** sexual offender treatment programme. In some cases they were referred to other services that were deemed more appropriate.
2. **Treatment Dropout** group – those who were referred, completed assessment and commenced treatment but who prematurely terminated their involvement with the treatment programme and were not considered by their programme provider to have successfully completed treatment.
3. **Treatment Completer** group – those who were referred, assessed and considered by their treatment provider to have successfully completed treatment.

Data sources

Within New Zealand, offending that occurs up until and including the age of 16 years is dealt with through the Youth Justice system which involves the Department of Child, Youth and Family (CYF) and/or the Youth Court. Recidivism data were collected from two sources: the New Zealand Police and CYF. These sources were chosen as they are both nationally based and provided the most detailed record of criminal activity dealt with through the youth and adult justice systems.

New Zealand Police

Official New Zealand Police criminal records were obtained through the Criminal Profiling Unit, New Zealand Police. This Unit has access to the National Intelligence Application (NIA) which is the national database used by the New Zealand Police. This data base contained current charges and Court outcomes. NIA included information on the disposition of charges from the New Zealand Courts through the Ministry of Justice. NIA would be an overly conservative estimate of recidivism as it only contained information on current charges and historical charges that proceed to Court and their deposition. The New **Z**ealand **W**ide **A**nalysis of **A**ntecedent and **G**eographic **S**uspect **I**ndicators (ZWAAGSI) database is unique to the Criminal Profiling Unit. This database contains all charges laid by New Zealand Police since 1976. Information collected included the date of the offence, date of charge, and date of convictions. The databases provided information on the date of offence, the charge(s) for which an individual was charged and the disposition for each case.

Court outcome data were categorised into a number of fields. Court outcomes in which the offender was acquitted (not guilty) or found not guilty were excluded from the conviction data. Youth Court outcomes were analysed separately.

Child, Youth and Family

Due to New Zealand's youth justice system (which diverts young offenders away from the adult justice system into Youth Justice), it was seen as essential for this study to collect data on offences that were dealt with through Youth Justice. Advice from the Ministry of Justice and Child, Youth and Family Services (CYF) suggested that offending could be dealt with through either Youth Justice or Care and Protection provisions. CYF maintain files of all children and youth who enter their service. CYF files contained a range of information but as the focus of this study was offending, files were read targeting references to offending behaviours. Behaviour was categorised as offending if details clearly indicated an offence had occurred including the date and type of offence (e.g., theft, wilful damage).

Definition of Recidivism

Recidivism was defined as any offence (sexual, violent or general) recorded in the Police databases (NIA and ZWAAGSI), determined by Youth Court proven outcomes[43], criminal charge or conviction or CYF record. These data yielded prevalence rates of re-offending during treatment and the follow-up period from the last date they were known to have had involvement with the treatment programmes.

Offences were coded as general (including dishonesty, traffic, drugs and property damage), violent (including murder, manslaughter, attempted murder, assault, robbery, kidnapping, and possession of a weapon), and sexual (including indecent assault, sexual assault, incest, indecent act, indecent exposure, sexual interference and aggravated sexual assault) offences. Offences were coded based on the NZ Police List of Offence Codes as at 14 June 2005. These are summarised in Table 45.

Table 45. Summary of offence codes categorises

Category	Code	Includes
Sexual Offences	2000-2999	Sexual Attacks Abnormal Sex Immoral Behaviour
Violent Offences (violent, nonsexual offences)	1000-1999	Homicide Kidnapping & Abduction Robbery Assaults (grievous, serious, minor) Intimidation/Threats
General offences (non-violent, nonsexual offences)	3000–9999 A - Y	Drugs & Antisocial Dishonesty (Burglary, Theft, Car Conversion, Receiving, Fraud, etc) Property Damage & Abuse Administrative Traffic, Licensing, etc.,

[43] In the Youth Court the term 'guilty' is not used rather cases are referred to as 'proven'.

Follow-up period

Data on offending that occurred while they were attending treatment were recorded and are presented separately from post-treatment re-offending. Offences were included in this category if the offence occurred between the start of treatment and the last date they were known to have attended treatment.

For those in the Treatment Dropout and Treatment Completers groups, offences that occurred between the end of the child or youth's involvement with the treatment programmes and 30 June 2005 were included as post-treatment offending. For those in the Comparison group, follow-up started from the date of referral (if no assessment sessions occurred), or the date of their last assessment session up until the 30 June 2005. This allowed for a minimum follow-up period of 12 months. The follow-up period ranged from 367 days (1 year) to 3647 days (10 years) with an average of 1625.4 days (*M* = 4.5 years, *SD* = 2.2).

Time spent incarcerated was not subtracted from the total follow-up time for a number of reasons including the fact that this information was often difficult to accurately calculate from the available information (resulting in high levels of incomplete data) and the point of interest was the date of their first re-offence not the frequency of their re-offending.

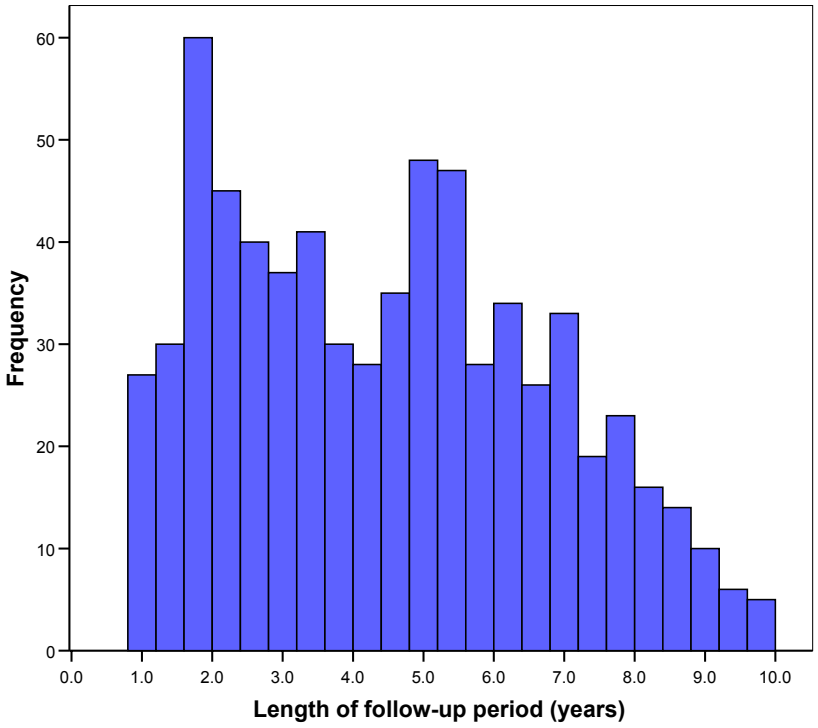

Figure 3. Length of follow-up period from end of contact with programme to 30 June 2005

Data aggregation

It is acknowledged that officially reported behaviour may underestimate actual levels of re-offending. This study sought to minimise the underestimations through the triangulation of multiple data sources. Sexual, general and violent recidivism were calculated based on each data source separately (CYF, Youth Court, criminal charges and convictions). Data were then aggregated across all sources to reveal overall sexual, general and violent recidivism. Overall sexual, general and violent recidivism data are presented separately for offending that occurred during treatment. Data on offending that occurred during treatment is not reported based on each data source (e.g., CYF records and charges) as the overall level of offending during treatment was low.

All incidents reported within a database were checked to ensure that duplicate data were removed.

Analysis

Data were coded and entered into the Statistical Package for Social Sciences (SPSS) Version 14.0. For the purposes of anonymity and confidentiality, a study number was assigned to each participant as their data were entered into the SPSS database.

Frequency data on treatment outcomes are presented first. This includes reasons why youth did not commence or complete assessment or treatment. Prevalence rates of sexual, general and violent re-offending were calculated based on CYF, Youth Court, charge and conviction data. Overall recidivism was then calculated based on aggregated data. Differences in sexual, general and violent recidivism between treatment groups were analysed using Pearson's chi-square, which is the most commonly used chi-square test for categorical data (Brace, Kemp, & Snelgar, 2003). Recidivism amongst the groups ('special needs' youth, females and children) are described. Data on general, violent and sexual offences that occurred while those in the Treatment Dropout and Treatment Completer groups were attending treatment are presented separately from re-offending that occurred post treatment.

Odds ratios were calculated for overall sexual, general and violent recidivism post-treatment data by comparing two groups (the Treatment Completers group compared with the Treatment Dropout or Comparison group) on a dichotomous outcome (e.g., sexual recidivism versus no sexual recidivism).

Recidivism patterns were assessed using Kaplan Meier Survival Analysis, as this allows for varying follow-up lengths (Altman, 1991; Norušis, 2004). The Tarone-Ware test was used as this is considered a more intermediate strategy to test for significant differences between survival

curves compared to the Breslow or log rank tests which are more likely to detect early or later differences between groups respectively (Norušis, 2004). The median survival times are reported. If the median survival time could not be calculated, as the survival proportion did not drop below 0.05, then the mean and standard deviation are reported.

A maximum alpha of 0.05 was used for all statistical tests.

B. Psychometric measures

Introduction

Recidivism is the most commonly used measure of treatment outcome in the literature on treatment efficacy for sexually abusive youth. To explore other outcome measures and expand the approaches used for assessing treatment efficacy, it was decided to investigate changes that might occur on psychometric measures between pre- and post-treatment. Consultation with the programmes occurred to find out which psychometric measures programmes used. It was felt that this would make this aspect of the outcome study meaningful to the programmes and not increase clinician workloads. It was felt that the programmes would be using psychometric measures which they found to be useful in their treatment provision.

Procedure

This study was designed to compare results on psychometric tests completed by youths at assessment (pre-treatment) and again at the end of their time in treatment (post-treatment). The three treatment programmes involved in this study were contacted and asked to create a list of all the psychometric measures they used, whether or not these were administer pre- and/or post-treatment and, if they were administered pre- and post-treatment, they were asked how long this had been occurring.

It was found that three psychometrics were used across all three sites:

- Child Behaviour Checklist (CBCL) – completed by parents/caregivers
- Youth Self Report (YSR) – youth version of the CBCL
- Millon Adolescent Clinical Inventory (MACI)

It was noted that WellStop did not carry out any post-treatment testing and Auckland and Christchurch indicated that the three psychometric tests had only been used consistently for pre- and post- measures in the last two years. As small numbers of clients had completed the psychometrics pre- and post-treatment during this timeframe, the period was extended.

This aspect of the study (part B) therefore included any sexually abusive youth who attended treatment between 1 January 1995 and 30 June 2004 at SAFE Auckland or STOP Christchurch (also included in Study 1) who had completed one, two or three of the psychometric measures pre- **and** post-treatment.

Sample

Power analysis was undertaken utilising the techniques outlined by Cohen (1992). Anticipating a medium effect size using t-tests to compare pre- and post-treatment scores, the total sample size was estimated at 64 individuals for each psychometric to establish a power level of 80%, with a significance level of 0.05.

A total of 31 adolescents had completed Millon Adolescent Clinical Inventories (MACI), 28 had completed the Child Behavior Checklist (CBCL) and 34 the Youth Self-Report (YSR) pre- and post-treatment (see Table 46). Therefore, the sample size indicated by the power analysis was not reached.

Table 46. Number of psychometric measures completed pre- and post-treatment at Auckland and Christchurch

	SAFE Auckland		STOP Christchurch		
Psychometric measure	***n***	**%**	**n**	**%**	**Total**
MACI	25	81	6	19	31
CBCL	12	43	16	57	28
YSR	16	47	18	53	34

Psychometrics

Millon Adolescent Clinical Inventory (MACI)

The Millon Adolescent Clinical Inventory (MACI) is a self-report personality inventory for adolescents aged 13-19 years (Millon, 1993). The MACI contains 27 scales: Personality Patterns (Introversive, Inhibited, Doleful, Submissive, Dramatizing, Egotistic, Unruly, Forceful, Conforming, Oppositional, Self-Demeaning, Borderline Tendency), Expressed Concerns (Identify Diffusion, Self-Devaluation, Body Disapproval, Sexual Discomfort, Peer Insecurity, Social Insensitivity, Family Discord, Childhood Abuse), Clinical Syndromes (Eating Dysfunctions, Substance Abuse Proneness, Delinquent Predisposition, Impulsive Propensity, Anxious Feelings, Depressive Affect, Suicidal Tendency), and three Modifying Indices (response bias scales) (Disclosure, Desirability, Debasement).

The internal consistency of the MACI appears strong with Cronbach alphas mostly in the .80s (range .73 to .91) (Buros Institute of Mental Measurements, n.d.). Correlations between self-reports on the MACI with clinician judgement are not very consistent (correlations mostly between .10 and .20s). A weakness of this measure seems to be its lack of specificity between scales with many scales correlating with each other in the .70s. Test-retest reliability ranges between .57, and .92 when the test is re-administered at 3- and 7 day intervals (Buros Institute of Mental Measurements, n.d.).

Child Behavior Checklist (CBCL)

The Child Behavior Checklist (CBCL) is designed to assess the behavioural problems and social competence of children aged between 4 and 18 years in a standardised format as reported by their parents/caregivers (Achenbach, 1991). The CBCL includes 113 questions related to the parent's perception of their child's behaviour. Parents respond to what degree each item describes their child on a 3-point rating scale (0 = not sure, 1 = somewhat true, 2 = very true or often true). Three of the scores yielded are: total behaviour problem score, internalising behaviour score and externalising behaviour score.

In the original development of the instrument by Achenbach and Edelbrock (1979), the scales of externalising and internalising behaviour problems were found to form two broad dimensions (Dreman & Ronen-Eliav, 1997). Each dimension also consists of another band of subscales. The externalising dimension includes delinquent and aggressive behaviour (Dreman & Ronen-Eliav, 1997). The internalising dimension includes: withdrawal, somatic complaints and anxious or depressed scales (Dreman & Ronen-Eliav, 1997). The total problem behaviour scale includes the externalising and internalising dimensions as well as social problems, thought problems and attention problems (Dreman & Ronen-Eliav, 1997). The CBCL also has 20 social competency items which assess the amount and quality of children's activities, social interactions and school functioning. This part of the measure yields three social competence scales and a total competence score.

Scores obtained from the CBCL are remarkably consistent across the parent form and across cultures (Crijnen, Achenbach, & Verhulst, 1999). The CBCL was based on empirical research and appears to have adequate reliability and validity. Reliability of the Externalising and Total Problem scores range between .92 and .96 across all age-gender groups and .88 and .92 for the Internalising scale. Internal consistency amongst the syndrome scales varies. Internal consistency on the Aggressive scale is strong (.92) for all age-gender groups, adequate on the Anxious-Depressed scale (.86 to .88) and Attention scale (.83 to .84) but low on the Thought Problems scale (lower than .70 across age-gender groups). Results show a test-retest correlation of .87 (Achenbach & Edelbrock, 1979).

Youth Self-Report (YSR)

The Youth Self-Report (YSR) (Achenbach, 1991) is designed to assess the behavioural problems and social competence of children aged between 11 and 18 years in a standardised self-report format. The YSR includes 112 questions related to the child/young person's own perception of their behaviour. They respond to what degree each item describes themselves on a 3-point rating scale (0 = not sure, 1 = somewhat true, 2 = very true or often true). The development of this form was similar to that of the CBCL. The format and questions are similar to the CBCL and the scores and scales are identical to those from the CBCL. Three of the scores yielded are: total behaviour

problem score, internalising behaviour score and externalising behaviour score. Competences scales looked at the amount and quality of children's activities, social interactions and school functioning. As with the CBCL these yield three competence scales and a total competence score. Test-retest reliability for the YSR ranged from .79-.88 done at 8- and 16-day intervals.

Analysis

Data were coded and entered into Microsoft Office Excel 2003. For the purposes of anonymity and confidentiality, a study number was assigned to each participant as their data were entered into the Excel spreadsheet.

The mean and standard deviation for each psychometric measure for Time 1 and 2 (i.e., pre- and post-treatment) were calculated. Due to the small sample size, analysis to determine statistically significant difference was not suitable so results were examined for patterns of change. Data are presented in graphical form in order to facilitate comparisons between pre- and post-treatment outcomes.

Treatment outcomes were evaluated with two different types of information: recidivism data and outcomes as measured by change in psychometric results from pre- to post-treatment. First, treatment details are presented, followed by the recidivism data and finally the psychometric data.

Chapter 7

Results – Recidivism

Treatment details

Almost a third (32%, *n* = 217) of the study population successfully completed treatment. This represents 57% of the 382 children and youth who commenced treatment. Those who completed treatment were made up of those (*n* = 186) who completed one of the standard therapy programmes offered (e.g., standard youth, 'special needs', female or children's programmes), and youth who (*n* = 31) completed an individualised therapy programme. A quarter of the study population (24%, *n* = 165) started treatment but did not successfully complete treatment. This represents 43% if those who started treatment.

Overall, 44% (*n* = 300) of those referred to the specialised community treatment programmes did not commence treatment (Comparison group).

Table 47. Status at termination from treatment programme and reasons

Treatment Group	First termination		Second termination	
	n	**%**	***n***	**%**
Comparison				
Referral only	90	13.2	9	22.0
Assessment not completed	64	9.4	4	9.8
Assessment only	146	21.4	4	9.8
Treatment dropouts				
Incomplete treatment	152	22.5	9	22.0
Individualised programme - incomplete	13	1.9	0	0.0
Treatment Completers				
Completed treatment	186	27.3	10	24.4
Individualised programme - completed	31	4.5	5	12.2
Total	**682**	**100.0**	**41**	**100.0**

Individuals were categorised into three groups based on their treatment outcomes: Comparison (43%, *n* = 300), Treatment Dropouts (24%, *n* = 165) and Treatment Completers (32%, *n* = 217) groups. Analysis revealed no statistically significant differences between the three programme sites (Auckland, Wellington and Christchurch) on membership to these treatment groups (χ^2 (4) = 7.74, $p > 0.05$).

The mean length of time children and youth spent in treatment was 519.8 days (17.0 months, *SD* = 315.8 days). The median was similar at 518.0 days. As the data did not meet the assumptions

of normality, the Mann-Whitney test for non-parametric data were used. The Treatment Dropouts (*Mdn* = 342.5) spent significantly shorter time in treatment than the Treatment Completers group (*Mdn* = 635.0), *U* = 9465.0, p < 0.000, *r* = -0.42.

Reasons why the youth did not commence or complete the assessment process are summarised in Table 48. The most common reasons were statutory agencies withdrawing the referral or funding (28%, n= 43) and family/whānau and/or the child or youth refusing to attend or withdrawing themselves from the assessment process (29%, *n* = 45). Another reason was that 15% (*n* = 23) of children and youth were referred to another service provider.

Table 48. Reason assessment not completed/commenced

Reason	*n*	%
Statutory agency withdrew referral or funding	43	27.9
Family/whānau and/or client refused /withdrew	45	29.3
Referred to other service provider[44]	23	14.9
Did not meet criteria for entry[45]	15	9.7
Unable to contact client or family /Moved out of area	9	5.8
Client imprisoned	6	3.9
Other	3	1.8
Unknown	10	6.5
Total	**154**	**100.0**

Table 49 summarises reasons children and youths completed assessment but did not commence treatment. The most common reason they did not commence treatment was being referred onto another service considered more suitable. It is also worth noting that approximately 6% (*n* = 9) did not attend treatment as CYF withdrew the referral, their involvement and/or commitment to fund treatment.

[44] For example, private counselling, other specialised community treatment programme, TPAR or counsellor to address own trauma.
[45] For example, outside age range, low intellectual ability or Lifestyle conditions not met (i.e., living in unsafe environment).

Table 49. Reason treatment not commenced

Reason	*n*	%
Referred to other service provider[46]	48	32.9
Did not met criteria for entry[47]	34	23.3
Refused to attend	19	13.0
CYF withdrew referral, declined treatment, withdrew involvement, unable to commit to funding through treatment	9	6.2
Youth/family continued to deny offending	8	5.5
Moved out of area	8	5.5
Imprisoned	5	3.4
Unknown	15	10.3
Total	**146**	**100.0**

Overall, 43% (n = 300) of young people referred to the specialised community treatment programmes did not commence treatment. The group consisted of 13% (*n* = 90) who were referred but did not commence assessment, 9% (*n* = 64) of children and youth who commenced assessment but did not complete the assessment process and 21% (*n* = 146) who completed the assessment process but did not commence treatment.

Table 50. Reasons treatment not completed

Reason	*n*	%
Client moved out of area/absconded from care/placement breakdown	18	10.9
Family/whānau and/or client refused/withdrew from treatment	44	26.7
Referred to other service/provider	15	9.1
Statutory agency involvement and/or funding ceased	19	11.5
Imprisoned/Sentence imposed due to breach of conditions	11	6.7
Terminated/Suspended by programme due to poor attendance, poor progress/engagement, inappropriate behaviour, etc	40	24.2
Unknown	18	10.9
Total	**165**	**100.0**

Almost a quarter (24%, *n* = 165) referred did not complete treatment. The most common reason clients did not complete treatment was that they withdrew and/or were withdrawn from treatment by their family/whānau (27%, *n* = 44). Approximately 24% (*n* = 40) were terminated or suspended by the programme for such reasons as poor progress or attendance. Nine percent (*n* = 15) were referred to another service provider. Just over 10% (12%, *n* = 19) did not complete treatment due to statutory agency (e.g., CYF, Corrections, Police or Courts) involvement and/or funding being

[46] For example, private counselling, culturally appropriate service, other specialised community treatment programme, TPAR or counsellor to address own trauma or drug and alcohol misuse.

[47] For example, assessed as low risk, low intellectual ability or Lifestyle conditions not met (i.e., using drugs, living in unsafe environment).

withdrawn and the youth ceasing to attend treatment as they were no longer mandated (see Table 50).

Comparing treatment groups

Matching between treatment groups did not occur but post hoc analysis was conducted to explore differences that might exist between treatment groups on the following variables:

- Ethnicity
- Age at referral
- Age at first known sexual offence
- Number of victims
- Nonsexual offending histories

Ethnicity

Analysis showed there was a significant difference between treatment groups in terms of ethnicity (χ^2 (6) = 28.81, p < 0.000). Significant differences were noted in that more than half (54%) of Māori youth referred to treatment did not receive treatment compared with 42% of Pacific Island and 39% of European youth. Pacific Island youth were more likely to drop out of treatment (36%) compared with Māori (25%) and European (22%). European youth were most likely to complete treatment (39%) compared with Pacific Island (22%) and Māori (21%) youth.

Table 51. Ethnicity across treatment groups

Treatment group	European		Māori		Pacific Island		Other/Unknown	
	n	%	*n*	%	*n*	%	*n*	%
Comparison	149	38.5	111	54.1	23	41.8	17	48.6
Dropouts	86	22.2	52	25.4	20	36.4	7	20.0
Completers	152	39.3	42	20.5	12	21.8	11	31.4
Total	**387**	**100.0**	**205**	**100.0**	**55**	**100.0**	**35**	**100.0**

The most common reasons Māori youth did not commence treatment (n = 111) were:

- Family/client refused to attend treatment programme (n = 20, 18%)
- Statutory agency (e.g., CYF, Police) withdrew referral and/or involvement and/or funding (n = 20, 18%)
- Referred to another treatment service provider (e.g., private counselling or culturally appropriate service) (n = 17, 15%)
- Referred to another specialist treatment provider (community or residential) (n = 12, 11%)
- Client imprisoned (n = 7, 6%)
- Unable to contact/client moved out of area (n = 7, 6%)

Compared with the overall population, Māori youth were more often referred onto another treatment provider (including specialist treatment programmes, culturally appropriate services or private counselling). Compared with the overall population, fewer Māori youth had the statutory agency withdraw the referral or their involvement/funding, and fewer families/clients refused the service. This suggests that Māori youths and their families did engage well with the treatment programmes and received ongoing support for their involvement in treatment by statutory agencies (e.g., CYF, Community Corrections, Court). Māori youth were often referred onto other services which the treatment programme considered would be more culturally suitable.

Although the number of Pacific Island youth who dropped out of treatment was small, the trends indicated by the results are worrying. Reasons why Pacific Island youths dropped out of treatment (*n* = 20) prior to successful completion included:

- Withdrawal of involvement and/or funding by statutory agency (e.g., CYF, Community Corrections, Court) (*n* = 5, 25%)
- Termination by programme due to poor progress, behaviour, attendance or engagement (*n* = 5, 25%)
- Transfer to other specialist treatment provider (community or residential) (*n* = 3, 15%)
- Family/client withdrawal from treatment (*n* = 3, 15%)
- Client imprisoned/sentence imposed due to breach of conditions (*n* = 2, 10%).

The most noticeable difference between the overall population and Pacific Island youths in reasons for treatment dropout was that more Pacific Island youth dropped out of treatment following the withdrawal of involvement and/or funding by a statutory agency (e.g., CYF, Community Corrections, Court).

Age at referral

Analysis revealed that there was a significant difference between treatment groups in age at first referral to the treatment programmes (F (2, 679) = 7.48. $p < 0.002$). The Tukey post hoc test indicated that the Treatment Dropout (M = 14. 87, SD = 1.6) group was significantly older at first referral compared with the Comparison (M = 14.15, SD = 1.8) and Treatment Completer (M = 14.27, SD = 1.7) groups.

Offending severity

There was no significant difference in the age at first known sexual offence between the three treatment groups included in this study (F (2, 577) = 0.64, $p > 0.05$).

Table 52. Mean number of victims across treatment groups

Treatment group	Mean # of victims	SD
Comparison	2.8	2.5
Treatment Dropouts	3.8	3.4
Treatment Completers	3.4	3.2
Total	**3.2**	**3.0**

There was a statistically significant difference between the three treatment groups (Comparison, Treatment Dropouts and Treatment Completers) in the number of identified victims (H (2) = 14.51. p = 0.001). Further analysis indicated that the significant differences were found between the Comparison group (mean number of victims = 2.8) and the Treatment Dropouts (mean number of victims = 3.8). The slightly lower number of known victims in the Comparison group may reflect the fact that disclosures of sexual offending tend to continue to occur over the assessment and treatment process, so there was less opportunity for disclosures to occur for the Comparison group or that the treatment dropouts are higher risk as is seen in the international research.

When the three groups were compared on the basis of their nonsexual offending histories analysis revealed that there was a significant difference between the treatment groups (χ^2 (2) = 10.828, p < 0.005). Further analysis revealed that the Treatment Completer group was significantly less likely to have a history of nonsexual offending compared with the Comparison (χ^2 (1) = 3.7, p = 0.05) and Treatment Dropout (χ^2 (1) = 10.77, p < 0.002) groups. There was no significant difference between the Treatment Dropout and the Comparison groups (χ^2 (1) = 2.97, p > 0.05).

Overall, no significant difference in age at first known sexual offence was found between the treatment groups. A small difference was found between the Comparison and Treatment Dropout groups in number of identified victims, but the limited opportunity for disclosure amongst those in the Comparison group may have contributed to this difference. The Treatment Dropout group was found to be more likely to have a history of nonsexual offending compared with the Comparison group. If matching between comparison groups had occurred (e.g., based on age and ethnicity), some of the differences between treatment groups (i.e., ethnic differences) may not been found. As there was little difference between the three comparison groups on the above variables it was considered reasonable to compare differences in recidivism between the groups.

Youth recidivism

Recidivism data were collected from two sources: CYF records and Police records. CYF data provided information on any known sexual, general and violent offences that occurred and were

known to Youth Justice or Care and Protection staff. Police records provided information on criminal charges, convictions, and Youth Court outcomes.

Youth re-offending data (based on CYF and Youth Court data) are presented and then adult re-offending (when the offender is 17+ years) that was dealt with through Police charge and conviction is presented. Overall, sexual, general and violent recidivism data based on the triangulation of all data sources are presented. Finally, survival curves for sexual, general and violent recidivism were created to represent the length of time sexually abusive youth "survive" (stay offence free) post-treatment.

Sexual recidivism

Data gathered from Child, Youth and Family (CFY) records regarding any known sexual offending are presented in Table 53. Sexual offending recorded included 'hands off' offences such as voyeurism and 'hands on' offences such as penetrative acts. There was no significant difference between treatment groups in sexual re-offending post-treatment based on CYF records (χ^2 (2) = 4.35, p > 0.05). This result should be viewed with caution as it may be due to the small number of sexual re-offences noted within CYF records. This has resulted in some cells having fewer subjects than expected, limiting the statistical confidence in this finding.

Table 53. Frequency and percentages of sexual recidivism within treatment groups based on CYF and Youth Court data

	CYF records					Youth Court records				
	No		Yes		Total	No		Yes		Total
Treatment group	*n*	%	*n*	%	*n*	*n*	%	*n*	%	*n*
Comparison	291	97.0	9	3.0	300	299	99.7	1	0.3	300
Dropouts	162	98.2	3	1.8	165	164	99.4	1	0.6	165
Completers	216	99.5	1	0.5	217	214	99.3	5	0.7	217
Total	**669**	**98.1**	**13**	**1.9**	**682**	**677**	**99.3**	**5**	**0.7**	**682**

Data gathered from Police databases on Youth Court proven outcomes (similar to a guilty verdict in the adult system) for known sexual offending are presented in Table 53. Police records indicated that only five (0.7%) youth had any sexual re-offences proven in the Youth Court post treatment. There was no significant difference between treatment groups as to whether or not Youth Court records indicated the youth had sexually re-offended (χ^2 (2) = 1.95, p > 0.05).

General recidivism

General re-offending recorded included property damage, theft, shoplifting, and traffic offences. Data gathered from Child, Youth and Family (CYF) records regarding any known general re-offending post-treatment is presented in Table 54. There was a significant difference between treatment groups in general recidivism based on CYF records (χ^2 (2) = 15.92, p < 0.000). Subsequent analysis revealed that general recidivism was significantly higher for the Comparison

group compared with the Treatment Dropout (χ^2 (1) = 6.6, p < 0.01) and Treatment Completers (χ^2 (1) = 12.76, p < 0.000) groups. There was no significant difference between the Treatment Dropout and Treatment Completers group (χ^2 (1) = 0.53, p > 0.05)

Table 54. Frequency and percentages of general recidivism within treatment groups based on CYF and Youth Court data

	CYF records					Youth Court records				
	No		Yes		Total	No		Yes		Total
Treatment group	*n*	%	*n*	%	*n*	*n*	%	*n*	%	*n*
Comparison	251	83.7	49	16.3	300	248	82.7	52	17.3	300
Dropouts	152	92.1	13	7.9	165	152	92.1	13	7.9	165
Completers	204	94.0	13	6.0	217	206	94.9	11	5.1	217
Total	**607**	**89.0**	**75**	**11.0**	**682**	**606**	**88.9**	**76**	**11.1**	**682**

Data gathered from Police databases on Youth Court proven outcomes for known general offending post-treatment is presented in Table 54. Eleven percent (n = 76) had at least one case proven within the Youth Court for general re-offending. There was a significant difference between treatment groups (χ^2 (2) = 21.47, p < 0.000). Further analysis indicated that general recidivism was significantly higher for the Comparison group compared with Treatment Dropouts (χ^2 (1) = 7.91, p < 0.01) and Treatment Completers (χ^2 (1) = 17.70, p < 0.000). There was no significant difference between the Treatment Dropout group compared with Treatment Completers (χ^2 (1) = 1.26, p > 0.05).

Violent recidivism

Violent re-offending recorded included assaults and threatening with weapons. Data gathered from Child, Youth and Family (CYF) records regarding any known violent re-offending during the post-treatment follow-up period are presented in Table 55. There was a significant difference found between treatment groups in violent recidivism based on CYF records (χ^2 (2) = 14.02, p < 0.001). Subsequent analysis revealed that violent recidivism was significantly higher for the Comparison group compared to the Treatment Dropout group (χ^2 (1) = 5.44, p < 0.03) and Treatment Completers (χ^2 (1) = 10.73, p < 0.00). There was no significant difference between the Treatment Completers and the Treatment Dropout groups (χ^2 (1) = 0.57, p > 0.05).

Table 55. Frequency and percentages of violent recidivism within treatment groups based on CYF and Youth Court data

	CYF records					Youth Court records				
	No		Yes		Total	No		Yes		Total
Treatment group	*n*	%	*n*	%	*n*	*n*	%	*n*	%	*n*
Comparison	274	91.3	26	8.7	300	366	88.7	34	11.3	300
Dropouts	160	97.0	5	3.0	165	160	97.0	5	3.0	165
Completers	213	98.2	4	1.8	217	213	98.2	4	1.8	217
Total	**647**	**94.9**	**35**	**5.1**	**682**	**639**	**93.7**	**43**	**6.3**	**682**

Data gathered from Police databases on Youth Court involvement regarding any proven outcomes for known violent re-offending during post-treatment follow-up are presented in Table 55. Six percent (n = 43) had at least one case proven outcome within the Youth Court for violent re-offending. There was a significant difference between treatment groups as to whether or not youth had a case proven in the Youth Court for violent re-offending (χ^2 (2) = 23.15, p < 0.001). Further analysis indicated that violent recidivism was significantly higher for the Comparison group compared with Treatment Dropouts (χ^2 (1) = 9.55, p < 0.02) and Treatment Completers (χ^2 (1) = 16.65, p < 0.001). No significant difference was found between the Treatment Dropout compared with the Treatment Completer groups (χ^2 (1) = 0.57, p > 0.05).

Adult recidivism

Sexual recidivism

Data gathered from the Police databases regarding any charges for sexual offending during the follow-up period are presented in Table 56. Police data indicated that 4% had been charged with sexual offences post treatment. There was a significant difference between the treatment groups in charges for sexual re-offending (χ^2 (2) = 11.87, p < 0.03). Subsequent analysis revealed that the Treatment Dropout group were significantly more likely to be charged with a sexual offence at follow-up than the Comparison (χ^2 (1) = 5.62, p < 0.02) and Treatment Completers (χ^2 (1) = 9.86, p < 0.002) groups. There was no statistically significant difference in charges for sexual re-offending between the Comparison and Treatment Completers groups (χ^2 (1) = 1.45 p > 0.05).

Table 56. Frequency of sexual recidivism within treatment groups based on police criminal charges and convictions data

	Criminal charges					Criminal convictions				
	No		Yes		Total	No		Yes		Total
Treatment group	*n*	%	*n*	%	*n*	*n*	%	*n*	%	*n*
Comparison	291	97.0	9	3.0	300	295	98.3	5	1.7	300
Dropouts	152	92.1	13	7.9	165	157	95.2	8	4.8	165
Completers	214	98.6	3	1.4	217	215	99.1	2	0.9	217
Total	**657**	**96.3**	**25**	**3.7**	**682**	**667**	**97.8**	**15**	**2.2**	**682**

Data gathered from the Police databases regarding any convictions for sexual offending during the follow-up period are presented in Table 56. Only 2% had been convicted for sexual re-offences during the follow-up period. There was a significant difference in whether or not the youth had been convicted for sexual re-offending (χ^2 (2) = 7.44, p < 0.02). Subsequent analysis revealed that the Treatment Dropout group were significantly more likely to be convicted with a sexual offence at follow-up than the Comparison (χ^2 (1) = 4.00, p < 0.05) and Treatment Completers (χ^2 (1) = 5.67, p < 0.02) groups. There was no statistically significant difference in

sexual convictions between the Comparison and Treatment Completers groups (χ^2 (1) = 0.52, p > 0.05).

General recidivism

Data gathered from the Police databases regarding any charges for general re-offending during the follow-up period are presented in Table 57. Overall it was found that 41% (n = 280) of the study population were charged with at least one general offence after their involvement with the specialised community programmes ceased. There was a significant difference in whether or not youth had been charged for general re-offending for the three treatment groups (χ^2 (2) = 28.34, p < 0.000). Further analysis revealed that the Treatment Dropout group were significantly more likely to be charged with a general re-offence than Comparison (χ^2 (1) = 24.52, p < 0.000) and Treatment Completers (χ^2 (1) = 19.70, p < 0.000) groups. The Comparison group were not significantly more likely to re-offend than the Treatment Completers group (χ^2 (1) = 0.05, p > 0.05).

Table 57. Frequency of general recidivism within treatment groups based on police charges and conviction data

	Criminal Charges					Criminal Convictions				
	No		Yes		Total	No		Yes		Total
Treatment group	*n*	%	*n*	%	*n*	*n*	%	*n*	%	*n*
Comparison	195	65.0	105	35.0	300	206	68.7	94	31.3	300
Dropouts	68	41.2	97	58.8	165	77	46.7	88	53.3	165
Completers	139	64.1	78	35.9	217	150	34.6	67	30.9	217
Total	**402**	**58.9**	**280**	**41.1**	**682**	**433**	**63.5**	**249**	**36.5**	**682**

Data gathered from the Police databases regarding any convictions for general offending during the follow-up period are presented in Table 57. Police records indicated that 37% of youth had been convicted for a general offence in the follow-up period. There was a significant difference between groups in whether or not youth had been convicted for general re-offending (χ^2 (2) = 26.59, p < 0.000). Subsequent analysis revealed that the Treatment Dropout group were significantly more likely to be convicted of a general offence at follow-up than the Comparison (χ^2 (1) = 21.63, p < 0.000) and Treatment Completers (χ^2 (1) = 19.61, p < 0.000) groups. There was no statistically significant difference in general recidivism between the Comparison and Treatment Completers groups (χ^2 (1) = 0.01, p > 0.05).

Violent recidivism

Data gathered from the Police databases regarding any charges for violent offending during the follow-up period are presented in Table 58. Overall it was found that 18% (n = 121) of the study population were charged with at least one violent offence after their involvement with the specialised community programmes ceased. There was a significant difference in whether or not youth had been charged for violent re-offending for the three treatment groups (χ^2 (2) = 20.22, p <

0.000). Further analysis revealed that the Treatment Completers group were significantly less likely to violently re-offend compared with the Comparison (χ^2 (1) = 5.75, p < 0.02) and Treatment Dropout (χ^2 (1) = 20.16, p < 0.000) groups. The Treatment Dropout group were significantly more likely to have been charged with a violent offence during the follow-up compared with the Comparison group (χ^2 (1) = 6.63, p < 0.000).

Table 58. Frequency of violent recidivism within treatment groups based on police charges and conviction data

	Criminal Charges					Criminal Convictions				
	No		Yes		Total	No		Yes		Total
Treatment group	*n*	%	*n*	%	*n*	*n*	%	*n*	%	*n*
Comparison	247	82.3	53	17.7	300	260	86.7	40	13.3	300
Dropouts	119	72.1	46	27.9	165	128	77.6	37	22.4	165
Completers	195	89.9	22	10.1	217	198	91.2	19	8.8	217
Total	**561**	**82.3**	**121**	**17.7**	**682**	**586**	**85.9**	**96**	**14.1**	**682**

Data gathered from the Police databases regarding any convictions for violent offending during the follow-up period are presented in Table 58. Police records indicated that 14% of youth had been convicted for a violent offence in the follow-up period. There was a significant difference in whether or not youth had been convicted for violent re-offending between the treatment groups (χ^2 (2) = 14.72, p < 0.001). Subsequent analysis revealed that the Treatment Dropout group were significantly more likely to be convicted for a violent offence at follow-up than the Comparison (χ^2 (1) = 6.37, p < 0.02) and Treatment Completers (χ^2 (1) = 14.00, p < 0.001) groups. The difference of violent recidivism between the Comparison and Treatment Completers groups was not significant (χ^2 (1) = 2.61, p > 0.05).

Overall recidivism data

Overall recidivism during treatment

Triangulation occurred of data gathered from the Police databases and CYF records regarding any known offending, charge or conviction for sexual, general and violent offending that occurred while the child or youth was attending treatment.

Table 59. Sexual recidivism during treatment within treatment groups

	No		Yes		Total
Treatment group	*n*	%	*n*	%	*N*
Dropouts	157	95.2	8	4.8	**165**
Completers	209	96.3	8	3.7	**300**
Total	**366**	**95.8**	**16**	**4.2**	**465**

Data indicated that only a small percentage offended sexually while attending treatment (see Table 59). There was no statistically significant difference in sexual recidivism between the Treatment Dropout and Treatment Completers groups (χ^2 (1) = 0.32, p > 0.05) during treatment.

Table 60. General and violent recidivism during treatment within treatment groups

	General recidivism					Violent recidivism				
	No		Yes		Total	No		Yes		Total
Treatment group	***n***	**%**	***n***	**%**	***n***	***n***	**%**	***n***	**%**	***n***
Dropouts	135	81.8	30	18.2	165	153	92.7	12	7.3	165
Completers	191	88.0	26	12.0	300	211	97.2	6	2.8	300
Total	**326**	**85.3**	**56**	**14.7**	**465**	**364**	**95.3**	**18**	**4.7**	**465**

Overall, 14.7% (n = 56) of those in the Treatment Dropout and Treatment Completers groups were known to have engaged in at least one general offence and 4.7% (n = 18) in a violent offence while attending treatment (see Table 60). There was no statistically significant difference in general offending between the Treatment Dropout and Treatment Completers groups during treatment (χ^2 (1) = 2.88, p > 0.05). Results indicated that the Treatment Dropout groups were significantly more likely to have violently offended during treatment compared with the Treatment Completers group (χ^2 (1) = 04.24, p < 0.05).

Overall sexual recidivism post treatment

Triangulation occurred of data gathered from the Police databases and CYF records regarding any known offending, charge or conviction for sexual offending during the follow-up period post treatment. These aggregated data are presented in Table 61. Overall, it is known that 6% (n = 39) of the study population re-offended sexually during the follow-up period. There was a significant difference between treatment groups in overall sexual re-offending (χ^2 (2) = 8.36, p < 0.02).

Table 61. Overall frequency, percentages and odds ratios for sexual recidivism across treatment groups

	No		Yes		Total		
Treatment group	***n***	**%**	***n***	**%**	***N***	***OR*[48]**	**95% *CI***
Comparison	283	94.3	17	5.7	300	2.11	0.77, 6.65
Dropouts	149	90.3	16	9.7	165	3.78	1.36, 12.02
Completers	211	97.2	6	2.8	217	1.00	-
Total	**643**	**94.3**	**39**	**5.7**	**682**	**-**	-

Subsequent analysis revealed that, overall, the Treatment Completers group were significantly less likely to have sexually re-offended at follow-up compared with the Treatment Dropout group (χ^2 (1) = 8.30, p < 0.01). There was no statistically significant difference in sexual recidivism

[48] Odds Ratio (OR)

between the Comparison group and the Treatment Dropout (χ^2 (1) = 2.62, p > 0.05) or Treatment Completers (χ^2 (1) = 2.49, p > 0.05) groups.

Compared with Treatment Completers, those who dropped out of treatment (Treatment Dropout group) were significantly more likely to re-offend (*OR* = 3.78, 95% *CI* 1.36, 12.02). The odds of sexual re-offending among those who did not attend specialised community treatment (Comparison group) was 2.11 times higher compared with those who completed treatment, although the 95% confidence interval includes 1 indicating there may be no true difference between the populations.

Overall general and violent recidivism post treatment

Triangulation occurred of data gathered from the Police databases and CYF records regarding any known offending, charge or conviction for general offending during the follow-up period post treatment. These aggregated data are presented in Table 62 and Table 63. Overall it is known that 46% (*n* = 310) of the study population re-offended generally and 23% (*n* = 154) violently post treatment. There was a significant difference between the treatment groups as to whether or not the youth engaged in general (χ^2 (2) = 25.76, p < 0.000) and violent (χ^2 (2) = 22.13, p < 0.000) re-offending.

Table 62. Overall frequency, percentages and odds ratios for general recidivism across treatment groups

	No		Yes		Total		
Treatment group	***n***	**%**	***n***	**%**	***N***	***OR***	**95% *CI***
Comparison	176	58.7	124	41.3	300	1.14	0.78, 1.65
Dropouts	62	37.6	103	62.4	165	2.68	1.73, 4.16
Completers	134	61.8	83	38.2	217	1.00	-
Total	**372**	**54.5**	**310**	**45.5**	**682**	**-**	-

Subsequent analysis revealed that, overall, the Treatment Dropout group were significantly more likely to have committed a general offence by follow-up than the Comparison (χ^2 (1) = 18.95, p < 0.000) and the Treatment Completers (χ^2 (1) = 21.93, p < 0.000) groups. There was no significant difference in general recidivism between the Comparison and Treatment Completers groups (χ^2 (1) = 0.50, p > 0.05).

Those who dropped out of treatment had an *OR* of 2.68 (95% *CI* 1.73, 4.16) and those who did not attend specialised community treatment had an *OR* of 1.14 for general re-offending compared with those who completed treatment. This indicates that Treatment Dropouts were between 1.73 times and 4.16 times more likely to re-offend compared with Treatment Completers.

Table 63. Overall frequency, percentages and odds ratios for violent recidivism across treatment groups

Treatment group	No		Yes		Total		
	n	%	*n*	%	*N*	*OR*	95% *CI*
Comparison	223	74.3	77	25.7	300	2.54	1.53, 4.29
Dropouts	114	69.1	51	30.9	165	3.29	1.89, 5.80
Completers	191	88.0	26	12.0	217	1.00	-
Total	**528**	**77.4**	**154**	**22.6**	**682**	**-**	-

Subsequent analysis revealed that, overall, the Treatment Completers group were significantly less likely to have committed a violent offence at follow-up than the Comparison (χ^2 (1) = 14.78, p < 0.001) and the Treatment Dropout (χ^2 (1) = 20.86, p < 0.000) groups. There was no statistically significant difference in violent recidivism between the Comparison and Treatment Dropout groups (χ^2 (1) = 1.47, p > 0.05).

The pattern of risk is more evident when examining violent re-offences: the odds ratio of violent re-offending is significantly elevated in both Treatment Dropout (*OR* = 3.29, 95% *CI* 1.89, 5.80) and the Comparison groups (*OR* = 2.54, 95% *CI* 1.53, 4.29) compared with Treatment Completers.

Overall recidivism rates amongst the subgroups

Overall, none of the thirteen females included in this study were sexual recidivists. Records indicated that only two children had engaged in further sexually abusive behaviours at follow-up (see Table 64): one in the Comparison group and one in the Treatment Completers group. Overall, 7% of the 135 sexually abusive youth with 'special needs' were known to have sexually re-offended at follow-up (see Table 64). There was no significant difference in sexual recidivism between treatment groups (χ^2 (2) = 2.61, p > 0.05).

Table 64. Frequency and percentages of sexual recidivism within the special populations

Treatment group	'Special Needs'					Children				
	No		Yes		Total	No		Yes		Total
	n	%	*n*	%	*n*	*n*	%	*n*	%	*n*
Comparison	42	93.3	3	6.7	45	21	95.5	1	4.5	22
Dropouts	34	87.2	5	12.8	39	3	100	0	0.0	3
Completers	49	96.1	2	3.9	51	9	90.0	1	10.0	10
Total	**125**	**92.6**	**10**	**7.4**	**135**	**33**	**94.3**	**2**	**5.7**	**35**

Two females were known to have committed a general re-offence (see Table 65). Six of the 35 children included in this study re-offended generally (see Table 65). Overall, 47% (*n* = 63) of 'special needs' youth generally re-offended. There was no statistically significant difference

between the treatment groups in general recidivism (χ^2 (2) = 5.15, p > 0.05) amongst 'special needs' youth.

Table 65. General recidivism within the special populations

Treatment group	'Special Needs'					Children					Females				
	No		Yes		Total	No		Yes		Total	No		Yes		Total
	n	%	*n*	%	*N*	*n*	%	*n*	%	*N*	*n*	%	*n*	%	*N*
Comparison	28	62.2	17	37.8	45	19	86.4	3	13.6	22	7	87.5	1	12.5	8
Dropouts	15	38.5	24	61.5	39	1	33.3	2	66.7	3	0	0	0	0	0
Completers	29	56.9	22	43.1	51	9	90.0	1	10.0	10	4	80.0	1	20.0	5
Total	**72**	**53.3**	**63**	**46.7**	**135**	**29**	**82.9**	**6**	**17.1**	**35**	**11**	**84.6**	**2**	**15.4**	**13**

Data indicated that two females violently re-offended (see Table 66). Four of the 35 children included in this study re-offended violently: two in the Comparison and two in the Treatment Dropout groups. Overall, 23% (*n* = 31) of 'special needs' youth violently re-offended during the follow-up period post treatment.

Table 66. Violent recidivism within the special populations

Treatment group	'Special Needs'					Children					Females				
	No		Yes		Total	No		Yes		Total	No		Yes		Total
	n	%	*n*	%	*N*	*n*	%	*n*	%	*N*	*n*	%	*n*	%	*N*
Comparison	31	68.9	14	31.1	45	20	90.9	2	9.1	22	7	87.5	1	12.5	8
Dropouts	27	69.2	12	30.8	39	1	33.3	2	66.7	3	0	0.0	0	0.0	0
Completers	46	90.2	5	9.8	51	10	100.0	0	0.0	10	4	80.0	1	20.0	5
Total	**104**	**77.0**	**31**	**23.0**	**135**	**31**	**88.6**	**4**	**11.4**	**35**	**11**	**84.6**	**2**	**15.4**	**13**

There was a statistically significant difference in violent recidivism between treatment groups (χ^2 (2) = 8.03, $p < 0.02$) amongst 'special needs' youth. Further analysis revealed that 'special needs' youth in the Treatment Completers group were significantly less likely to violently re-offend compared with the Comparison (χ^2 (1) = 6.84, $p < 0.01$) and Dropout (χ^2 (1) = 6.34, $p < 0.01$) groups. There was no statistically significant difference between the Comparison and Treatment Dropout groups in violent recidivism (χ^2 (1) = 0.001, $p > 0.05$).

Survival analysis

In order to assess the recidivism rates between the three treatment groups (Comparison, Treatment Dropouts and Treatment Completers) while taking into account variations in the length of follow-up, Kaplan-Meier survival analysis was undertaken. Survival curves for general, violent and sexual recidivism for the total sample and within group comparisons in recidivism can be seen in Figure 4 through to Figure 9. Survival within the context of this research means that they had no known general, violent or sexual offence within the follow-up period (i.e., were offence free). The graphs show the proportion that were known to have not re-offended, and the time elapsed from the end of treatment until the date of their first known re-offence or the end of the follow-up period (30 June 2005).

Sexual recidivism

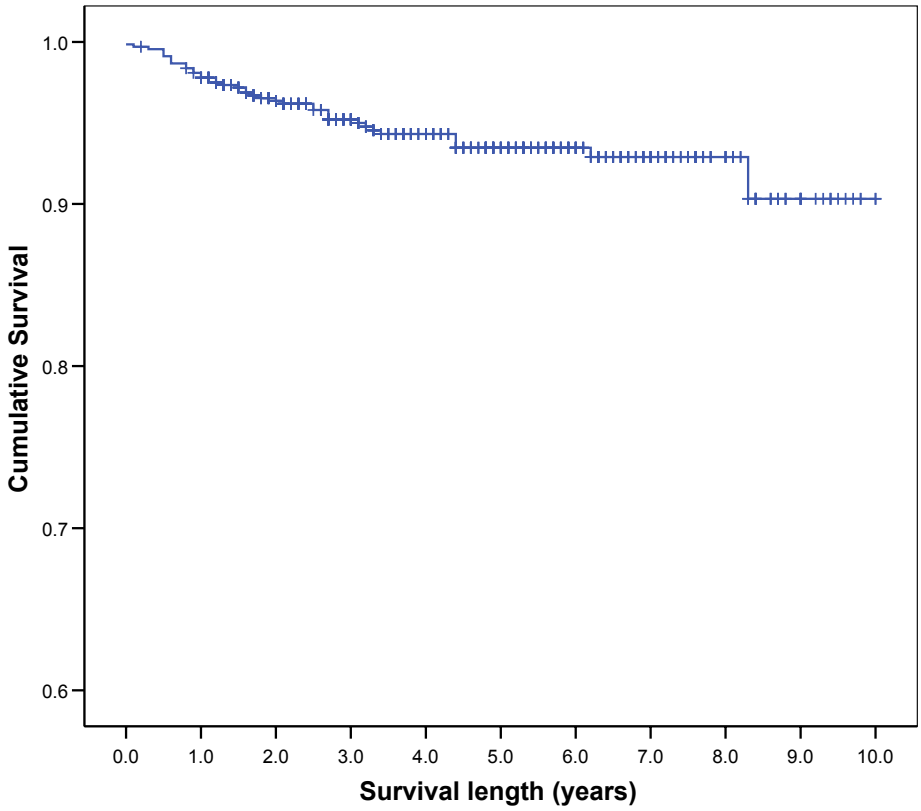

Figure 4. Overall sexual recidivism amongst sexually abusive youth

The survival curve for sexual re-offending for the total sample can be seen within Figure 4. The mean survival times were 9.4 years (*SE* = 0.10, 95%*CI* = 9.2 - 9.6) for the overall sample.

Comparison of the sexual recidivism survival curves (see Figure 5) showed there was a significant difference between the Comparison, Treatment Dropouts and Treatment Completers groups (Tarone-Ware statistic (*df* = 2) = 5.84, *p* = 0.05). Further analysis showed that the significant difference was between the Treatment Completers and Treatment Dropout groups (Tarone-Ware statistic (*df* = 1) = 5.83, *p* < 0.02). The difference between the groups was not so marked during the first year but emerged over subsequent years. There was no significant difference in the survival curves between the Comparison group and the Treatment Completer (Tarone-Ware statistic (*df* = 1) = 1.45, *p* > 0.05) or the Treatment Dropout (Tarone-Ware statistic (*df* = 1) = 1.97, *p* > 0.05) groups.

The Comparison group remained at ongoing risk of re-offending, while those who dropped out of treatment were at highest risk of sexually re-offending within the first four years after they dropped out of treatment. Based on the survival curves in Figure 5, it is possible to estimate the true sexual recidivism rate for the three treatment groups at the end of the follow-up period. The estimated sexual recidivism rate at the end of the follow-up period for the Treatment Completer group was 3% (cumulative survival proportion at the end of 8 years was 0.97). The estimated sexual recidivism rate for the Comparison and Treatment Dropout groups was 12% at the end of the follow-up period for both groups (cumulative survival proportion was 0.88 at the end of the follow-up period, 10 and 9 years respectively).

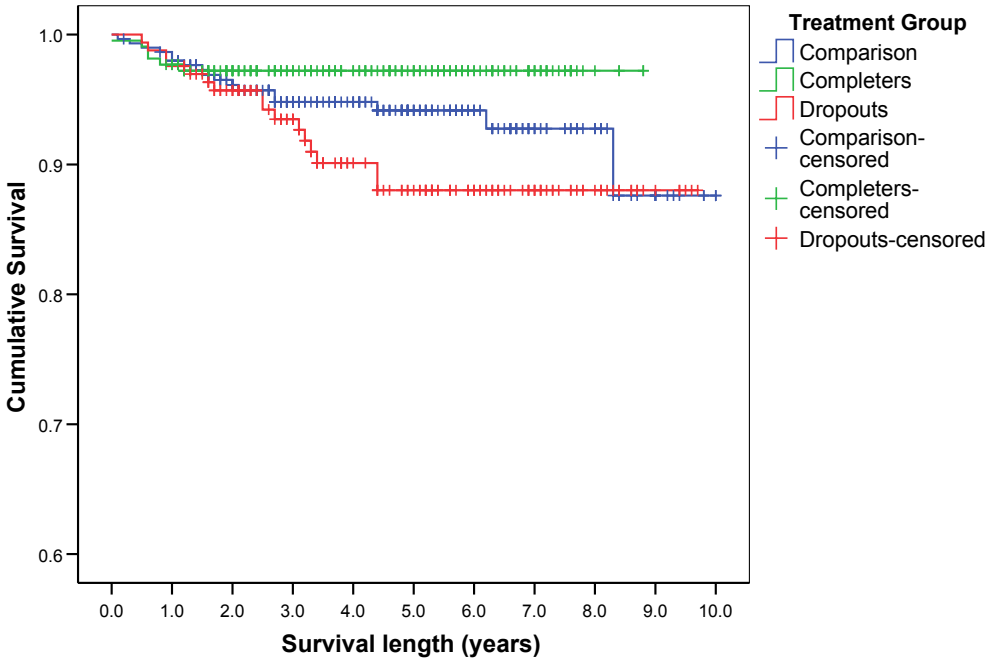

Figure 5. Sexual recidivism within treatment groups[49]

[49] Censored entries (the plus sign) indicate that the individual(s) was still offence free when the follow-up period ended.

The median survival time could not be calculated as the survival proportion did not drop below 0.5. The mean survival times were 9.4 years (*SE* = 0.16, 95%*CI* = 9.1 - 9.7) for the Comparison group, 8.8 years (*SE* = 0.20, 95%*CI* = 8.4 - 9.2) for the Treatment Dropout group and 8.6 years (*SE* = 0.09, 95%*CI* = 8.4 - 8.8) for the Treatment Completers group.

General recidivism

The survival curve for general re-offending for the total sample can be seen in Figure 6. The overall mean survival time was 5.3 years (*SE* = 0.19, 95%*CI* = 4.94 – 5.70).

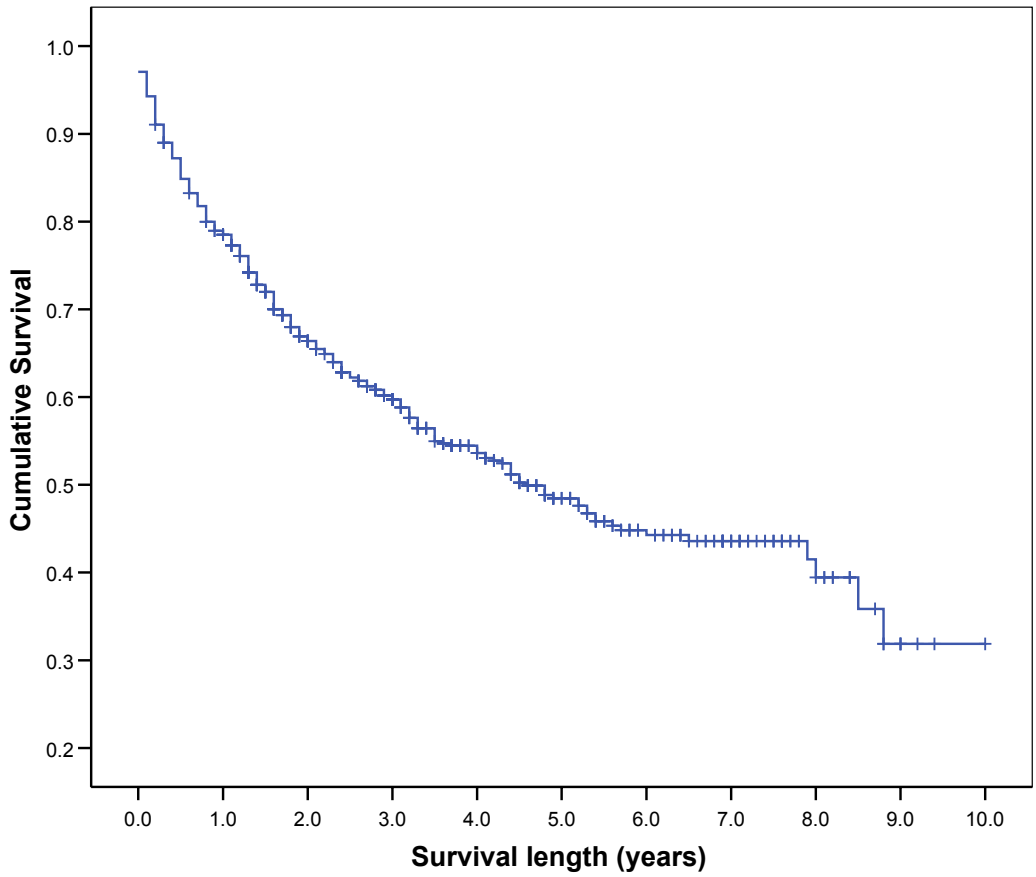

Figure 6. Overall general recidivism

Comparison of the general recidivism survival curves (see Figure 7) showed a significant overall difference between the Comparison, Treatment Dropouts and Treatment Completers (Tarone-Ware statistic (*df* = 2) = 18.66, *p* < 0.000) groups. Further analysis showed Treatment Dropout group were statistically different to the Treatment Completers (Tarone-Ware statistic (*df* = 1) = 13.76, *p* < 0.000) and Comparison group (Tarone-Ware statistic (*df* = 1) = 14.17, *p* < 0.000). The difference between the groups was not so marked during the first year but emerged over subsequent years. However, for all three groups the probability of general re-offending increased over time with those in the Dropouts group being at highest risk by the end of the follow-up period.

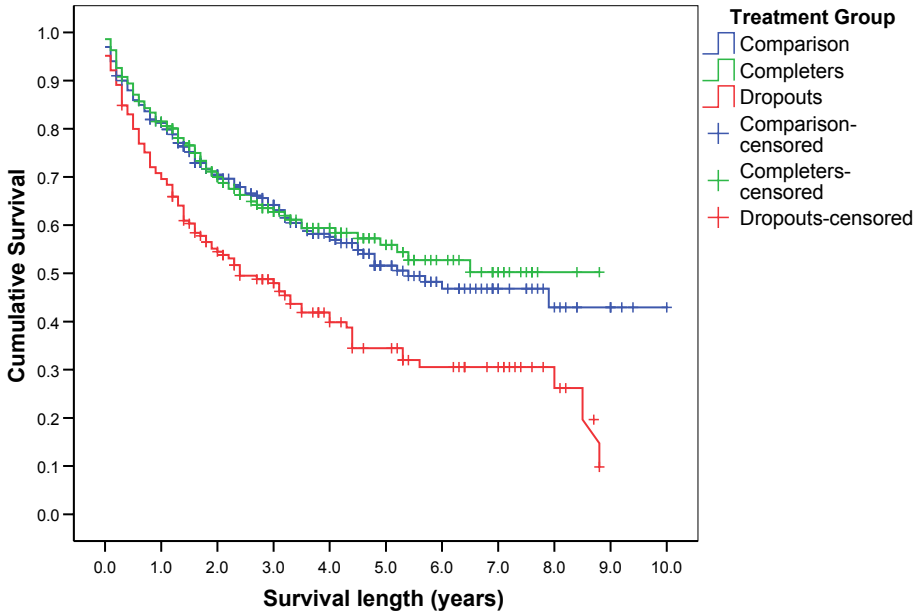

Figure 7. General recidivism within treatment groups

The estimated true general recidivism rate at the end of the follow-up period for the Treatment Completer group was 50% (cumulative survival proportion at the end of 8 years was 0.50). The estimated general recidivism rate was 57% for the Comparison group (cumulative survival proportion was 0.43 at 10 years) and 88% for the Treatment Dropout group (cumulative survival proportion was 0.12 at 8 years) at the end of the follow-up period.

The median survival time for the Comparison group was 5.4 years (*SE* = 1.02, 95%*CI* = 3.4 – 7.4) and for the Treatment Dropouts was 2.4 (*SE* = 0.49, 95%*CI* = 1.5 – 3.4) years. The median survival time could not be calculated for the Treatment Completers although the mean survival time for this group was 5.5 years (*SE* = 0.28, 95%*CI* = 4.9 - 6.0).

Violent recidivism

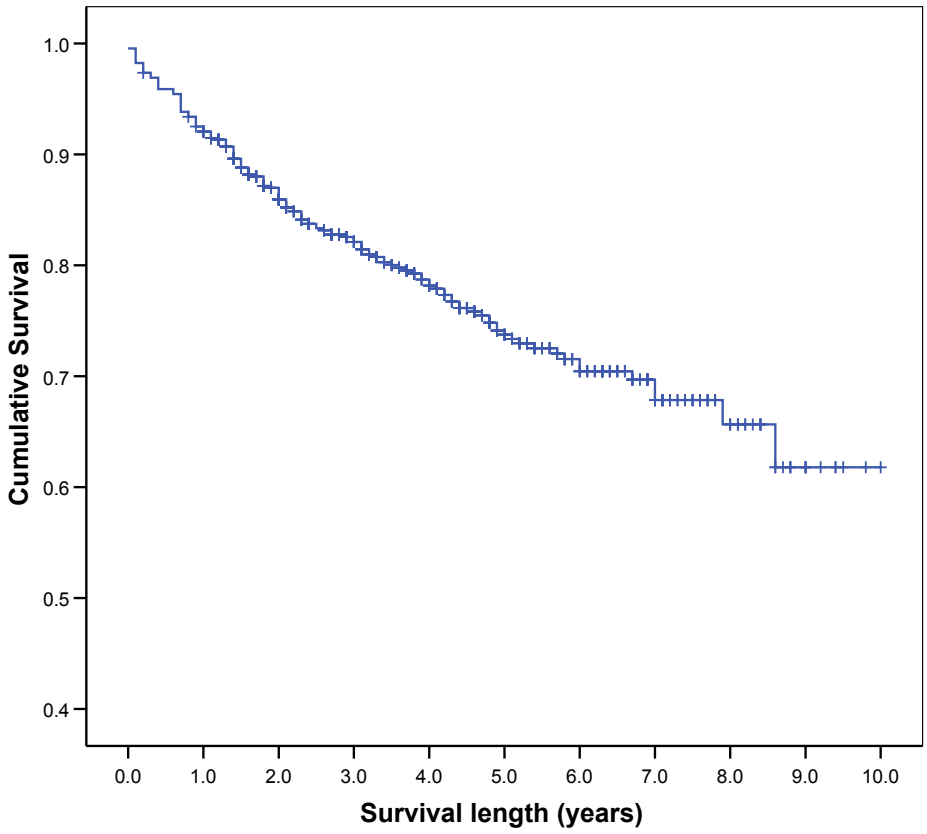

Figure 8. Overall violent recidivism

The survival curve for violent re-offending for the total sample can be seen in Figure 8. The mean survival length overall was 7.6 years (*SE* = 0.17, 95%*CI* = 7.28 – 7.96). It is not possible to report the median survival time as the survival proportion did not drop below 0.5.

Analysis of the violent recidivism survival curves for the three treatment groups (see Figure 9) showed a significant overall difference between the Comparison, Treatment Dropouts and Treatment Completers (Tarone-Ware statistic (*df* = 2) = 17.80, *p* < 0.000). Further analysis showed that the Treatment Completers group were less likely to violently re-offend over time compared with the Treatment Dropout (Tarone-Ware statistic (*df* = 1) = 17.04, *p* < 0.000) and Comparison groups (Tarone-Ware statistic (*df* = 1) = 12.82, *p* < 0.000). The difference between the groups was not so marked during the first year but emerged over subsequent years with those in the Treatment Dropout and Comparison groups at increasing risk of violent re-offending.

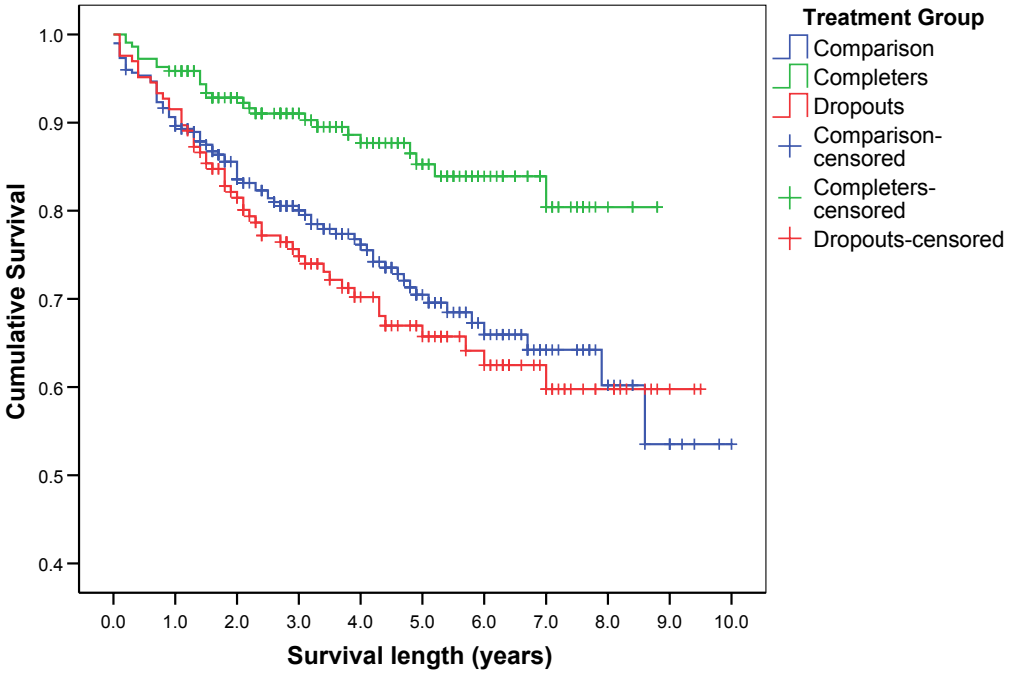

Figure 9. Violent recidivism within treatment groups

The estimated true violent recidivism rate at the end of the follow-up period for the Treatment Completer group was 22% (cumulative survival proportion at the end of 8 years was 0.78). The estimated general recidivism rate was 45% for the Comparison group (cumulative survival proportion was 0.55 at 10 years) and 42% for the Treatment Dropout group (cumulative survival proportion was 0.58 at 9 years) at the end of the follow-up period.

The median survival time for the Comparison group was 5.4 years (*SE* = 1.02, 95%*CI* = 3.4 – 7.4), and 2.4 years (*SE* = 0.49, 95%*CI* = 1.4 – 3.4) for the Treatment Dropout group. The median could not be calculated for the Treatment Completers group. The mean survival time for the Treatment Completers group was 7.8 years (*SE* = 0.19, 95%*CI* = 7.4 - 7.1).

Chapter 8

Results – Psychometric measures

Three psychometric measures were reported to be used by Auckland and Christchurch programmes at assessment (pre-treatment) and again at the end of treatment (post-treatment). The average for each scale on the three psychometric measures pre- and post-treatment was calculated. Graphs for each psychometric measure are presented separately.

Youth Self Report Form (YSR)

Figure 10 indicates a decrease in T Scores on the YSR scales between pre- and post-treatment. This pattern was consistent across all scales including the Total Problems, Externalizing and Internalizing Problem scales. This was a self-report measure indicating that, on average, sexually abusive youth were reporting a decrease in their behavioural and psychological symptoms.

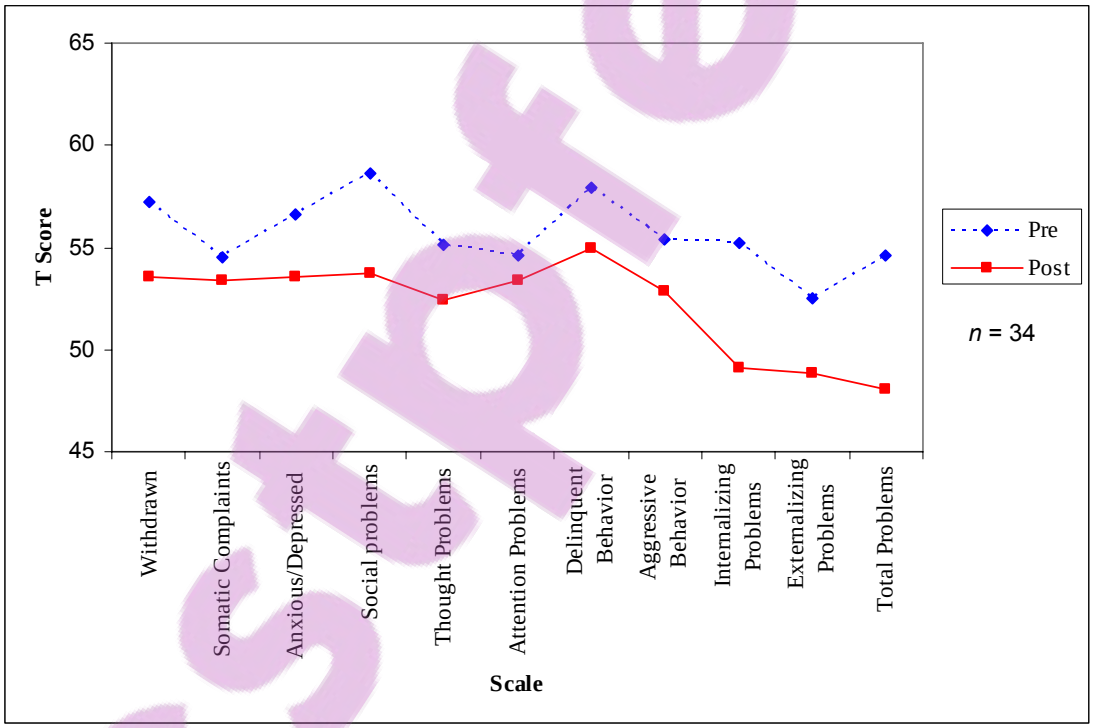

Figure 10. Average scores on the Youth Self Report Form (YSR) Pre- and Post-treatment

Child Behavior Checklist (CBCL)

Figure 11 indicates a decrease in T Scores on the CBCL scales between pre- and post-treatment. This pattern was consistent across all scales including the Total Problems, Externalizing and Internalizing Problem scales. This indicates that parents and caregivers of the sexually abusive youth were reporting a decrease in the behavioural and psychological symptoms of their child from pre- to post-treatment.

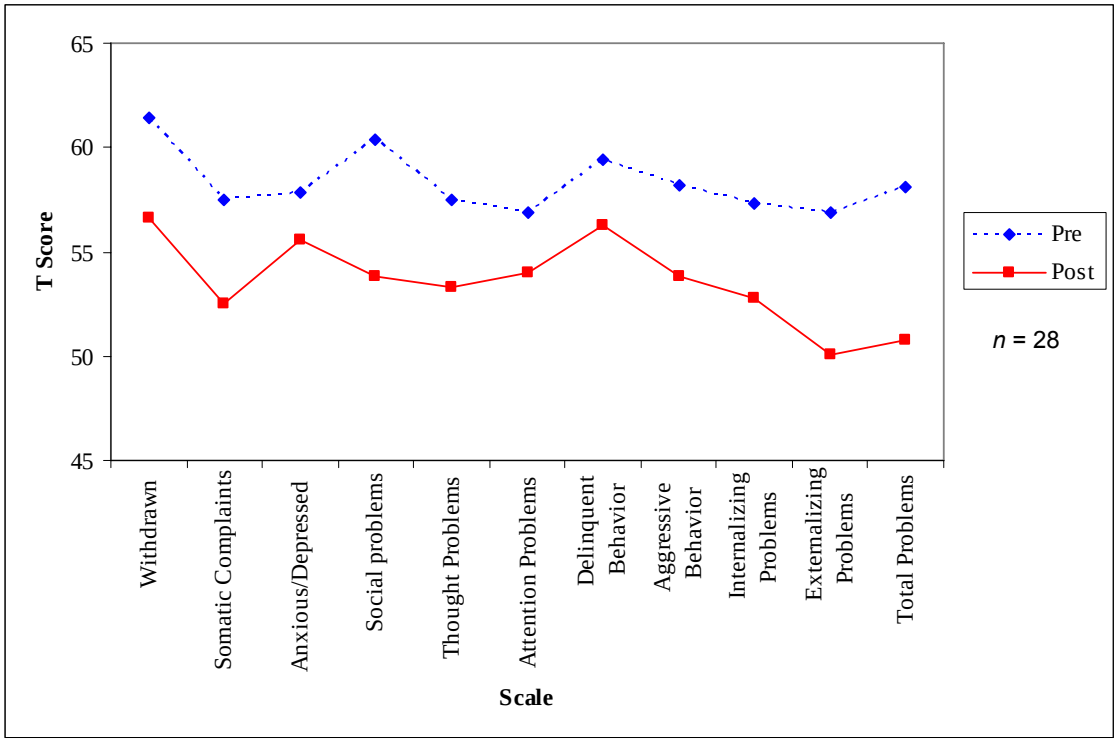

Figure 11. Average scores on the Child Behavior Checklist (CBCL) (Achenbach, 1991) Pre- and Post-treatment

Millon Adolescent Clinical Inventory (MACI)

In Figure 12, it can be seen that although there were differences in the average scores on the various scales of the MACI between pre- and post-treatment, there was no overall pattern or trend. Rather, on some scales there was a drop in the average T-score (e.g., Self-Devaluation and Depressive Affect Scales) while on others there was an increase in the average T-scores (e.g., Desirability and Delinquent Predisposition).

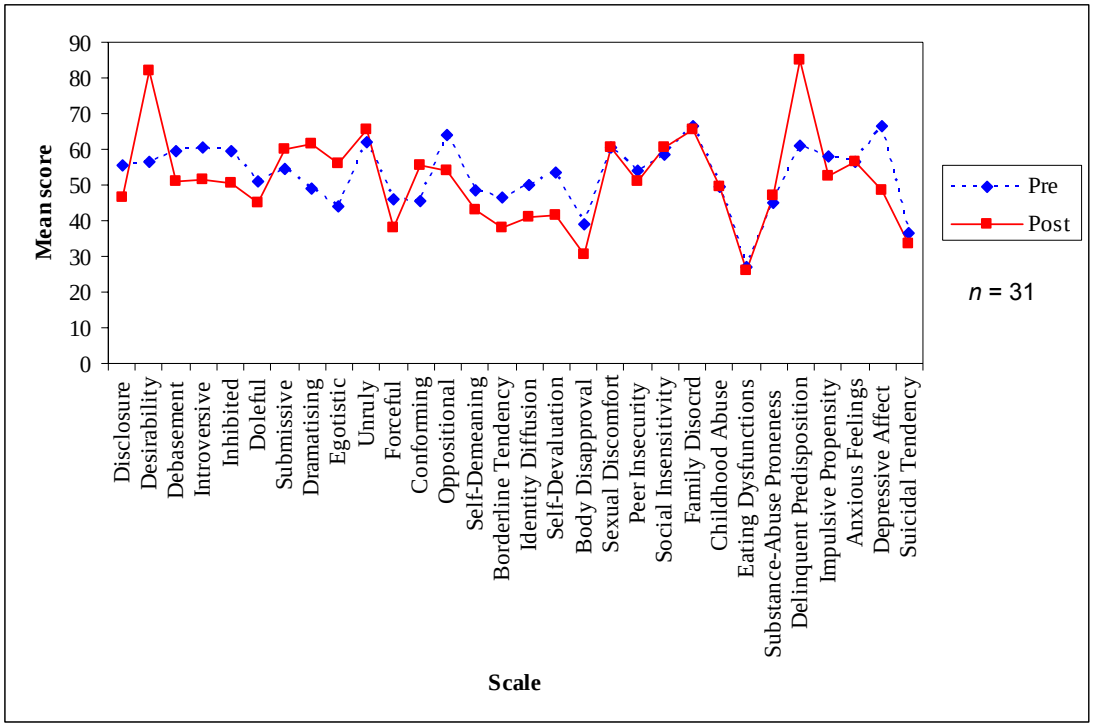

Figure 12. Average scores on the Millon Adolescent Clinical Inventory (MACI) (Achenbach, 1991) Pre- and Post-treatment

Chapter 9

Discussion and Recommendations

In this naturalistic outcome study children and youth from the three main specialised community treatment programmes in New Zealand were followed up for an average of 4.5 years (range 1 to 10 years). Recidivism was the main treatment outcome of interest. Recidivism is a commonly used measure of treatment outcome. Internationally, recidivism research on sexually abusive youth is often criticised for its poor, or at best, conservative definition of recidivism. Measures of recidivism will always be an underestimate of the actual recidivism. Relying solely on one source of re-offending data (e.g., youth justice, adult charges or convictions) produces overly conservative estimates of recidivism. The current study sought to overcome this through the triangulation of recidivism data from multiple, nationally based, data sources on youth and adult re-offending to reduce the risk of a positive treatment effect bias. This was seen as particularly important due to New Zealand's unique youth justice system which seeks to keep children and youth out of the adult justice system (youth are dealt with in this system up until 16 years old). Overall recidivism was calculated using the aggregation of all data sources.

Sexual recidivism

One of the stated aims of specialised community treatment programmes in New Zealand for sexually abusive children and youth is to reduce the risk of sexual recidivism. Using this approach, the current study found an overall sexual recidivism rate of 3% for those youth who completed treatment compared with 6% for the Comparison and 10% for the Treatment Dropout groups. Those who completed treatment (Treatment Completers group) were significantly less likely to sexually re-offend compared with the Comparison and Treatment Dropout groups. These findings indicate that specialised community treatment programmes in New Zealand reduced the risk of sexual recidivism at follow-up for children and youth who successfully completed treatment.

Internationally, research has found sexual recidivism amongst those who attend treatment ranging from 0% to 40% (e.g., Allan et al., 2003; Becker, 1990; Gretton et al., 2001; Kahn & Lafond, 1988; Mazur & Michael, 1992; Prentky et al., 2000; Schram et al., 1991; Smets & Cebula, 1987; Smith & Monastersky, 1986; Worling & Curwen, 2000a), with a mean of 7.4% (Reitzel & Carbonell, 2006). Compared with the average sexual recidivism found by Reitzel and Carbonell (2006), the New Zealand programmes are producing positive results for children and youth who complete treatment.

Nonsexual recidivism

This study found general recidivism to be 41%, 62% and 46% amongst the Comparison, Treatment Dropout and Treatment Completer groups. The Treatment Dropout group were significantly more likely to be general recidivists compared with the other two groups. Violent recidivism was 26%, 31% and 12% respectively. The Treatment Completer group were significantly less likely to violently re-offend compared with the Comparison and Treatment Dropout groups.

Outcome studies of community programmes in the United States and Canada have found nonsexual recidivism to be as high as 90% with many studies finding nonsexual recidivism levels of between 40 to 60% (Allan et al., 2003; Gretton et al., 2001; Kahn & Lafond, 1988; Prentky et al., 2000; Schram et al., 1991; Smith & Monastersky, 1986; Worling & Curwen, 2000a). Based on a meta-analysis of nine outcome studies, Reitzel and Carbonell (2006) found general recidivism to be 28.5% and violent recidivism 24.7%. Compared with Reitzel and Carbonell (2006), this means that general recidivism found in this New Zealand study is about the same for those who complete treatment while violent recidivism was slightly below what could be expected.

Published recidivism studies often refer to 'recidivism rates' (e.g., see Allan et al., 2003; Waite et al., 2005; Worling & Curwen, 2000a). In fact, what is often measured is the prevalence of re-offending during the follow-up period. This follow-up period is often variable, resulting in variable lengths of time at risk. In this study, recidivism was calculated using two methods. The first is in line with previous studies in this field which uses prevalence of re-offending. Follow-up time was calculated from end of involvement with the treatment programmes resulting in those who did not attend treatment (Comparison group) and those who left treatment prior to successful completion (Treatment Dropouts) being at risk for longer compared to those who completed treatment. A true rate takes into account the probability of an event in relation to time at risk. Survival curves can be useful tools in considering the level of re-offending over time as used by Waite et al (2005) and Worling and Curwen (2000a). Survival curves take into account the variability of follow-up and allow an estimate of the true survival rate at the end of the follow-up period. The survival curves estimated that recidivism among Treatment Completers was 3% (cumulative survival proportion at 8 years was 0.77), and 12% in both the Treatment Dropouts and Comparison groups (cumulative survival proportion 0.88 respectively). In comparison with calculating the proportion of re-offences method, the estimates for the Treatment Completers are the same but double for the Comparison group (12% v 6%) and are slightly higher in the Treatment Dropout group (12% v 10%). The variable follow-up period was also addressed by looking at offending that occurred while children and youth were attending treatment. Some may also have spent time in prison which reduced their opportunity for offending; this information was not collected as part of this study. Future research could obtain information on the length of time young people included in the study were incarcerated and allow for this when calculating the length of follow-up.

The current study involved children and youth who received community-based treatment whereas many of the international studies involved youths who had attended residential treatment programmes (Waite et al., 2005). Community treatment may be less costly but it does provide those attending community treatment with increased opportunity to re-offend during treatment. Comparison of outcomes for children and youth attending community and residential programmes should be done with caution.

Research on sexually abusive youth usually indicates that sexual recidivism is lower than nonsexual recidivism (Reitzel & Carbonell, 2006). The lower levels of sexual and violent recidivism found in the New Zealand study compared with overseas research could reflect lower levels of overall risk for these youth. Short follow-up periods are associated with lower recidivism; however, as the current study involved an average follow-up period of 4.5 years (range 1 to 10 years) this alone would not explain the low recidivism. There was little change in levels of nonsexual offending from pre-treatment levels with many still engaging in general re-offending (e.g., theft, property damage) post treatment. This suggests treatment is having a limited impact on this less severe form of offending, although completing treatment reduces their risk of general recidivism compared with those who do not attend or dropout of treatment. This is consistent with other research in New Zealand which found that a prison-based specialist programme for sexual offenders produced a reduction in sexual recidivism but did not achieve a significant reduction in nonsexual re-offending (e.g., Nathan, Wilson, & Hillman, 2003).

During treatment there was no difference between Treatment Completers and Treatment Dropouts in relation to sexual and general offending. However, Treatment Dropouts were significantly more likely to violently offend while attending treatment compared with the Treatment Completers. Youth re-offending data post-treatment indicated no difference in levels of sexual re-offending but indicated that the Comparison group were at increased risk of general and violent recidivism, compared with the Treatment Dropouts and Treatment Completers groups. This could be due to the fact they were not in treatment at this time and so had increased time at risk under the Youth Justice system. Overall, this group continued to remain at risk of re-offending as adults; compared with Treatment Completers the Comparison group were more likely to violently re-offend post treatment. Consideration of adult re-offending data indicated that Treatment Dropouts were at increased risk of both sexual and general offending, whereas Treatment Completers were less likely to violently re-offend post treatment. This is consistent with Edwards et al., (2005) who found sexually abusive youth who dropped out of treatment had higher levels of sexual, violent and general recidivism compared with treatment completers. Clinicians need to be aware that youths engaging in violent offences during treatment may be at increased risk of dropping out of treatment and that after dropping out of treatment these youth are at increased risk of going on to engage in sexual, general and violent offending as adults. Overall, at post-treatment follow-up, the odds ratio for the Treatment Dropouts of sexual recidivism was 3.78 compared to Treatment

Completers, 2.68 for a general re-offence and 3.2 for violent re-offending compared with Treatment Completers.

Data sources

Rates of sexual re-offending based on youth records (information from CYF records and Youth Court data) produced the most conservative estimate of sexual recidivism. This may reflect the fact that youth offending is dealt with through these pathways only up until the age of 16 years. The average age at referral to the programmes was 14 years which means that, on average, the maximum follow-up period was two years using youth records. The rest of the offending was captured within Police records for charges and convictions. By using a combination of youth and adult offending records, this study has produced the least conservative estimate of the prevalence of re-offending possible, based on official records.

Self- or parent/caregiver reports of sexual, general and violent re-offending may provide a less conservative estimate of re-offending by identifying offending that is not officially reported. Self or parent/caregiver reports were not included in the current study due the expense and difficulty of collecting such data with the risk of a poor return rate of anonymous questionnaires. This is an area for future research.

Treatment

This study found that approximately half of the children and youth referred to specialised community programmes in New Zealand commenced treatment. Of those who commenced treatment, approximately half (25% of those referred) went on to complete treatment.

One reason individuals did not receive treatment or dropped out of treatment was due to referral to another service considered more appropriate (e.g., to address own trauma or a more culturally appropriate service). Of concern were the number of children and youth and/or family/whānau who refused to attend and those who did not attend treatment or dropped out of treatment due to a statutory agency (most commonly CYF but also Corrections, NZ Police, or Courts) withdrawing their involvement (e.g., withdrawing supervision, withdrawing charges), and/or funding. Many youth withdrew themselves from treatment once the external mandate for them to attend assessment and/or treatment was removed.

Māori youth referred to the treatment programmes were less likely to commence treatment compared with other ethnic groups; however, one of the main reasons for this was that they were often referred onto other services which were considered more suitable to meet their needs. This study found that Māori youths and their families who commenced treatment went on to complete treatment and received ongoing support for their involvement in treatment from statutory agencies (e.g. CYF, Community Corrections, Court). This suggests that Māori youth and whānau engage

well in treatment, and this has been associated with having Māori staff and incorporating cultural components into treatment (Lambie & Seymour, 2006).

This study also found that Pacific Island youth were most likely to drop out of treatment. Pacific Island youth, compared with other ethnic groups, often dropped out of treatment following the withdrawal of involvement and/or funding by a statutory agency (e.g. CYF, Community Corrections, Court). This is of concern and indicates a lack of ongoing support for Pacific Island youth and their families and needs to be addressed immediately by statutory agencies such as CYF.

Treatment Dropouts

Sexually abusive youth who dropped out of treatment were at high risk of sexual, general and violent recidivism compared with those who completed treatment. These differences were not apparent when the youth re-offending data were considered but emerge strongly in the adult re-offending data. This can be seen in the steep drop-off in the general recidivism survival curve at approximately 8 years when the Treatment Dropout group dropped down to meet the Comparison group. However, in the survival analysis of violent recidivism, the shape of the curve is most similar between the Treatment Dropout and Comparison groups with Treatment Completers showing a different characteristic. Differences in risk level may have contributed to these findings. The Treatment Dropout group were more likely to have a history of prior nonsexual offending compared with the Comparison and Treatment Completers groups and had more identified victims than those in the Comparison group. This suggests that the Treatment Dropout group may have entered treatment as slightly higher risk offenders, thus placing them at increased risk of re-offending. Although, the characteristics of interest may differ according to outcome, for example in the survival analysis the shape of the survival curve was similar for Treatment Completers and Dropouts for sexual recidivism until 8½ years. Other possible influences may be short-term treatment effects, and involvement of other agencies and support networks during their childhood and teenage years such as social workers, schools and other agencies which cease being involved with these young people as they reach 17 and 18 years of age. At approximately the same time, their offending starts to be dealt with through the adult justice system. It may also be that this group of youth may simply represent those identified by Ryan (1999) and Seto and Barbaree (1997) as a group of youth at high risk of continuing to offend into adulthood regardless of any intervention they might receive or that the personal or family characteristics that are associated with them dropping out of treatment are also associated with elevated risk of re-offending.

Programmes need to consider factors associated with increased risk of youth dropping out of treatment. This information could be used to help identify individual clients at risk of dropping out of treatment early, and arrangements could be made to target appropriate services. It is recommended that programmes develop protocols to try to keep clients in treatment as long as

possible. International research indicates that mandated attendance means that youth are more likely to stay in treatment (Becker, 1990; Flanagan & Hayman-White, 2000). This may have implications for the way statutory agencies such as CYF and the Courts in New Zealand deal with youth within the youth justice system. Longer periods of supervision and a longer commitment to funding treatment may be warranted in order to have them attend and complete treatment, thus also significantly decreasing their risk of re-offending.

Treatment dropouts were included as a separate group for comparison because there is very little international research on this population. The results from this study contribute to the understanding of this group and indicate that further research on this population is warranted.

Special populations

Overall, none of the thirteen females included in this study were sexual recidivists. There were two female general recidivists and two female violent recidivists (in both cases one in the Comparison and one in the Treatment Completer group).

This study included 35 children (12 years or younger). Two children were known to have engaged in further sexually abusive behaviour/s (one in the Comparison and one in the Treatment Completer group). Four children violently re-offended post-treatment but none of the children who completed treatment violently re-offended. There were six children who were general recidivists; one in the Treatment Completer group, three in the Comparison and two in the Treatment Dropout group.

One hundred and thirty five sexually abusive youth with 'special needs' were included in the study. Ten of the 'special needs' youth sexually re-offended including three in the Comparison group, five in the Treatment Dropout group and two in the Treatment Completer group. More sexually abusive youth with 'special needs' were general recidivists: more of those in the Treatment Dropout group were general recidivists compared with 'special needs' youth in the Comparison and Treatment Completers groups. Overall, 23% of 'special needs' youth violently re-offended: more of those with 'special needs' in the Comparison and Treatment Dropout groups violently re-offended compared with the Treatment Completers group.

No published studies looking at recidivism amongst these special populations were found. When compared to the results for male youths the levels of re-offending amongst females and children are very positive. The results for the 'special needs' youth are more in line with recidivism found amongst male youth post treatment, although still indicating a positive treatment effect for sexual recidivism. Future research using larger samples, especially of female and children who engage in sexually abusive behaviours, need to be undertaken to further explore recidivism amongst these under researched populations.

Aftercare

Internationally, there is limited research examining the type of follow-up that is effective with sexually abusive youth. Flanagan and Hayman-White (2000) described a treatment programme for sexually abusive youth in Melbourne, Australia. As part of this treatment programme, an after care group was offered which involved monthly support group meetings for clients after they have completed the formal part of the programme. These after care groups assisted in the maintenance of relapse prevention plans, and helped in the development of other future life goals. The groups were informal and the agenda was set by participants. Flanagan and Hayman-White describe "the After Care Group as a way of maintaining contact with clients, monitoring progress long-term, and providing ongoing support" (2000, p. 62). Clients attended the After Care group for varying lengths of time, with some attending for up to 18 months (Flanagan & Hayman-White, 2000). Maintenance of therapeutic gains have also been associated with ongoing support of parent(s)/caregiver(s) and significant others (Flanagan & Hayman-White, 2000).

Newbauer and Blanks (2001) found that some youths in their sample returned to aftercare for 6 weeks while others stayed longer (e.g., 3 to 6 months) as they found it harder to not re-offend than they thought it would be and needed the extra support. Aftercare allowed them to "update relapse prevention plans, identify new triggers, and develop strategies to avoid lapsing and reoffending" (Newbauer & Blanks, 2001, p. 48)

In the current study youth, who completed treatment were found to be at greatest risk of sexual recidivism in the first 1 to 2 years post treatment; thereafter their risk of sexual recidivism decreased. Although a review of the aftercare offered by programmes was not included in this research this finding supports the need for programmes to provide follow-up for clients, especially during this initial 1 to 2 year period. Programmes may want to target services during this initial period post-treatment but may need to be flexible to meet individual client needs.

Psychometric measures

Recidivism is not the only measure of treatment outcome. In order to explore any measurable change over time, this study looked at three psychometrics that were administered at assessment and post-treatment by the Auckland and Christchurch programmes. Wellington was excluded from this section of the study as they had historically not administered psychometric tests post-treatment.

Each programme administered different psychometrics to their clients, although there was some overlap. Auckland and Christchurch reported administering the Child Behaviour Checklist, Youth Self-Report Form and Millon Adolescent Clinical Inventory (MACI) pre- and post-treatment. It was found that even those psychometrics that were reported to be used at assessment and post-treatment were not consistently administered. This made it impossible to obtain a sample size

that was large enough (power analysis indicated a sample of 65 was necessary) to undertake any statistical analysis of the psychometric data.

It is strongly recommended that the treatment programmes consider which psychometrics they are going to use and develop a minimum set to help identify psychological characteristics associated with positive and negative treatment outcomes. Once they have determined which psychometrics they will use, these need to be administered routinely as part of their assessment package and again at the end of treatment. Consistency between programmes nationally would be useful if further research was to occur, but it would be more important to ensure consistency within each programme. When the tests are used, they need to be clearly, accurately and completely filled out (including the date they were completed), scored and summarised and/or reports written. Staff may wish to check with clients and parents/caregivers once they have completed the forms to reduce the risk of incomplete forms invalidating the results.

A striking feature of this population is the multiple and high levels of adverse family factors and experiences. Youths attending these programmes often come from chaotic and multi-problem families, and all programmes offer family therapy as part of the standard treatment packages. No published process or outcome research about family therapy with these families was found. Programmes may want to monitor outcomes from family therapy interventions. Programmes may like to consider the inclusion of other measures of outcomes including functioning on daily living tasks, changes in family functioning and communication, assessment of social skills and quality of peer relationships and adjustment measures. In addition, well designed questionnaires to obtain feedback on an ongoing basis, from youth, their parents/caregivers and other involved parties, about their experiences of being involved in the treatment programmes would be useful. This would allow for the ongoing study and improvement of treatment through programmes obtaining feedback on how youth and their families perceive treatment outcomes, as well as identifying strengths and weaknesses of the programmes. This may help address the number of cases where families withdraw their child from treatment.

Results indicated that parents/caregivers and sexually abusive youth reported a decrease in behavioural and psychological symptoms between assessment and the end of treatment as measured by the Child Behavior Checklist and Youth Self Report Form. Results from the Millon Adolescent Clinical Inventory (MACI) were less clear as the average scores on some scales decreased, whereas they increased on other scales. It is worth noting that there were in fact noticeable *increases* in the average scores on two scales: Desirability and Delinquent Predisposition. This suggests that when treatment ended, they were responding in a way that they perceived was more socially desirable on this self-report measure and were self-reporting problems in the clinical range on Delinquent Predisposition scale (including indifference to consequences and pain to others, stealing, fighting, destruction of property and use of weapons) (Kennedy, Licht, & Caminez, 2004). This would be consistent with the levels of violent and

general recidivism post-treatment. Although psychometrics should not be used in isolation, they provide a useful tool when used in conjunction with clinical knowledge and judgement. They are also a useful way of tracking change in a client's progress over time.

Limitations and strengths of study

Identifying a suitable comparison group of untreated sexually abusive youth who had not been referred to a specialist community treatment programme was not possible for this research. After extensive consultation with organisations such as the Department of Child, Youth and Family Services, the New Zealand Police, Department of Corrections and Ministry of Justice it was concluded that it would not be possible to identify a large enough sample of individuals who had engaged in sexually abusive behaviours as youth and who had not been referred to specialist treatment. The study design was adjusted to accommodate this – comparisons were made of sexually abusive youth referred to the treatment programmes who did not receive treatment (Comparison group), with those who did not successfully complete treatment (Treatment Dropouts) and Treatment Completers. This allowed comparisons in recidivism between groups to occur. However, it is important to be aware that systematic differences and selection biases may occur between the groups. A limitation associated with the psychometric aspect of this study was the fact that the results were not able to be compared to a comparison group.

Matching did not occur as this was not a case controlled study. Matching usually utilises variables which are already identified as having an impact on the variable of interest. As this is the first study of its kind in New Zealand, matching did not occur as it was not known how sexually abusive children and youth compare to those overseas, and variables that are used for matching could not be used in further analysis. This would have limited our understanding of the New Zealand population and the differences between the groups may have been lost. However, such a study design could be used in the future in New Zealand using this study as a foundation. The limitations of this study should not detract from the fact that it makes a significant contribution both nationally and internationally to the academic and clinical knowledge in this field.

Conclusion

This study utilises multiple data sources from information collected at a national level and includes data on youth and adult re-offending. This is rarely done in international studies which often only focus on re-offending that is dealt with within the adult justice system. One of the common criticisms of overseas recidivism research of sexually abusive youth has been the short follow-up periods (United States General Accounting Office, 1996). A strength of this study was the relatively long follow-up period (range 1 year to 10 years, with an average of 4.5 years).

This study involved a large sample of children and youth referred to the three main specialist community treatment programmes in New Zealand over a 9½ year period. When compared to other international recidivism studies, the study population is almost twice that of the next largest

(compare with Kahn & Lafond, 1988 who had a sample of 350 youth). The large sample size also gives the study greater statistical power and increases confidence in the reliability of results.

Overall, results from this study indicate support for the efficacy of the treatment packages being provided by specialist community treatment programmes in New Zealand for sexually abusive children and youth. Successful completion of treatment is associated with positive effects on sexual, violent and general recidivism. In New Zealand mainstream treatment encompasses the evidence-based therapies of CBT and family therapy, with a focus on psycho-education and relapse prevention. In addition, those aspects of the programmes that have been adapted and/or introduced to meet the needs of New Zealand youth and their families and communities, such as the broad systems approach and cultural components of treatment, are also associated with the positive treatment effects (Lambie & Seymour, 2006). Future research could explore the contribution of the various aspects of this treatment package to successful outcomes.

STUDY THREE - Predicting outcomes

Chapter 10

Introduction to predicting outcomes

"Risk is an inherently subjective construct" because what is considered loss, and the significance of that loss will vary from individual to individual (Yates & Stone, 1992, p.5). Yates (1992) defined risk as being a combined estimate of the likelihood and severity of an undesirable outcome. Risk assessment of sex offenders involves decisions about their safety in the community, decisions about the type and length of supervision they require, and recommendations about appropriate placements (Fisher & Thornton, 1993). These risk judgements have consequences for both the offender and potential victims (Fisher & Thornton, 1993). Due to the serious potential consequences of risk judgements, there is a real need for professionals to ensure their risk assessment decisions are based on the most sound and accurate information available (Fisher & Thornton, 1993; Quinsey, Rice, & Harris, 1995).

Determining the level of risk of an individual involves taking into account "the level of risk of sex offenders in general [and] whether the particular features of this individual offender suggest an unusually high or unusually low level of risk" (Fisher & Thornton, 1993, p. 105). The difficulty with determining risk for sexually abusive youth is that there is limited research available that has identified the importance of particular features in risk assessments with this population.

Risk assessment of sexually abusive youth is an inexact art. With few assessment tools available it has, in the past, been primarily dependent on clinician experience, informed by the limited available research. Factors used in risk assessment are often referred to as dynamic and static factors (Browne, Foreman, & Middleton, 1998; Worling & Långström, 2003). Dynamic factors are those factors that can potentially be changed such as attitudes to treatment, level of denial and responsibility for offending. Static factors are often historical factors that do not change, such as experience of childhood sexual abuse and age of first sexual offence.

This study first explored the literature on predicting risk of sexual and nonsexual recidivism amongst sexually abusive youth. Secondly, it examined factors associated with those sexually abusive youth who do not successfully complete treatment (i.e., 'Treatment Dropouts').

Predicting risk of recidivism

Currently the development and persistence of sexual offending behaviour is poorly understood, which makes the prediction of recidivism difficult (Caldwell, 2002). Internationally, there are limited studies that have investigated factors associated with recidivism amongst sexually abusive youth (Righthand & Welch, 2001). This restricts clinicians' ability to identify dangerous youth and treat them appropriately (Miner, 2002).

Sexual recidivism risk factors

Worling and Curwen (2000a) investigated recidivism amongst a group of 148 sexually abusive youth who completed at least 12 months of treatment and concluded that there was support for the efficacy of specialised community treatment for sexual abusive youth. Factors found to be predictive of sexual recidivism included more past and/or present sexual fantasies of children, child-victim grooming behaviours and intrusive sexual offences against children.

In an Australian study involving 70 sexually abusive youth (aged 13 to 21 years), Kenny, Keogh and Seidler (2001) found that deviant sexual fantasies, learning problems and poor social skills were related to sexual recidivism. In another Australian study of 303 sexual abusive youth, Nisbet, Wilson and Smallbone (2004) found that sexual recidivism was associated with a higher number of charges for the index sex offence, older age at initial assessment and a history of nonsexual offending. Similarly, Schram, Milloy, and Rowe (1991) followed up 207 sexually abusive male youth who attended either residential or/and community treatment programmes. Offenders were found to be at greatest risk of recidivism in the first year, and presented greater risk to children and adolescents than adults. The authors identified four characteristics which were predictive of recidivists. Sexual recidivists were more likely to have a history of truancy, deviant sexual arousal patterns, identified thinking errors, and at least one prior conviction for a sexual offence.

Smith and Monastersky (1986) carried out a study that aimed to identify offender and offence characteristics that predicted recidivism in a sample of 112 male sexually abusive youth aged 10 to 16 years who received treatment in the community. A lack of depression and a lack of willingness to explore the referral offence non-defensively were linked with a higher likelihood of sexual recidivism. They also found that offenders who victimised strangers were more likely to re-offend sexually compared to those who offended against relatives and acquaintances; those who had at least one recent sexual offence against a male were more likely to sexually re-offend compared with those with female victims only and there was some indication that a

history of aggressive or destructive behaviour and history of abuse (sexual or physical) against the offender or a family member was related to recidivism (Smith & Monastersky, 1986).

In a study of 170 sexually abusive youth, Rasmussen (1999) found that the number of female victims was related to sexual re-offending in the five years after release. Kahn and Chambers (1991) found that sexual recidivism was associated with deviant sexual arousal patterns, using verbal threats during the commission of sexual offending and blaming their victims.

In a review of the literature on factors associated with criminal recidivism among sexually abusive youth, Worling and Långström (2003) identified a number of risks factors which they classified as supported, promising, possible and unlikely. Supported risk factors for sexual re-offending included: deviant sexual interests including sexual interest in prepubescent children or in sexual violence; prior criminal sanctions for sexual assault/s; past sexual offences against two or more victims; selection of stranger victims; lack of intimate peer relationships and social isolation; and incomplete offence-specific treatment. Worling and Långström (2003) identified the following as “promising” risk factors: problematic parent-adolescent relationships and feelings of parental rejection; and attitudes which are supportive of sexual offending.

Researchers have also identified factors which they concluded were not predictive of sexual recidivism. Hagan and Cho (1996) compared 50 youths who had offended against children and 50 who had offended against victims their own age or older. As they found no difference in recidivism between the two groups of sexually abusive youth at two to five year follow-up the authors concluded that the type of initial offence was not predictive of future risk of re-offending.

In a meta-analysis of seven studies that looked at denial as a predictor of sexual recidivism, which involved a combination of studies including youth and adult sexual abusers, Lund (2000) concluded that the roles of denial in treatment success, risk assessment and risk prediction remained unclear, requiring further research. This has been supported by research by Worling and Långström (2003) who found that denial of sexual offending was not associated with increased risk of sexual recidivism. Other factors they suggest are not supported in the literature as predicting risk of sexual recidivism include: 1) lack of victim empathy; 2) history of nonsexual offences; 3) penetrative sexual offences; and 4) adolescent’s own history of child sexual abuse (Worling & Långström, 2003).

Caldwell (2002) suggests that most factors that predict recidivism may not be specific to sexual offending but predict general or nonsexual recidivism. There is, however, evidence

that sexual recidivism can be predicted by a unique set of factors (e.g., Boyd et al., 2000; Sipe et al., 1998; Worling & Curwen, 2000a).

Table 67. Summary of factors associated with sexual recidivism based on the reviewed literature[50]

Category	Factor associated with sexual recidivism
Sexual offending factors	Deviant sexual fantasies, interests or arousal patterns including sexual interest in prepubescent children
	Any previous sexual offence
	Past sexual offences against two or more victims
	Prior criminal sanctions for sexual assault/s
	Any stranger victims
	Any male victims
	Number of female victims
	Intrusive (penetrative) sexual acts against children
	Early onset of sexually abusive behaviours
	Victim grooming behaviours, the use of verbal threats to victims during offending, and blaming victims
Behavioural history	History of truancy
	History of nonsexual offending
	History of delinquency and behavioural problems, including aggressive or destructive behaviour
Social skills	Poor social skills
	Lack of intimate peer relationships
	Social isolation
Placement history	Institutional placement
Abuse history	A personal history including abuse (sexual or physical abuse) and neglect
Learning problems	Learning problems
Family history	Multi-problem and chaotic families (e.g. parent divorce or separation)
Treatment	Thinking errors
	Older age at initial assessment
	Incomplete offence-specific treatment

Summary

A summary of these factors associated with sexual recidivism, based on the reviewed literature is presented in Table 67. Some factors which have emerged as indicators of increased risk of sexual recidivism are more general (e.g., poor social skills, problems with truancy, behavioural problems, multi-problem and chaotic families, a personal history including abuse and neglect). Others are sexual-offence-specific factors (e.g., any previous sexual offending, early onset of sexually abusive behaviour, and two or more victims). However, the relationship is not always so clear; factors identified by some researchers as predictive may not be found to predictive by others. For example, Worling and Långström (2003) found that a history of nonsexual offences was not associated with increased risk of sexual recidivism whereas Nisbet, et al., (2004) have found this was associated with increased risk of sexual recidivism.

[50] Boyd et al., (2000), Hagan and Cho (1996), Kahn and Chambers (1991), Kenny, Keogh and Seidler (2001), Lund (2000), Nisbet, et a., (2004), Rasmussen (1999), Schram, Milloy, and Rowe (1991), Sipe et al., (1998), Smith and Monastersky (1986), Worling and Curwen (2000a) and Worling and Långström (2003)

Nonsexual recidivism risk factors

Increased risk of nonsexual recidivism amongst sexually abusive youth has been associated with factors that are commonly predictive of general delinquency. These include socio-economic disadvantage, low self-esteem, criminal history, history of delinquent and aggressive behaviours and a history of childhood sexual abuse (Worling & Curwen, 2000a). Factors associated with general (non-violent, non-sexual) recidivism include prior nonsexual offences, negative family environments, having divorced or separated parents, perceived parental rejection, and those with a developing pattern of sexual offences including those who had committed previous sexual offences against peers or adults (Rasmussen, 1999; Smith & Monastersky, 1986; Worling & Curwen, 2000a). High levels of impulsive/antisocial behaviours have also been found to be associated with nonsexual recidivism (Waite et al., 2005). Failing to complete or attend treatment has also been associated with nonsexual recidivism (Rasmussen, 1999).

Table 68. Summary of factors associated with nonsexual recidivism based on the reviewed literature[51]

Category	Factor associated with sexual recidivism
Sexual offending factors	History of previous sexual offences, including a developing pattern of sexual offences and penetrative acts
	Preoccupation with children
	Previous sexual offences against peers, older victims or adults
	Use of threats, force or weapons during sexual offence/s
	Younger age at first offence
Behavioural history	History of any previous criminal behaviour including nonsexual and violent offences and/or convictions
	Three or more previous convictions for any crime
	History of antisocial/conduct disordered behaviour, including early onset
	Impulsivity
Individual factors	History of mental health issues
Abuse history	History of sexual abuse
Family history	Negative family environments
	Low socio-economic status
	Parental divorced or separation
	Perceived parental rejection
Treatment	No treatment or incomplete offence specific treatment

In a sample of 86 sexually abusive youth who were receiving treatment in a corrections-based sex offender treatment programme, Miner (2002) identified factors which were predictive of nonsexual recidivism. Due to the small number of sexual re-offences, analysis focused on any criminal behaviour and general recidivism (i.e., nonsexual offences). Overall, Miner (2002) concluded that predictors of recidivism were different for adolescents than for adults. Predictors of nonsexual recidivism included impulsivity (e.g., being reckless, aggressive and

[51] Långström (2002), Långström and Grann (2000), Miner (2002), Rasmussen (1999), Smith and Monastersky (1986), Waite et al., (2005), Worling and Curwen (2000a) and Worling & Långström (2003)

acting on irresponsible impulses), a history of sexual abuse, younger age at first offence and shorter treatment stays (Miner, 1997, 2002). Preoccupation with children was found to be a significant predictor of recidivism whether or not the definition of recidivism included sexual offences (Miner, 2002).

Långström's research on Swedish sexually abusive youths found that violent and general, nonsexual recidivism was associated with antisocial/conduct disordered behaviour before age 15, victim penetration during sexual offences, previous violent convictions, three or more previous convictions for any crime, and a propensity for aggressive behaviour during sexual offending including the use of threats, force or weapons and causing physical injury to victims (Långström, 2002; Worling & Långström, 2003). General recidivism was predicted by previous criminal behaviour, early onset Conduct Disorder, psychopathy and use of death threats and weapons at the index sexual offence (Långström & Grann, 2000). Factors that research has identified that are associated with nonsexual recidivism are summarised in Table 68.

Summary

There is limited empirical research which has looked at factors related to the risk of recidivism in sexually abusive youth. The literature indicates that there is a complex relationship between individual, developmental, family and past offending variables all of which interact upon an adolescent and their risk of recidivism.

Despite there being no conclusive set of factors associated with recidivism, the available literature indicates some emerging trends. Factors that are associated with sexual and nonsexual recidivism are summarised in Table 67 and Table 68. There is a range of historical sexual offending factors which are associated with increased risk of sexual recidivism amongst sexually abusive youth including offence specific factors (e.g., any previous sexual offence, deviant sexual fantasies) and other factors relate to a history of behavioural problems and nonsexual offending, social skills deficits, out-of-home placements, learning problems, multi-problem and chaotic families and non-completion of specialised treatment. Factors associated with nonsexual recidivism by sexually abusive youth include individual (e.g., low self-esteem and a history of childhood sexual abuse), behavioural (e.g., impulsivity, nonsexual offending history), family and treatment factors. There are also historical sexual offending factors associated with nonsexual recidivism (e.g., committing sexual offences against peers and adults and preoccupation with children).

Currently there is inconsistency in research findings around factors which predict risk of sexual and/or nonsexual recidivism in sexually abusive youth. The literature in this field is in its infancy and indicates there is a need for additional research.

Predicting treatment dropout

Dropping out prior to completing treatment has safety implications, as well as indicating greater risk for recidivism compared with those who complete treatment (Edwards & Beech, 2004). Edwards and Beech (2004) suggest that there is currently little known about the future effects of treatment dropout by adolescents. This is due to the scarcity of research on this population whether in residential or community treatment settings (Edwards & Beech, 2004; Kraemer et al., 1998). Available research suggests that youth who have completed offence specific treatment are less likely to re-offend sexually and non-sexually (Borduin, Henggeler et al., 1990; Worling & Curwen, 2000a).

In a sample of 49 sexually abusive youths who received specialised treatment at a residential programme in the United Kingdom, Edwards and colleagues (2005) found that treatment dropout was associated with increased risk of recidivism, including general, violent and sexual re-offending. They found that factors predictive of treatment dropout were: having a biological father who had been unemployed for the majority of the youth's life; police involvement (conviction/caution) for nonsexual offending (strongest pre-treatment predictor variable); frequent absconding from placements and home; a history of self-harm; a history of school refusal or truancy problems; a history of being expelled/excluded from school; greater tendency for fire setting behaviours; aggressive behaviours; having committed their first sexually abusive offence prior to 10 years of age; and victim/sexual offences characterised by anal penetration, victims that were 17+ years or children known to the perpetrator (though not related), and having more male and extra-familial victims.

Other factors Edwards et al., (2005) found to be associated with treatment dropout included: a diagnosis of conduct disorder and emotional disorders; significant minimising or denial of their offence/s; an attitude supportive of sexually abusive behaviour; an unwillingness to change their attitude or deviant sexual interests; impulsivity (not a strong predictor on its own); using others in a self/callous/remorseless manner. Treatment dropouts were also more likely to have previously attended individual therapy for their sexually abusive behaviour indicating low levels of success in previous attempts at rehabilitation (Edwards et al., 2005).

Kraemer, Salisbury, and Spielman's study (1998) examined a sample of 78 sexually abusive youths aged 12 to 14 years. They found that a combination of impulsivity (antisocial characteristics) and age were the best predictors of treatment dropout. In relation to age, they found that it was older youth who were more likely to dropout of treatment (Kraemer et al., 1998).

Flanagan and Hayman-White (2000) identified a number of reasons why youths in their sample dropped out of treatment. Reasons included: lack of parental/caregiver encouragement and support; client's refusal to attend; clients and/or parents minimising or

denying sexually abusive behaviours; geographic distance; and length of waiting lists (up to four months).

Similarly, living with parents during treatment has been associated with successful completion of specialised treatment (Seabloom et al., 2003). When there is no external mandate for attendance, Flanagan and Hayman-White (2000) suggest that parental/caregiver support and encouragement is critical, thus making it essential to engage and support parents/caregivers as early as possible. However, they also suggest that when the young person is involved with agencies, interagency collaboration is important to ensure the young person is supported, encouraged and transported to treatment (Flanagan & Hayman-White, 2000). This is supported by Becker (1990) who reported that only 27% of those who entered treatment attended 70% to 100% of scheduled therapy sessions. Approximately 45% attended at least half their scheduled sessions (Becker, 1990). She attributes the low attendance rate to a number of factors including lack of a mandate to attend treatment and poor family support for participation in the programme (Becker, 1990).

Bremer (1998) found that treatment failure was associated with a history of emotional and behavioural disturbances and suggested that these young people had other needs that were not being met by the specialised sexual offender treatment. Treatment dropouts not only represent an inefficient use of resources but the experience of failure is demoralising to clients and staff (Robinson & Little, 1982). Steketee and Chambless (1992) stated that the identification of factors which predict dropout pre-treatment would allow for more intensive interventions to be targeted at this group. Thus, treatment can be individualised to meet the needs of highly resistant clients (Kraemer et al., 1998).

Summary

Success in treatment does not suggest success in avoiding re-offending but rather the lack of success in treatment has been found to be a risk factor for recidivism (Boyd et al., 2000). There is limited literature that has investigated factors associated with treatment dropout in sexually abusive youth. The available literature indicates family factors that may be associated with increased risk of a youth dropping out of treatment include having a biological father who had been unemployed for the majority of the youth's life and lack of parental/caregiver encouragement, support and participation in the programme. In terms of placement history, youth with a history of frequent absconding from placements and home were at increased risk of dropping out of treatment, as were youth with a history of school refusal or truancy problems and a history of being expelled/excluded from school. Behavioural and psychological factors associated with non-completion of treatment included a greater tendency for fire setting behaviours, impulsive, delinquent and aggressive behaviours, a history of self-harm, and being diagnosed with conduct and/or emotional disorders (see Table 69) .

Table 69. Summary of factors associated with treatment dropouts based on the reviewed literature[52]

Category	Factor associated with sexual recidivism
Sexual offending factors	Committed first offence early (<10 years old)
	Involved anal penetration
	Non-contact offences
	Use of others in a callous/remorseless manner
	Violence related to index sexual offence
	More male victims
	More extra-familial victims
	Victims >17years or children known to the perpetrator
Behavioural history	History of school refusal, truancy problems, being expelled
	History of fire setting behaviour
	History of drug and alcohol dependency
	Previous police involvement including convictions for violent offences
	Time spent in prison
	Aggressive, delinquent and impulsive behaviours
Placement history	Frequent absconding from placements and home
Individual factors	Unemployment
	Diagnosis of conduct disorder
	History of self-harm
	History of emotional disorders
Family history	Poor family encouragement and support
	Biological father who was unemployed during their childhood
Treatment	Lack of a mandate to attend treatment
	Previously attended therapy (indicating low levels of success at previous rehabilitation attempts)
	Refusal to attend treatment
	Geographic distance from treatment programmes
	Older age at referral
	Length of waiting lists (up to four months)
	Clients and/or parents minimising or denial of offence/s
	Attitude supportive of sexually abusive behaviour
	No change in attitude or deviant sexual interests

Youth who have come to police attention (conviction/caution) for nonsexual offending have been found to be at risk of dropping out of treatment. A range of sexual offending variables have been associated with increased risk of treatment dropout including committing their first sexually abusive offence prior to 10 years of age, and having victim/sexual offences characterised by anal penetration, victims that are 17+ years or children known to the perpetrator (though not related), and having more male and extra-familial victims. Youths and/or families who strongly minimise or deny sexual offence/s or have attitudes supportive of sexually abusive behaviour, and youths who are unwilling to change their attitude or deviant sexual interests, are at greater risk of dropping out of treatment. A range of treatment factors have been associated with increased risk of youth dropping out of treatment including the youth's refusal to attend, geographic distance from treatment centre, long waiting lists for entry into treatment, having previously attended individual therapy and older age at entry into

[52] Becker (1990), Bremer (1998), Edwards and Beech (2004), Flanagan and Hayman-White (2000), Kraemer, Salisbury, and Spielman (1998), Seabloom et al., (2003) and Steketee and Chambless (1992)

treatment. Youth who have no external mandate to attend treatment are more likely to drop out, as are those with low levels of interagency collaboration.

Conclusion

When comparing studies, there needs to be some caution, as there are a number of methodological issues to be considered. A detailed review of the recidivism research is included in Study Two so will not be repeated here. However, it is important to note that there were differences in definitions of recidivism (some followed up until 18 years of age whereas others included adult offending) and variation in follow-up periods across studies. Some of the studies reviewed here included groups of young people who had attended treatment (both residential and/or community based treatments) although others involved young people who were part of assessment and evaluation process only. There were also variations in the age range of the different studies. For example, the studies by Långström (2000) and Långström and Grann (2000) included a sample aged 15 to 20 years while Smith and Monastersky (1986) had a sample aged 10 to 16 years. This means that different groups may be included in the analyses of the studies reviewed, for example, in the age of the sample and in who is considered a recidivist. These differences in samples may impact which factors are found to be predictive in their analyses. Literature in this area is still in its infancy and so, along with the methodological issues, this may be contributing to the fact that few factors have been identified that are consistently associated with increased risk of recidivism or treatment dropout.

Clinicians are frequently asked to provide a judgement on the risk of re-offending posed by an individual youth. There is, however, a lack of validated assessment tools to assist in this task (Prescott, 2004). In order to develop empirically based assessment tools, research needs to continue to identify factors associated with risk of sexual and nonsexual recidivism and treatment dropout.

Consistent with the lack of international research, no research on identifying risk factors associated with recidivism or treatment dropout amongst sexually abusive youth has been carried out in New Zealand. This study aims to contribute to an understanding of factors associated with increased sexual and nonsexual recidivism and treatment dropout, and also to make a contribution to the international literature on risk prediction for sexually abusive youth.

Chapter 11

Methodology

Sample

The sample included sexually abusive youth who were referred to the three main specialised community treatment programmes in New Zealand between 1 January 1995 and 1 July 2004. All youth included in Study Two (Recidivism Study) were included in the analysis for the regression study giving a total of 682 youth. See Studies One and Two for further details of the sample characteristics.

Power analysis was undertaken utilising the techniques outlined by Cohen (1992). Anticipating a medium effect size, using logistic regression analysis, the total sample size was estimated at 85 individuals to establish a power level of 80%, with a significance level of 0.05.

Procedure

As with Studies One and Two, ethical approval was sought and granted by the University of Auckland Human Participants Ethics Committee (UAHPEC) (approval was given for this project on 19 May 2004 for a period of three years. Reference number 2004/163). Approval was also granted by the Research Access Committee (RAC) of the Department of Child, Youth, and Family Services and the Research and Evaluation Steering Committee, Office of the Commissioner, New Zealand Police.

Individual confidentiality agreements were signed with Child, Youth and Family, and each of the programmes involved in this study to ensure that individuals would not be identified in any written or verbal reports or presentations that may result from the research.

Data included in this study were an amalgamation of relevant data collected for Studies One and Two. Variables of interest (based on the review of the literature) were selected from Study One and outcome variables (e.g., recidivism and treatment dropout) were selected from Study Two. All data were coded and entered into the Package for Social Sciences (SPSS) Version 14.0. Categorical data were recoded, if necessary, to ensure that outcome variables were coded as 1 (event occurred) and 0 (event did not occur) (Field, 2005). For example, for sexual recidivism, 1 represented sexual recidivism occurred and 0 represented no recorded sexual recidivism. Data entries were stripped of identifying information, and each participant was identified by their unique study number.

Based on the literature, independent variables that were hypothesised as being associated with sexual recidivism were: dropping out of a specialised community treatment prior to successful completion, history of nonsexual (general and violent) offending prior to referral, any child victims (12 years and younger), poor social skills and/or poor peer relationships, history of childhood sexual and/or physical abuse, history of behavioural problems (e.g., impulsivity, anger, aggression, delinquency, etc.), any male victims and multiple victims (3 or more identified victims).

Independent variables that were hypothesised as being associated with nonsexual (general and violent) recidivism were: dropping out of a specialised community treatment programme prior to successful completion, history of behavioural problems (e.g., delinquency and aggression), history of any nonsexual offending prior to referral, any child victims (12 years or younger) of sexually abusive behaviours, parental divorce or separation, history of mental health issues (e.g., symptoms consistent with diagnoses such as depression, anxiety, Obsessive Compulsive Disorder, Autistic Spectrum Disorders, and Post-Traumatic Stress Disorder), use of strategies (such as threats, violence and grooming behaviours) during the commission of at least one sexual offence and age at first known sexual offence.

Independent variables that were hypothesised as being associated with treatment dropout were: age at referral, history of any nonsexual offending prior to referral, early onset sexually abusive behaviour/s (onset prior to 11 years), any previous 'hands on' offending, history of behaviour problems (including delinquency or aggressive behaviour), history of expulsions and/or suspensions from school, and no external mandate to attend treatment, history of mental health problems (e.g., suicidal ideation, deliberate self-harm, depression, anxiety), substance abuse problems, any male victims and use of any strategies during sexual offending (including threats, force and/or grooming behaviours).

Analysis

The data were analysed to examine which variables were associated with youth who dropped out of specialised community adolescent sexual offender treatment programmes and which were associated with sexual or nonsexual recidivism.

Data were analysed using the logistic regression procedure in SPSS Version 14.0. Logistic regression was deemed the most suitable statistical approach as the outcome variables were categorical and the predicator variables were continuous and categorical (Field, 2005). The forced entry method was selected as it was considered statistically suitable because this study involved hypothesis testing (i.e., the independent variables were selected based on the

findings of previous research) but makes no decisions about the order in which variables should be entered into the model (Field, 2005).

Logistic regression was used to explore the relationship between three dependent variables (sexual recidivism, nonsexual (general and violent) recidivism and treatment dropout) and selected independent variables. Each analysis was run separately to identify factors associated with sexual and nonsexual recidivism and treatment dropout. The events of interest in the analyses were sexual recidivism, nonsexual recidivism and treatment dropout, respectively, which were coded as '1' when the data were entered. Those with no known sexual or nonsexual recidivism or completing treatment were coded as '0'.

The independent variables included in this study were based on a review of the international literature as noted above (e.g., Browne et al., 1998; Edwards et al., 2005; Flanagan & Hayman-White, 2000; Kenny et al., 2001; Långström, 2002; Långström & Grann, 2000; Miner, 2002; Nisbet et al., 2004; Sipe et al., 1998; Worling & Curwen, 2000a; Worling & Långström, 2003). Some variables which were identified in the literature review were not included in the current study as complete data were unavailable. For example, time spent in prison, biological father who was unemployed during their childhood (associated with treatment dropout), and perceived parental rejection and low socio-economic status (non-sexual recidivism).

Chapter 12

Results – Predicting outcomes

This study aimed to explore variables which were reported in the literature as being associated with sexual and nonsexual recidivism, and failure to satisfactorily complete treatment (treatment dropout) within a New Zealand population of sexually abusive youth. See Study Two for age and ethnicity of each group.

Other variables, based on the literature, were included in the early logistic regression models but were excluded from later analysis due to their lack of predictive power. For example, 'hands on' offences, number of victims and victim gender were excluded from the sexual recidivism logistic regression as early analysis did not find these variables to be associated with sexual recidivism.

Predicting sexual recidivism

A logistic regression analysis was performed with sexual recidivism as the dependent variable and the following independent variables: dropping out of a specialised community treatment prior to successful completion, history of nonsexual (general and violent) offending prior to referral, any child victims (≤12 years), poor social skills and/or poor peer relationships, history of childhood sexual and/or physical abuse, history of behavioural problems (e.g., impulsivity, anger, aggression, delinquency, etc.), any male victims and multiple victims (3 or more identified victims).

Table 70. Logistic regression for sexual recidivism

					95% *C.I.* for Exp(β)	
Independent variable	**β (S.E.)**	**Wald**	***df***	**Exp(β)**	**Lower**	**Upper**
Treatment drop out	-0.66 (0.348)	3.55	1	0.52	0.26	1.02
History of non-sex offending	0.23 (0.36)	0.41	1	1.26	0.63	2.52
Child victims	0.53 (0.45)	1.37	1	1.70	0.70	4.12
History of trauma	-0.82 (0.42)	3.81	1	0.44	0.19	1.00
Multiple victims (3 or more)	-0.81* (0.39)	4.39	1	0.45	0.21	0.95
History of behavioural problems	-0.17 (0.37)	0.20	1	0.85	0.41	1.76
Any male victims	0.63 (0.38)	2.66	1	1.87	0.88	3.96
Social deficits	-0.59 (0.38)	2.42	1	0.56	0.27	1.16

Note: * p< 0.05 ** p< 0.01 *** p< 0.000

A total of 682 cases were analysed and the full model was significantly reliable (χ^2 (8) =20.98, p < 0. 01). This model accounts for between 3% and 9% of variance in sexual recidivism status (i.e., sexual recidivist or non-recidivist), with 100% of those who **did not** sexually re-offend successfully predicted. However, 0% of predictions for the sexual re-offenders were accurate. Overall, 94% of predictions of whether or not adolescents had sexually re-offended were accurate. Table 70 provides coefficients (β) and the Wald statistics and associated degrees of freedom (*df*) and probability values (Exp(β)) for each of the predictor variables. In summary, this shows that having a trauma history (i.e., having experienced childhood sexual or physical abuse) approached significance. The values of the co-efficient reveal that having three or more victims was associated with a decrease in the odds of sexual recidivism by a factor of 0.45 compared with youth who had one or two victims.

Predicting nonsexual recidivism

Logistic regression analysis was performed with nonsexual recidivism as the dependent variable and the following predictor variables: dropping out of a specialised community treatment programme prior to successful completion, history of behavioural problems (e.g., delinquency and aggression), history of any nonsexual offending prior to referral, any child victims (≤12 years), parental divorce or separation, history of mental health issues (e.g., symptoms consistent with diagnoses such as depression, anxiety, Obsessive Compulsive Disorder, Autistic Spectrum Disorders, and Post Traumatic Stress Disorder), use of strategies (e.g., threats, violence, grooming behaviours) during the commission of at least one sexual offence and age at first known sexual offence.

Table 71. Logistic regression for nonsexual recidivism

					95% C.I. for Exp(β)	
Independent variable	**β (S.E.)**	**Wald**	***df***	**Exp(β)**	**Lower**	**Upper**
Treatment dropout	-0.71 ** (0.20)	12.15	1	0.49	0.33	0.73
History of non-sex offending	-0.84 ** (0.18)	20.78	1	0.43	0.30	0.62
Use of strategies	-0.30 (0.18)	2.60	1	0.74	0.52	1.07
Age at first known sexual offence	0.07* (0.03)	5.70	1	1.08	1.01	1.14
History of behavioural problems	-0.06 (0.19)	0.08	1	0.95	0.65	1.38
Any child victims	-0.08 (0.25)	0.10	1	0.92	0.57	1.51
Parents divorced/separated	0.38 (0.21)	3.32	1	0.69	0.46	1.03
History of mental health problems	0.01 (0.19)	0.00	1	1.01	0.69	1.48

Note: * p< 0.05 ** p< 0.01 *** p< 0.000

A total of 580 (102 were excluded due to missing data on age at first known sexual offence) cases were analysed and the full model was significantly reliable (χ^2 (8) = 48.73, p < 0.000).

This model accounts for between 8% and 11% of variance in nonsexual recidivism status, with 74% (*n* = 237) of those who did not re-offend successfully predicted. However, 55% of predictions for the nonsexual re-offenders were accurate. Overall, 63% of predictions of whether or not an adolescent had non-sexually re-offended were accurate. Table 71 provides coefficients (β) and the Wald statistics and associated degrees of freedom (*df*) and probability values (Exp(β)) for each of the predictor variables. This indicates that dropping out of treatment, a history of nonsexual offending and age at first known sexual offence reliably predicted nonsexual recidivism status. The values of the coefficients revealed that dropping out of treatment was associated with a decrease in the odds of nonsexual recidivism by a factor of 0.49 compared with those who completed or did not start treatment. A history of nonsexual offending was associated with a decreased chance of nonsexual recidivism by a factor of 0.43 compared with youth who had no history of nonsexual offending. An increase of one year of age (i.e., older age) at first known sexual offence was associated with an increased risk of nonsexual recidivism by a factor of 1.01.

Due to the low levels of predictive value from the models for nonsexual recidivism, the analysis was re-run using the more specific dependent variables of general and violent recidivism to see if this improved the accuracy of the model. The data are not presented here as they did not increase the accuracy of the model or change the factors associated with increased chances of nonsexual recidivism. See Appendix G for results for the logistic regression looking at factors associated with the prediction of general and violent recidivism.

As the Treatment Dropout group were found to have higher levels of recidivism within Study Two, some exploratory analysis was also conducted to see the effect excluding them from the analysis had on the accuracy of the models in predicting sexual and nonsexual recidivism. The data is not presented here as it did not increase the accuracy of the model or change the factors associated with increased chances of sexual and nonsexual recidivism. See Appendix G for results for the logistic regression.

Predicting treatment dropout

A logistic regression analysis was performed with treatment drop out as the dependent variable and the following independent variables: age at referral, history of any nonsexual offending prior to referral, early onset sexually abusive behaviour/s (onset prior to 11 years), any previous ‘hands on’ offending, history of behaviour problems (e.g., delinquency or aggressive behaviour), history of expulsions and/or suspensions from school, and no external mandate to attend treatment, history of mental health problems (e.g., suicidal ideation, deliberate self-harm, depression, anxiety, etc), substance abuse problems, any male victims and use of any strategies during sexual offending (e.g., threats, force and/or grooming behaviours).

Table 72. Logistic regression for treatment dropout

Independent variable	β (S.E.)	Wald	*df*	Exp(β)	95% *C.I.* for Exp(β) Lower	Upper
Age at referral	0.17** (0.06)	7.28	1	1.19	1.05	1.35
Early onset sexually abusive behaviours (prior to 11 years)	-0.30 (0.24)	1.56	1	.074	0.47	1.18
Any male victims	-0.25 (0.21)	1.36	1	1.28	0.85	1.94
History of nonsexual offending prior to referral	-0.18 (0.22)	0.66	1	0.84	0.55	1.28
Engaged in any 'hands on' offending	-0.40 (0.21)	3.65	1	0.677	0.46	1.01
Use of any strategies during sexual offending	-0.22 (0.21)	1.01	1	0.81	0.53	1.23
History of mental health problems	-0.49* (0.23)	4.51	1	0.61	0.39	0.96
History of behaviour problems	0.07 (0.23)	0.08	1	1.07	0.69	1.67
History of substance abuse problems	-0.10 (0.24)	0.16	1	1.10	0.69	1.77
History of expulsions and/or suspensions from school	-0.30 (0.22)	1.86	1	0.74	0.48	1.14
No mandate to attend treatment	0.56** (0.21)	6.90	1	1.75	1.15	2.65

Note: * p< 0.05 ** p< 0.01 *** p< 0.000

A total of 580 cases were analysed and the full model was significantly reliable (χ^2 (11) = 37.92, p < 0.000). This model accounts for between 6% and 9% of variance in recidivism status, with 99.5% of those who did not dropout of treatment successfully predicted. Approximately 2% of predictions for treatment dropouts were accurate. Overall, 75% of predictions were accurate. Table 72 gives coefficients (β) and the Wald statistics and associated degrees of freedom (*df*) and probability values (Exp(β)) for each of the predictor variables. This shows that age at referral, history of mental health problems and having no mandate to attend of treatment reliably predicted treatment dropout status. It was also found that having a history of engaging in 'hands on' offending neared significance as a variable which predicted treatment dropout status. The value of the coefficient revealed that an increase of one year of age at referral was associated with an increase in the chances of youth dropping out of treatment by a factor of 1.2. The value of the coefficient indicated that having no mandate to attend treatment was associated with an increased risk of dropping out of treatment by a factor of 1.75. Having a history of mental health problems was associated with a decreased risk of dropping out of treatment (by a factor of 0.6).

Chapter 13

Discussion and Recommendations

This study investigated factors that predicted treatment dropout, sexual recidivism and nonsexual recidivism. The variables included in the regression analysis were based on international research findings and also included in Studies One and Two. However, within the New Zealand sample of sexually abusive youth, only a few variables were identified which were found to be associated with any of the outcomes of interest.

The first model explored variables predictive of sexual recidivism. The model had an overall accuracy of 94% but had no success at accurately predicting sexual recidivism. The model was more accurate (100%) at predicting those who did not sexually re-offend. The only variable that reliably predicted sexual recidivism outcome was having three or more victims and, contrary to international literature, it was found that having multiple victims was associated with a decreased chance of sexual recidivism. Other research has found having multiple victims to be associated with increased risk of sexual recidivism (e.g., Worling & Långström, 2003).

The model testing nonsexual recidivism had an overall accuracy rate of 68% and was able to accurately predict about 55% of those who non-sexually re-offended. Three variables were found to predict nonsexual recidivism: a history of nonsexual offending, dropping out of treatment and age at first known sexual offence. An increase of one year of age (i.e., older age) at first known sexual offence was associated with an increased risk of nonsexual recidivism. This is consistent with international research which found that early onset of inappropriate sexualised behaviour was associated with increased risk of nonsexual recidivism (Miner, 1997, 2002). A history of engaging in nonsexual offending prior to referral was associated with a decreased chance of nonsexual recidivism. This is contrary to previous international research which found that a criminal history for nonsexual offending was associated with increased risk of nonsexual recidivism (Långström, 2002; Långström & Grann, 2000; Miner, 2002; Rasmussen, 1999; Worling & Curwen, 2000a; Worling & Långström, 2003). A surprising result was that dropping out of treatment prior to successful completion was associated with a decreased risk of nonsexual recidivism. It is not clear why this emerged, as this finding is contrary to the findings of Rasmussen (1999) and counter intuitive. It may reflect the high base rate of nonsexual recidivism.

The final model developed for predicting youth who stayed in or dropped out of treatment was 75% accurate. However, the model had low levels of accuracy in predicting youth who dropped out of treatment (2% accuracy) but was 99.5% accurate at predicting those who did

not dropout of treatment. Older age at referral was found to predict an increased risk of treatment dropout. This is consistent with the findings of Kraemer, Salisbury, and Spielman (1998) who found that older aged youth were more likely to dropout of treatment (Kraemer et al., 1998). Having a history of mental health problems was associated with a decreased risk of treatment dropout contrary to previous research which has found that those with diagnoses of conduct disorder and emotional disorders were more likely to dropout of treatment (Bremer, 1998; Edwards et al., 2005). It could be that sexually abusive youth with multiple presenting problems were identified by treatment programmes and other agencies in New Zealand and were receiving the extra assistance they needed, reducing the role of mental health problems as a risk factor. Potentially these children and youth may have more services/agencies involved in their care and this may assist them in completing treatment.

It was also found that those with no external mandate to attend treatment (e.g., no direction from CYF through Care and Protection and/or Youth Justice provisions, Police diversion, or Court orders) had a greater chance of dropping out of treatment. This is an important finding as it has implications for treatment providers and others (e.g., Courts, New Zealand Police and CYF) involved in the care of sexually abusive youth in terms of supervision and funding provisions. This suggests that supervision and funding arrangements that supported youth through the full length of treatment may help reduce their chances of dropping out of treatment. This would be up to 24 months for the standard programme and up to 36 months for youth with special needs. Research has shown that youth who drop out of treatment before successful completion are at highest risk of recidivism (Borduin, Henggeler et al., 1990; Worling & Curwen, 2000a). Programmes need to consider factors associated with increased risk of youth dropping out of treatment and use this information to help them target treatment services, resources, and other aspects of care, for those clients who are assessed as being at risk of dropping out of treatment.

Many of the factors associated with risk of sexual and nonsexual recidivism and/or dropping out of treatment in overseas research were not identified as risk factors in a sample of New Zealand sexually abusive youth. The fact that this study failed to replicate predictors found in previous research is an ongoing problem for researchers in the field (Steketee & Chambless, 1992). Some of the reason could be due to true variance in the sample (Steketee & Chambless, 1992). It could be that the factors associated with recidivism and treatment drop out in overseas populations of sexually abusive youth are not suitable for a New Zealand population of sexually abusive youth. It may be that the New Zealand social and cultural context (e.g., differences in ethnicities between North America and New Zealand) may have contributed to the results. The lack of strong associations could also be due to the low base rate of sexual recidivism and the high base rate of some of the independent variables in the New Zealand sample (Edwards et al., 2005; Prentky et al., 2000). It could also be that the differences between overseas studies used to develop and identify independent variables in

this analysis, and the New Zealand sample, contributed to the lack of positive associations. This study included children and youths aged 8 to 19 years compared with overseas samples that were aged between 10 to 20 years. The definition of recidivism used in the current study included youth and adult re-offending, not just charges or convictions which are often used in previous research.

The review of the literature indicated there are limited factors that have been identified as being associated with treatment dropout amongst sexually abusive youth. However, psychological treatment research in other areas indicates that there are socio-demographic characteristics (e.g., low income), family (e.g. parental stress) and personality factors that may be predictive of treatment dropout (Dierker, Nargiso, Wiseman, & Hoff, 2001; Edlund et al., 2002; Ogrodniczuk, Joyce, & Piper, 2005). The findings from this study suggest that further investigation needs to occur to better understand factors associated with sexual and non-sexual recidivism and treatment drop out in New Zealand sexually abusive youth.

Within the field of treatment of sexually abusive youth one of the few known actuarial assessment tools that has been developed is the JSORRAT (Epperson, Ralston, Fowers & DeWitt, 2005, as cited in Viljoen, Scalora, Cuadra, Bader, Chávez, Ullman, et al., 2008). The main risk assessment forms developed for use with sexually abusive youth are the Estimate of Risk of Adolescent Sexual Offense Recidivism (ERASOR) developed by Worling and Curwen (Worling & Curwen, 2000b) and the Juvenile Sex Offender Assessment Protocol (J-SOAP) (Prentky et al., 2000). Version 2 of the ERASOR can be used with youth (12 to 18 years) and includes 25 risk factors in five categories: sexual interests, attitudes and behaviours, historical sexual assaults, psychosocial functioning, family/environmental functioning and treatment. The J-SOAP is a 23 item risk assessment tool designed for use with 12-18 year old male sexual abusive youth (Prentky et al., 2000). The risk assessment takes into consideration details of previous sex offences and sexual fantasies, impulsive, antisocial behaviours including history of school suspensions, non-sex offending, Conduct Disorder and substance abuse, clinical/treatment variables such as level of responsibility, motivation to change, and community stability/adjustment variables (e.g., stability of living situation and social supports and peer relationships) (Prentky et al., 2000).

The J-SOAP has been found to have an inter-rater reliability ranging between 0.75 and 0.91 (Prentky et al., 2000). The ERASOR (Version 2) has been found to have an interclass correlation coefficient for overall clinical risk assessment of 0.92 indicating strong inter-rater agreement (Worling, 2004). The ERASOR (Version 2) has been found to have validity in the assessment of risk of recidivism amongst sexually abusive youth (Worling, 2004). However, as these risk assessment tools are so recently developed, research is still ongoing on their validation and reliability (Prescott, 2004).

Clinicians working with sexually abusive youth are often called on to provide some assessment of the level of risk a youth poses. Tools such as those mentioned above provide a framework on which to base this judgement, as well as considering the balance between the risks and needs of the individual and community safety (Worling, 2004).

Limitations and future research

This is the first study of this nature conducted in New Zealand and a number of factors with predicative value were identified. It provides a point from which future research could stem and, based on a sample of 680, forms a solid base line from which to proceed. The current study tended to include static ('fixed') factors (e.g., gender, prior offending details) collected at referral and assessment, rather than dynamic factors. Previous researchers have found that variables related to client and family minimisation and denial of offending, attitudes supportive of sexually abusive behaviours and an unwillingness to change attitudes or deviant sexual fantasises were associated treatment dropout (e.g., see Edwards et al., 2005; Flanagan & Hayman-White, 2000; Worling & Curwen, 2000b). Although information on these variables was sometimes contained within files, it was not consistently recorded and not considered reliable as it can be particularly vulnerable to variation in clinician definitions. As data were collected retrospectively, it was not possible to determine the accuracy of this information; therefore some of the variables (e.g., dynamic factors) identified in the literature could not be included in the current analysis. In order to increase the predictive value of the models, analysis of other factors is warranted. The inclusion of dynamic factors, assessed at assessment and again at treatment completion, may be more useful in predicting future risk. They may also be useful in reflecting treatment outcomes.

The fact that some variables identified by the literature as being predictable were not able to be included in this study as they were not available, as mentioned above was a limitation of this study. This may have had an impact on the results as logistic regression can be less accurate when relevant variables are excluded and/or when irrelevant variables are included.

Overall the models had limited ability to accurately predict the dependent variables of interest. That is, the model predicted 0% of sexual recidivists with accuracy, only 2% of treatment dropouts whereas the model predicting non-sexual recidivism was more accurate with the model accurately predicted 55% of non-sexual recidivists.

Further research is needed to explore the appropriateness and validity of using overseas risk assessment tools in the New Zealand context. If they are found to have validity, then risk assessment tools need to be used consistently which would assist clinicians in risk assessment and allow future research to include an assessment of risk pre- and post-treatment. Considering the lack of risk factors that the current study found, the ERASOR and

the J-SAOP are, currently, still the best way to assess sexually abusive youth risk in New Zealand, in conjunction with clinical judgement, while being aware that the generalisability of these to the New Zealand context may be limited.

Conclusion

This study found few variables, identified within the international literature, that were positively associated with sexual and nonsexual recidivism or treatment dropout in the New Zealand sample. Older age at first known sexual offence was associated with increased chance of nonsexual recidivism. Older age at referral and having no external mandate to attend treatment was associated with increased risk of youth dropping out of treatment. These findings strongly support the need for sexually abusive behaviours by children and youth to be reported and assessed as early as possible and that the young persons continued attendance in specialised treatment be supported by external mandate by agencies such as child welfare, police and courts. This includes ensuring ongoing supervision and funding arrangements are in place for the length of treatment which ranges from 18 to 24 months for the standard programmes.

We also know that, in this New Zealand sample, having three or more victims is associated with a decreased chance of sexual recidivism; having a history of nonsexual offending and dropping out of treatment is associated with reduced chance of nonsexual recidivism; and that having a history of prior mental health problems is associated with a decreased chance of dropping out of treatment. Although this study gave us limited insight into factors associated with those who re-offend or dropout of treatment, it has provided us information on factors that are not associated with increased risk of recidivism or treatment dropout in New Zealand. This means that, to some extent, we may be able to reduce the number of youth who are monitored due to concern about their re-offending risk by identifying those at lower risk of recidivism and treatment dropout. The findings also indicate that any differences that do exist are on variables that were outside the scope of the factors included in the current study. Future research is warranted to explore other possible predictive factors.

OVERALL DISCUSSION AND CONCLUSION

This study examined sexually abusive children and youths in New Zealand. The inclusion of 702 individuals referred to specialised community programmes across New Zealand provides us with the opportunity to have a clearer understanding of the individual, their offending and their family characteristics. These children and youths are engaging in both 'hands on' and 'hands off' offences, in some cases over extended periods of time. Those most vulnerable to being sexually abused by children and youths in New Zealand are male and female children (under 13 years old) and same aged peers, who are acquaintances or relatives. In the past there has been some level of minimisation of the severity of sexual abuse perpetrated by children and youths and a tendency to view it simply as 'experimentation' (Becker, 1990; National Adolescent Perpetrator Network, 1993; Ryan & Lane, 1997). However, it is becoming increasingly apparent both from this study, and from others, that children and youths are engaging in sexually abusive behaviours (Centre for Sex Offender Management, 1999; Martin et al., 1991).Therefore, until an assessment of risk is undertaken and safety plans are in place, their contact with other children and same aged peers needs to be carefully monitored. Safety Plans to account for this risk are developed by programmes and need to be supported by all those involved including children, youths, families and caregivers. Statutory agencies (such as CYF) should take responsibility for ensuring that safety plans are complied with in order to protect other children from potential harm.

Many of the individual and family characteristics of this population of sexually abusive children and youths are associated with negative mental health outcomes in young people and with general delinquency (Ford & Linney, 1995; Lyn & Burton, 2005; Rich, 2003). Rich (2003) concluded that there is no profile of young people who sexually abuse but that there are individual characteristics and developmental experiences that are commonly shared. This was supported by the current study which found that children and youths presented not only with sexually abusive behaviour(s) but that many, though not all, had other issues including mental health and behaviour problems, low levels of social competence, trauma histories (e.g., sexual and physical abuse), multiple out-of-home placements and came from chaotic and multi-problem families. Some also had histories including substance abuse and many had school problems and prior nonsexual offending. It appears that there may be no single cause of sexually abusive behaviours but rather that the behaviour is the result of a range of individual psychological, social, developmental and environmental risk factors (Barbaree & Langton, 2006; Rich, 2003; Williams & New, 1996). Finally, cognitive and contextual factors such as motivation, opportunity and an ability to overcome internal and external inhibitions allow them to act and engage in sexually abusive behaviours (Rich, 2003).The treatment programmes and others responsible for the care of these children and youths (e.g., CYF) need to ensure they are aware of the range and extent of the multiple issues clients may present with (other than their sexualised behaviour) and seek

assistance from other mental health service providers, iwi services, CYF and Group Special Education, Ministry of Education as necessary.

It is also important to recognise some of the protective factors associated with these children and youths. Most were still attending school or were in formal training when they were referred to specialised community treatment and about half were engaged in sports and had hobbies. These protective factors should be encouraged as they are associated with more positive outcomes and act as a deterrent to general offending behaviour(s) and may have a protective role for sexually youth and children (Carr & Vandiver, 2001; Fergusson & Lynskey, 1996). However, there is relatively little research conducted on protective factors and this is an area for future development.

The results from this study indicate support for the efficacy of the treatment packages being provided by specialist community treatment programmes in New Zealand for sexually abusive children and youths. Treatment was found to be associated with a reduction of sexual, general and violent recidivism amongst those who completed treatment. In New Zealand, mainstream treatment encompasses the evidence-based therapies of CBT and family therapy, with a focus on psycho-education and relapse prevention. In addition, those aspects of the programmes that have been adapted and/or introduced to meet the needs of New Zealand youths, their families and communities, such as the broad systems approach and cultural components of treatment are also associated with the positive treatment effects (Lambie & Seymour, 2006). Compared with overseas studies, results from the current study were particularly favourable for the levels of reduction of both sexual and violent re-offending. However, although completing treatment was associated with reduced risk of general recidivism, this was more consistent with levels found in overseas studies. It is not clear why this was so, but it could be that children and youths who sexually abuse in New Zealand are lower risk offenders or it could simply be a more marked positive treatment effect for sexual and violent recidivism.

Given that children and youth exist within the family context, and that many of their families have multiple problems (e.g., domestic violence, parental divorce/separation, parental mental health issues,), it is positive that treatment programmes in New Zealand provide family therapy and have a systems focus as part of their treatment package. A recent Cochrane review indicates that family and parenting interventions are effective for children and youth (aged 10 to 17 years) with conduct disorder and delinquency problems (Woolfenden, Williams, & Peat, 2001). This provides support for the treatment programmes to continue to offer family interventions and indicates that programmes may want to further develop this aspect of their programmes (Lambie & Seymour, 2006). This study highlighted that a significant proportion of those referred to treatment, but who never commence, are withdrawn by their families. Family therapy interventions targeting engagement may have a role in addressing this problem and has been used successfully in treatment programmes for youths with behavioural and substance abuse problems (Diamond &

Josephson, 2005; Perrino, Coatsworth, Briones, Pantin, & Szapacznik, 2001; Santisteban et al., 1996; Szapacznik & Williams, 2000).

In this study, dropping out of treatment was associated with an increased risk of recidivism, and violent offending during treatment was associated with treatment dropout. Treatment dropout was also associated with older age at referral and having no external mandate to attend treatment. As the current study and international research has shown, youths who drop out of treatment are at increased risk of sexual, general and violent recidivism (Borduin, Henggeler, Blaske, & Stein, 1990; Worling & Curwen, 2000). This is consistent with previous research which has also indicated that having no external mandate to attend treatment (e.g., no direction from CYF, Police, or the Court) means children and youths are more likely to drop out of treatment (Becker, 1990; Flanagan & Hayman-White, 2000). These are important findings as they have implications for treatment providers and statutory agencies (e.g., Courts, Police and CYF) and for the way youths are dealt with through the justice system in New Zealand. First, the findings suggest that children and youths need to be referred to specialised programmes as soon as possible. In order to have sexually abusive children and youths attend and complete treatment, longer periods of supervision to match the length of treatment (up to 24 months for the standard programme and up to 36 months for youths with 'special needs') and a longer commitment to funding treatment may be warranted. This would significantly decrease their risk of re-offending.

Programmes need to consider factors associated with increased risk of youths dropping out of treatment. Examining these factors could be useful in identifying individual clients at risk of dropping out of treatment early and in the development of protocols to keep them in treatment was long as possible. This may involve targeting appropriate services, resources, and other aspects of care for those who are assessed as being at risk of dropping out of treatment. There are limited risk assessment tools available for use with sexually abusive youth. Based on the available data, the ERASOR or J-SOAP are still valuable resources and could be used during assessment in conjunction with other assessment tools and clinical judgement.

Factors associated with recidivism were explored in this study. Few variables that were positively associated with sexual and nonsexual recidivism or treatment dropout within overseas studies were found to accurately predict sexual and nonsexual recidivism in this New Zealand sample. Older age at first known sexual offence was associated with increased chance of nonsexual recidivism and having three or more victims is associated with a decreased chance of sexual recidivism; having a history of nonsexual offending and dropping out of treatment is associated with reduced chance of nonsexual recidivism. This study has provided information on factors associated with increased and decreased risk of re-offending and treatment dropout in New Zealand. This means that, to some extent, we may be able to reduce the number of youths who are monitored due to concern about their re-offending risk by identifying those at lowesr risk of recidivism and treatment dropout. The findings also indicate that any differences that do exist

may be on variables that were outside the scope of the factors included in the current study. Future research is warranted to explore other predictive factors.

In the current study, youth who completed treatment were found to be at greatest risk of sexual recidivism in the first 1 to 2 years post treatment; thereafter their risk of sexual recidivism decreased. Although a review of the aftercare offered by programmes was not included in this research, this finding may support the need for programmes to provide aftercare services for some clients, especially during this initial 1 to 2 year period. Programmes may want to target services during this initial post-treatment period but may need to be flexible to meet individual client needs.

Treatment programmes in New Zealand provide separate programmes for females, children and 'special needs' youths which are adapted to meet their developmental, intellectual and social needs. There was little difference in the offending across the groups as they all tend to victimise children who are acquaintances or relatives using both 'hands on' and 'hands off' offending. However, those in the 'special needs' group presented with even higher levels of school difficulties, social skills deficits, peer relationship difficulties, behavioural problems and mental health issues. They had intellectual impairments that warrant the adaptation of treatment and allow information to be presented to them using simplified language and ideas and an extended time in treatment in which to cover the material. Because children are younger and developmentally less mature than the older youths, targeting the language and ideas to their developmental level is necessary for them to engage and benefit fully from treatment. Females were found to be more socially capable but had marked trauma histories and behavioural difficulties. In these cases, treatment needs to be adjusted to manage their behaviour while being sensitive to their trauma backgrounds. The findings of this study suggest that the current practice of providing separate programmes for these groups are associated with positive treatment outcomes.

The overall positive treatment outcomes for treatment completers, supports the provision of culturally appropriate services for Māori youths and their whānau. Some Pacific Island youths were at risk of dropping out of treatment prior to successful completion suggesting that there is may be a need to develop culturally appropriate services for Pacific Island youths and their families to assist with treatment engagement. To support this, programmes need to continue to offer and further develop cultural services for Māori youths and their whanau and continue to develop or start developing relationships with mana whenua, iwi, hapu and other Māori service providers with a view to facilitating access to treatment. The relatively low numbers of Pacific Island youths being referred to specialised treatment programmes highlights the need for the programmes to develop or start developing relationships with, and offering education and support to, Pacific Island communities. Pacific Island youths are at high risk of dropping out of treatment prior to completion. This can be associated with the withdrawal of involvement and/or funding by

a statutory agency (e.g., CYF, Community Corrections, Court). Agencies, such as CYF and Police, may need to consider reviewing their procedures. It would be ideal if a commitment to fund youths for the duration of treatment (approximately 2 years) occurred. Offering culturally appropriate services for Pacific Island youths and families may enhance their engagement in treatment and reduce their risk of treatment dropout.

Other implications for treatment, prevention and policy development

There needs to be increased awareness that sexual abuse is not just perpetrated by adults but that adolescents and children, females and youths with 'special needs' are also engaging in sexually abusive behaviours. There also needs to be awareness amongst those who are most vulnerable to these young sexual abusers. Such awareness would assist in early disclosure and identification of children and youths who engage in sexually abusive behaviours and assist in the promotion of prompt referrals to specialised treatment providers. This awareness needs to be increased amongst the public, community organisations (e.g., churches and schools), statutory agencies (e.g., Child, Youth, and Family, Ministry of Education, and NZ Police) and others working with children and victims of abuse. Dissemination of this and similar research as widely as possible would assist agencies and the general public to better understand this population of sexual abuser and help prevent the underestimation of the risk children and youths can present.

This study revealed a delay of approximately a year between first known sexual offence (13 years) and referral (14 years) to a specialised community treatment programme. This has a number of implications as older age at initial assessment by specialised treatment programmes has been associated with increased risk of sexual recidivism and early detection and intervention may prevent the escalation of the behaviour and reduce the number of victims (Flanagan, 2003; Flanagan & Hayman-White, 2000; Nisbet, Wilson, & Smallbone, 2004; Tomison, 2000). There needs to be less delay between the onset of sexually abusive behaviours and referral to specialist treatment providers. Agencies such as CYF and the New Zealand Police need to review their procedures around the referral of youths to the specialist treatment programmes to ensure that the process is streamlined and referrals occur promptly disclosure.

Conducting the audit of programme files identified limitations in the data collection methods of the programmes. There was great variability in the consistency, accuracy and completeness of the data collected and recorded within clients' programme files and across sites. Programmes need to be continuously monitoring the quality of data collected and recorded; not just to assist future researchers accessing file data but also to ensure that they are providing an appropriate, clinically safe and high quality service to their clients.

For best results, it is desirable that the treatment programmes consider which psychometrics they are going to use and develop a minimum set. These need to be administered routinely as part of

their assessment package and again at the end of treatment. Psychometric tests need to be clearly, accurately and completely filled out (including the date they were completed), scored and summarised and/or reports written. Staff may wish to check with clients and parents/caregivers once they have completed the forms to reduce the risk of incomplete forms invalidating the results.

Children and youths attending these programmes often come from chaotic and multi-problem families and may have victimised family members. The three programmes included in this study offer family therapy as part of their standard treatment packages. Programmes may want to monitor outcomes from family therapy interventions. Programmes may like to consider the inclusion of other measures of outcomes including functioning on daily living tasks, changes in family functioning and communication, as well as obtaining feedback on an ongoing basis, from those using their service. This would allow for the ongoing study and development of programmes.

Programmes need to ensure regular contact occurs with other agencies (e.g., Child, Youths and Family, Ministry of Health, Ministry of Education, Police Youths Aid), service providers (NGOs) and other organisations (e.g., churches and schools, youths groups etc) and provide ongoing education and support. Some agencies may have a rapid turn-over of staff so regular education and liaison sessions may be warranted (e.g., having liaison meetings every 6 months with staff from local CYF offices). This will allow programmes to provide education and increase awareness around children and youth who engage in sexually abusive behaviours and increase awareness of the availability of specialised treatment programmes.

Limitations and strengths of study

This study involved a large national sample of sexually abusive children and youths referred to the three largest specialised community treatment programmes in New Zealand over a 9½ year period. Having such a large sample resulted in greater statistical power and so increases our confidence in the reliability of the results.

The recidivism data presented here are most likely a conservative estimate of the actual rate of recidivism. However, every effort was made to capture as much known recidivism data as possible through the triangulation of data across multiple, nationally based, data sources to capture information on youth and adult re-offending and to reduce the risk of a positive treatment effect bias. A strength of this study is the inclusion of both youth and adult recidivism data.

One of the common criticisms of overseas recidivism research of sexually abusive youths has been the short follow-up periods (United States General Accounting Office, 1996). This study had a medium to long term follow-up period (range 1 year to 10 years, with an average of 4.5 years).

There was variability in the length of follow-up for the individuals included in Study Two. This was addressed through the use of survival curves to explore differences in the chance of re-offending between treatment groups. Survival curves take into account the variability of follow-up and allow an estimate of the true survival rate at the end of the follow-up period.

The fact that this study involved community-based treatment meant that children and youths were still at risk while attending treatment. Offending that occurred while children and youths were attending treatment was also considered in order to address this issue. Some may also have spent time in prison which would have reduced their opportunity for re-offending. This information was not collected as part of this study. Future researchers could obtain information on the length of time young people included in the study were incarcerated and allow for this when calculating the length of follow-up.

A review of the international outcome research indicated that of 27 studies reviewed, only five included a comparison group (Borduin, Schaeffer, & Heilbluma, 2000; Hagan, Gust-Brey, Cho, & Dow, 2001; Lab, Sheilds, & Schondel, 1993; Seabloom, Seabloom, Seabloom, Barron, & Hendrickson, 2003; Worling & Curwen, 2000). After extensive consultation, it was concluded that it was not possible to include a comparison group of sexually abusive youths who had not been referred to a specialist community treatment programme. The study design was adjusted to accommodate this; comparisons were made of sexually abusive children and youths referred to the treatment programmes who did not receive treatment (Comparison group), with those who did not successfully complete treatment (Treatment Dropouts) and Treatment Completers. This allowed comparisons of recidivism between groups to occur. However, it is important to be aware that systematic differences and selection biases may exist between the groups, although the current study found few differences based on the available information.

This study relied on information collected and recorded by others. The data included in this study, therefore, can only be as accurate as the data that were recorded in programme files and on the data bases accessed for re-offending data (Police and CYF).

There are limits to the generalisabilty of the results from this study to sexually abusive children and youths who were *not* referred to a specialised community treatment programme and to overseas populations.

Future research

Treatment programmes and funding agencies (e.g., The Department for Child, Youth and Family) need to commit funding to support future studies of these services and treatment outcomes. Follow-up of recidivism amongst sexually abusive children and youths and treatment completers

needs to occur at regular intervals in the future (a maximum of every five years would be recommended). Future outcome research should also include a comparison group.

As discussed above, official records will provide a conservative estimate of recidivism. Future research could include self and/or parent/caregiver reports of sexual and nonsexual re-offending as this may provide a less conservative estimate of actual recidivism. The exploration of other measures of outcome, for example through the administration of psychometric measures pre- and post-treatment would be useful. Initial results indicate positive changes in psychological and behavioural issues from pre- to post-treatment.

The special populations (children, female youths and youths with 'special needs') included in this study are under-researched populations. More research needs to occur to replicate the findings of Studies One, Two and Three in order to further our understating of these populations and contribute to the development of treatments offered to them.

Research on Māori children and youths who sexually offend is in its infancy. Research needs to be undertaken to fulfil the obligations to young people and their whānau in order to enhance treatment services. Research on sexually abusive Pacific Island children and youths also needs to be undertaken to better understand them and contribute to the ongoing development of culturally appropriate services.

The current treatment packages offered in New Zealand were effective in reducing recidivism amongst those who completed treatment. Future research could explore the contribution of the various aspects of the treatment to successful outcomes. This study also focused on specialised community treatment programmes. Future research could include a comparison study of the outcomes for youths who attend specialised community treatment programmes compared with those who attend residential treatment in New Zealand.

This study presented details of the individual, family and offending characteristics of male youths, female youths, youths 'special needs' and children. International research has explored typologies amongst sexually abusive youths. This would be an interesting direction for researchers in New Zealand to further explore. They could explore the association between typologies and treatment outcomes and risk prediction.

A limited number of factors were found that were positively associated with sexual and nonsexual recidivism or treatment dropout. More information was gained about factors that are associated with a lower risk of recidivism. Future researchers could explore variables associated with recidivism and treatment dropouts including more dynamic risk factors. Few variables included in this study were found to be predictive of treatment dropout. The review of the literature indicated there are limited factors that have been identified as being associated with treatment dropout

amongst sexually abusive youths. However, psychological researchers in other areas indicate that there are socio-demographic characteristics (e.g., low income), family (e.g. parental stress) and personality factors that may be predictive of treatment dropout and warrant exploration by future researchers (Dierker, Nargiso, Wiseman, & Hoff, 2001; Edlund et al., 2002; Ogrodniczuk, Joyce, & Piper, 2005).

Conclusion

The results from this study indicate support for the efficacy of the treatment packages being provided by specialist community treatment programmes in New Zealand for sexually abusive children and youths. Successful completion of treatment is associated with positive effects on sexual, violent and general recidivism. It also provided a detailed description of the individual, offending and family characteristics of sexually abusive male youths in New Zealand. Although this group of offenders has been well studied overseas, to date there has been no systematic, large scale study of this population within New Zealand. This study also provides a detailed description of the characteristics of sexually abusive female youths, children and youths with 'special needs'. There are limited studies involving these populations internationally and so this will add greatly to the understanding of these populations nationally and internationally. Understanding these populations will allow treatment programmes to be developed to best meet their multiple needs and allow agencies involved in their care to better understand and support their treatment needs. Treatment dropouts were also identified as a high risk group of re-offenders. Factors associated with treatment dropout that could be addressed to reduce the risk of this group going on to future offend were identified.

APPENDIX A - Data Collection Form

Data collected from files held by the Programmes

SECTION A: Client Demographic Information

1. Full name ……
   (First name) (Family/Last name)

2. Date of birth ...…../..…../..….

3. Address of parents/primary caregiver (not out-of-home placement)
Number and Street ……..
Suburb ……..
City …….

4. Programme Client No. ……

5. Study No. ……

Instructions: Copy the study number from above onto the following page and then remove this page from the data collection form and store separately. (Data to be held in an encrypted file.)

Collection Details

Collected By:	Collection Date:

OUTCOME STUDY - DATA FORM FOR ADOLESCENT SEX OFFENDERS

SECTION A: Client Demographic Information (continued)

Data collected from files held by the Programmes

Study No. **……**

1. **Age at referral ……. (years)**

2. **Gender**
   ☐ Male ☐ Female

3. **Ethnicity (select all that apply)**
   ☐ Pakeha / European
   ☐ Māori Iwi/Hapu (specify) ……
   ☐ Samoan
   ☐ Cook Island Māori
   ☐ Tongan
   ☐ Niuean
   ☐ Asian (specify) …….
   ☐ Other European e.g. English, Scottish, Australian (specify) ……
   ☐ Other (specify) ……..

Treatment Details

1. **Site**
   ☐ SAFE Network Auckland ☐ STOP Wellington ☐ Christchurch STOP

2. **Referral agent (select all that apply)**
   ☐ Unknown
   ☐ Child Youth and Family Service (CYF) – Care and Protection
   ☐ Child Youth and Family Service (CYF) – Youth Justice
   ☐ Self
   ☐ Family / Whānau
   ☐ Child and Family Mental Health Service
   ☐ Youth Mental Health Service
   ☐ Māori Service Provider / Counsellor
   ☐ Social Service Agency
   ☐ Other: e.g. church / Police / school / counsellor / GP (specify) ……

3. **Date of Referral ……/……./…….**

4. **Date of Assessment** ……/……./……

5. **Date(s) in treatment**
   First entry From: ……/……./……. To: ……/……./…….
   Second entry From: ……/……./……. To: ……/……./…….
   Third entry From: ……/……./……. To: ……/……./…….

6. **Type of Treatment Received**

Treatment programme	Yes / No (Y/N)
Standard youth	
'Special needs' group	
Female	
Children's	
Individualised	

7. Treatment status at termination

- ☐ Not assessed (Go to **Question 8**)
- ☐ Assessment not completed (Go to **Question 8**)
- ☐ Assessed and did not commence treatment (e.g., not suitable) (Go to **Question 9**)
- ☐ Assessed, commenced treatment but treatment not successfully completed (e.g., dropped out, changed residence, referred on) (Go to **Question 10**)
- ☐ Assessed and completed treatment (successful completion) (Go to **Question 11**)

8. Reason assessment was not completed / commenced? (Select all that apply)

- ☐ Unknown
- ☐ Not applicable
- ☐ Client did not attend appointment(s)
- ☐ Client withdrew during assessment
- ☐ Unable to contact client or family/whānau
- ☐ Client being outside age range
- ☐ Sexually abusive behaviour not meeting threshold for entry to programme
- ☐ Due to low level of intellectual ability
- ☐ Due to significant mental health issue
- ☐ Due to significant current substance abuse
- ☐ Client imprisoned
- ☐ Client held in secure / residential CFYS facility
- ☐ Other reason (specify) ……

9. Reason treatment was not commenced? (Select all that apply)

- ☐ Unknown
- ☐ Not applicable
- ☐ Client withdrew following assessment
- ☐ Unable to contact client or family/whānau
- ☐ Client moved out of the area
- ☐ Client referred on (specify) …..…..…..…..…..
- ☐ Client imprisoned
- ☐ Other reason (specify) …..…..…..…..…..

10. Reason treatment was not completed? (Select all that apply)

- ☐ Unknown
- ☐ Not applicable
- ☐ Client did not attend appointment(s)
- ☐ Client withdrew during treatment
- ☐ Client moved out of the area
- ☐ Client referred on (specify) …..…..…..…..…..
- ☐ Client imprisoned
- ☐ Other reason (specify) …..…..…..…..…..

Other agency involvement

11. Prior Treatment – specific treatment received for sexual offending

- ☐ Unknown
- ☐ None known
- ☐ Community-based treatment
- ☐ Residential treatment
- ☐ Other treatment (specify) ……..……

12. Prior Treatment – other treatment received (e.g. drug and alcohol, mental health services)

- ☐ N/A
- ☐ Specify agency and length

  Agency ……... Length …… months
  Agency ……... Length …… months
  Agency ……... Length …… months

13. Did the client receive any other programmes/services while attending specialist treatment?

☐ Unknown ☐ No ☐ Yes

Treatment engagement

14. Mandate status for treatment attendance

☐ Unknown
☐ No legal status / No mandate to attend
☐ Directed by CYF
☐ Outcome of Family Group Conference (Care & Protection or Youth Justice)
☐ Ordered by Court (District / Family / Youth)
☐ Other e.g. Police Diversion (specify): ……..

15. Level of denial or minimisation of offending at commencement of treatment (select all that apply) Read options carefully.

☐ Unknown
☐ Adolescent FULLY acknowledged ALL aspects of ALL sexual offences
☐ Adolescent acknowledged most aspects of offending and denied a few aspects
☐ Adolescent acknowledged some aspects of offending and denied other aspects
☐ Adolescent denied most aspects of offending and acknowledged a few aspects
☐ Adolescent minimised sexual offending
☐ Adolescent denied sexual offending
☐ Not applicable

16. Level of denial or minimisation at completion of treatment (select all that apply) Read options carefully.

☐ Unknown
☐ Adolescent FULLY acknowledged ALL aspects of ALL sexual offences
☐ Adolescent acknowledged most aspects of offending and denied a few aspects
☐ Adolescent acknowledged some aspects of offending and denied other aspects
☐ Adolescent denied most aspects of offending and acknowledged a few aspects
☐ Adolescent minimised sexual offending
☐ Adolescent denied sexual offending
☐ Not applicable

17. The ASO's overall attitude towards treatment could be described as

☐ Unknown
☐ Active participation in treatment most of the time
☐ Mix of active participation and reluctant / resistant participation in treatment
☐ Reluctant / Resistant participation in treatment most of the time
☐ Not applicable

18. The families/whānau approach to the adolescents sex offending could be described best as: (Select all that apply)

☐ Supportive ☐ Neutral / Indifferent
☐ Not involved ☐ Actively undermining treatment

19. Family/Whānau involvement and attitude towards treatment could be described as (Select all that apply)

☐ Unknown
☐ Family/Whānau refused to participate in assessment
☐ Family/Whānau refused to participate in treatment (e.g. family therapy)
☐ Family/Whānau denied their child had committed sexual offence(s) despite evidence to the contrary
☐ Family/Whānau denied <u>any</u> risk of sexual re-offence
☐ Family/Whānau attempted to undermine or minimise the adolescent's sexual offence specific assessment and treatment
☐ Family/Whānau were indifferent to the adolescent receiving treatment
☐ Family/Whānau were supportive of assessment and treatment

Education

20. Age left school?
☐ Unknown ☐ Still attending school ☐ Left aged ……..……..

21. During treatment was the adolescent involved in an educational or training course?
☐ Unknown
☐ No
☐ Yes (if YES specify)……..

22. Has the family moved a lot resulting in the child attending multiple schools?
☐ Unknown ☐ No ☐ Yes (specify approximate number) ……

23. Highest qualification achieved
☐ Unknown
☐ School Certificate – specify number of subjects ……
☐ Sixth From Certificate – specify number of subjects ……
☐ Higher School Certificate
☐ NZ University Entrance, Bursary or Scholarship - specify number of subjects ……
☐ Other NZ school qualification (specify) ……..
☐ Any post school qualifications (e.g. trade certificate, diploma etc) (specify) ……
☐ NZQA qualification (specify) ……..……
☐ Other (specify) ……..……

24. Intellectual functioning
☐ Unknown ☐ Developmentally Delayed (<70)
☐ Borderline (70-79) ☐ Low average (80-89)
☐ Average (90-109) ☐ High average (110-119)
☐ Superior (120-129) ☐ Very superior (130+)
☐ Below average (unspecified) ☐ Average (unspecified)

Predominant Family Environment

The following refer to the time up to which the young person ENTERED treatment

25. Parent's marital status (select all that apply)
☐ Married ☐ Divorced ☐ Separated
☐ Mother remarried ☐ Father remarried ☐ Never married
☐ Father unknown ☐ Mother unknown
☐ Child adopted / whāngai at age ……
☐ GAY/LESBIAN parents (Donor or surrogate KNOWN/UNKNOWN)
☐ FATHER / MOTHER in prison (*select which parent*)
☐ Mother deceased when child aged …...
☐ Father deceased when child aged ……

26. Adolescent has regular contact with mother
☐ Unknown ☐ No ☐ Yes

27. Adolescent has regular contact with father
☐ Unknown ☐ No ☐ Yes

28. Number of siblings
☐ Unknown
☐ No siblings

	# Brothers	# Sisters
Biological	……	…….
Half	……	……
Step	……	……
Adopted/Whāngai	……	……
Foster	……	……

29. The quality of the primary caregiver/child relationship could be best described as:
☐ Unknown ☐ Close ☐ Distant ☐ Mixed (close & distant)

30. **Evidence or report of young person witnessing domestic violence (**against ADULTS or other CHILDREN) in the household (not as a victim)
☐ Unknown ☐ No ☐ Yes

31. Sexualised family/whānau environment (Select all that apply)
☐ Unknown
☐ Non-sexualised family/whānau environment
☐ Frequent incidents of nudity amongst family/whānau members
☐ Frequent sexualised comments from parents/caregivers
☐ Easy access to pornography
☐ Parental (caregiver) sexual activity seen/heard by the adolescent (on more than two occasions)
☐ Other (specify) ……..

32. Exposure to pornography (Select all that apply)
A) Exposure to ☐ Unknown ☐ No
☐ Magazines ☐ Movies / Videos
☐ Television ☐ Websites / Internet
B) Exposure in home? ☐ Unknown ☐ No ☐ Yes

33. Has anyone in the family/whānau (e.g. parents, siblings) ever been arrested or appeared in court (including youth court) – for sexual offences? (Select all that apply)
☐ Unknown ☐ No one
☐ Brother(s)/sister(s) - Specify details: ……..
☐ Parent(s) - Specify details: ……...
☐ Sibling(s) and parent(s) - Specify details: ……..
☐ Other (specify) …… ……..…….

34. Has anyone in the family/whānau (e.g. parents, siblings) ever been arrested or appeared in court (including youth court) – for nonsexual offences? (Select all that apply)
☐ Unknown ☐ No one
☐ Brother(s)/sister(s) - Specify details: ……..
☐ Parent(s) - Specify details: ……...
☐ Sibling(s) and parent(s) - Specify details: ……..
☐ Other (specify) ……..…….

35. Other problems in the family/whānau include: (Select all that apply)
A. History of alcohol abuse by parents/caregivers
☐ Unknown ☐ No ☐ Yes
B. History of drug abuse by parents/caregivers
☐ Unknown ☐ No ☐ Yes
C. History of psychiatric problems in parents/caregivers
☐ Unknown ☐ No ☐ Yes
D. History of ill health in parents/caregivers
☐ Unknown ☐ No ☐ Yes
E. History of suicide / self harm behaviour in family/whānau
☐ Unknown ☐ No ☐ Yes
(Specify)…….....
F. History of chronic unemployment in parents/caregivers
☐ Unknown ☐ No ☐ Yes
G. History of extreme poverty in family/whānau
☐ Unknown ☐ No ☐ Yes

Living Situation

36. At the time of attending assessment the young person lived with: (Select all that apply)

- ☐ Unknown
- ☐ Mother (biological/adoptive/whāngai)
- ☐ Father (biological/adoptive/whāngai)
- ☐ Brother(s) (Full/Half)
- ☐ Sister(s) (Full/Half)
- ☐ Step brother(s)
- ☐ Step sister(s)
- ☐ Stepmother
- ☐ Stepfather
- ☐ Mother's partner
- ☐ Father's partner
- ☐ Grandparent(s)
- ☐ Cousin(s)
- ☐ Aunt(s)
- ☐ Uncle(s)
- ☐ Foster parent(s)
- ☐ Family Home (specify) ……..
- ☐ Other (specify) ……

37. Number of changes in parental figure(s) prior to assessment treatment

Number ……

38. Did the young person ever change their place of residence due to their sexually inappropriate behaviour?

☐ Unknown ☐ No ☐ Yes

39. Has the young person ever run away from home & stayed out over night?

☐ Unknown ☐ Never ☐ Once
☐ Two to three times ☐ Four or more times

40. Has the young person ever been in the care or custody of CYF? (e.g. CYF residence or foster home)

☐ Unknown ☐ No ☐ Yes

41. Total number of out-of-home placements?

Number …..

42. Number of out-of-home placements prior to assessment?

Number ……

Types of placements experienced prior to treatment

- ☐ Not applicable
- ☐ Unknown
- ☐ Family/Whānau From: …./…./…. To: …./…./….
- ☐ Family – extended family/whānau From: …./…./…. To: …./…./….
- ☐ Family Home (e.g. CYF) From: …./…./…. To: …./…./….
- ☐ Foster Home From: …./…./…. To: …./…./….
- ☐ Group Home From: …./…./…. To: …./…./….
- ☐ Te Poutama Arahi Rangatahi (TPAR) -Specialist Residential Unit-Christchurch From: …./…./…. To: …./…./….
- ☐ Specialist Care for Other Type of Offence (e.g. YHT, Youth Prison, Barnardos) From: …./…./…. To: …./…./….
- ☐ Independent living From: …./…./…. To: …./…./….
- ☐ Other - specify: From: …./…./…. To: …./…./….

43. Number of out-of-home placements while attending treatment programme?

Number ……

44. Place young person lived during treatment (i.e. while on the programme)
☐ Unknown ☐ Not applicable

Placement Number:	Location:	Dates:
1	☐ Family/Whānau ☐ Family - extended family/whānau ☐ Family Home (e.g. CYF) ☐ Foster Home ☐ Te Poutama Arahi Rangatahi (TPAR) ☐ Specialist Care for Other Type of Offence (e.g. YHT, Youth Prison, Barnardos) ☐ Independent living ☐ Other - specify:	From: …./…./…. To: …./…./….
2	☐ Family/Whānau ☐ Family - extended family/whānau ☐ Family Home (e.g. CYF) ☐ Foster Home ☐ Te Poutama Arahi Rangatahi (TPAR) ☐ Specialist Care for Other Type of Offence (e.g. YHT, Youth Prison, Barnardos) ☐ Independent living ☐ Other - specify:	From: …./…./…. To: …./…./….
3	☐ Family/Whānau ☐ Family - extended family/whānau ☐ Family Home (e.g. CYF) ☐ Foster Home ☐ Te Poutama Arahi Rangatahi (TPAR) ☐ Specialist Care for Other Type of Offence (e.g. YHT, Youth Prison, Barnardos) ☐ Independent living ☐ Other - specify:	From: …./…./…. To: …./…./….

45. Nature of post-treatment placement:
☐ Unknown ☐ Living with Parent(s)
☐ Independent living ☐ Living with Extended Family/Whānau
☐ Foster Home / Family Placement
☐ Specialist Care for Sexual Offending
☐ Specialist Care for Other Type of Offence (e.g. YHT, Youth Prison, Barnardos)
☐ Other (specify): ……
☐ Not applicable

Abuse History

46. Victim of Child Sexual Abuse (CSA)
☐ Unknown ☐ No ☐ Yes

47. Approximate age at which first sexually abused? …… years

48. Estimated duration of CSA? ……days ……months …..years

49. CSA – Perpetrato(s) of abuse was:
☐ No recorded abuse
A. Gender
☐ Male ☐ Female
B. B. Age
☐ Child (<12) ☐ Adolescent (12-17) ☐ Adult (>17)

C. C. Relationship

☐ Biological mother	☐ Biological father
☐ Adoptive or whāngai mother	☐ Adoptive or whāngai father
☐ Step mother / Father's Partner	☐ Step father / Mother's Partner
☐ Family Friend	☐ Uncle
☐ Aunt	☐ Grandfather
☐ Grandmother	☐ Stranger
☐ Other Caregiver (specify): …..……	☐ Other e.g. teacher/priest (specify) ..……

50. CSA – Nature of sexual abuse

☐ No recorded abuse
☐ Vaginal penile penetration / attempted penetration
☐ Anal penile penetration / attempted penetration
☐ Vaginal penetration / attempted penetration
☐ Anal penetration / attempted penetration
☐ Oral contact by perpetrator to victim's genitals
☐ Oral contact by victim to perpetrator
☐ Sexualised touch by perpetrator to other parts of victims body, or victim to perpetrator's body (e.g., of breasts, penis, vagina, bottom).

☐ Touching	☐ Voyeurism
☐ Exhibitionism	☐ Other (specify): ……..

51. Child Physical Abuse (CPA) victim

☐ Unknown ☐ No ☐ Yes

52. Age at which first physically abused? …… years

53. Estimated duration of CPA? ……days ……months …..years

54. CPA – Perpetrator(s) of abuse was:

☐ No recorded abuse

A. Gender

☐ Male ☐ Female

B. B. Age

☐ Child (<12) ☐ Adolescent (12-17) ☐ Adult (>17)

C. C. Relationship

☐ Biological mother	☐ Biological father
☐ Adoptive or whāngai mother	☐ Adoptive or whāngai father
☐ Step mother / Father's Partner	☐ Step father / Mother's Partner
☐ Family Friend	☐ Uncle
☐ Aunt	☐ Grandfather
☐ Grandmother	☐ Stranger
☐ Other Caregiver (specify): …..……	☐ Other e.g. teacher/priest (specify) ..……

55. Other abuse experienced included

☐ No other abuse recorded	☐ Neglect
☐ Emotional abuse	☐ Other trauma (specify) ……..…….

Socialisation

56. Actively involved in at least one sport(s)

☐ Unknown ☐ No ☐ Yes (specify) …….

57. Actively involved in at least one hobby

☐ Unknown ☐ No ☐ Yes (specify) …….

58. Report or evidence of social skills deficit

☐ Unknown ☐ No ☐ Yes

59. Report or evidence of low self-esteem
☐ Unknown ☐ No ☐ Yes

60. Types of friends (use codes H = Historic, P= Present)
☐ Unknown
H P Gang affiliation / membership
H P Friends mostly involved in anti-social / delinquent behaviour
H P Friends mostly involved in pro-social behaviours and activities

61. Number of friends
☐ Unknown ☐ No friends
☐ A few friends (1-2) ☐ Moderate to high number of friends (3+)

Historical and/or Present Diagnoses or problem behaviours

62. Report or evidence of behaviour problems (e.g., anger, aggression, etc.,)
☐ Unknown ☐ No
☐ Yes – If yes was it ☐ Prior to 10 years of age
☐ After to 10 years of age
☐ Age unknown

63. Report or evidence of being the victim of bullying at school
☐ Unknown ☐ No ☐ Yes

64. Report or evidence of being expelled from school prior to entry to treatment?
☐ Unknown ☐ Never
☐ Yes – If yes were they
☐ First expelled before 10 years (how many times? ……)
☐ First expelled 10 years or older (how many times? ……)
☐ Age unknown

65. Report or evidence of being suspended from school prior to entry to treatment?
☐ Unknown ☐ Never
☐ Yes – If yes were they
☐ First suspended before 10 years (how many times? ……)
☐ First suspended 10 years or older (how many times? ……)

66. Report or evidence of school truancy prior to entry to treatment?
☐ Unknown ☐ Never
☐ Yes – If yes was
☐ Prior to 10 years of age (how many times? ……)
☐ 10 years or older (how many times? ……)
☐ Age unknown

67. Diagnoses or problem behaviours

H – Historical Diagnosis P – Present Diagnosis U - Unknown

H P U	ADHD	H P U	Animal Cruelty
H P U	Anxiety Disorder	H P U	Asperger's Disease
H P U	Autistic Disorder	H P U	Bipolar Disorder
H P U	Conduct Disorder	H P U	Depressive Disorder
H P U	Eating Disorder	H P U	Encopresis (soiling problem)
H P U	Enuresis (wetting problem)	H P U	Fetal Alcohol
H P U	Firesetting	H P U	Head Injury
H P U	Language Disorder	H P U	Learning Disability
H P U	Obsessive Compulsive Disorder	H P U	Oppositional Defiant Disorder
H P U	Personality Disorder	H P U	Post Traumatic Stress Disorder
H P U	Psychotic Disorder	H P U	Reactive Attachment Disorder
H P U	Sleep Disorder	H P U	Tourette's Disease
H P	Other ……..	H P	Other…….

68. if report or evidence of conduct disorder

☐ Yes – If yes were they
- ☐ First diagnosed before 10 years (how many times? ..……)
- ☐ First diagnosed 10 years or older (how many times? ……)
- ☐ Age unknown

69. Scale of conduct disorder

☐ N/A ☐ Minor ☐ Moderate ☐ Severe

70. Report or evidence of drug abuse? (select all that apply)

☐ Unknown ☐ No
☐ Yes – prior to 10 years ☐ Yes – at 10 years or older
☐ Yes – has a diagnosed drug problem

71. Types of drugs/substances used (select all that apply)

*** Not alcohol - see separated question below on alcohol abuse**

☐ N/A ☐ Unknown
☐ Solvents (glue, petrol, paint etc) ☐ Sedatives – downers (e.g. marijuana)
☐ Cocaine, crack & methadone ☐ Heroin / Homebake
☐ Stimulants – uppers, amphetamines, speed, P, crystal meths etc
☐ LSD, PCP, ecstasy or other psychedelic drugs
☐ Prescription medicines that can get you high
☐ Morphine / MSTs ☐ Other (specify) ……..……..

72. Scale of drug abuse (if known)

☐ N/A ☐ Minor ☐ Moderate ☐ Severe

73. Report or evidence of alcohol (e.g. wine, beer, spirits etc.) abuse? (Select all that apply)

☐ Unknown (Go to Q. 90) ☐ No (Go to Q. 90)
☐ Yes (Go to Q. 89) ☐ Yes – has a diagnosed alcohol problem

74. Scale of alcohol abuse

☐ N/A ☐ Minor ☐ Moderate ☐ Severe

75. Any attempted suicide / self harmed prior to attending treatment

☐ Unknown ☐ No ☐ Yes (Specify) ……..

76. Any attempted suicide / self harmed while in treatment

☐ Unknown ☐ No ☐ Yes (Specify) ……..

SECTION B: OFFENDING HISTORY (sexual and non-sexual)

This Section refers to OFFENDING PRIOR to assessment and /or treatment

1. Information based on (select all that apply)

☐ Police/probation report ☐ Self-report ☐ File information
☐ Parent/caregiver report ☐ Other (specify): ……..

2. Was the young person involved in any of the following prior to referral to the treatment programme for A) sexual or B) nonsexual offending:

A) Sexual offending?

☐ Unknown ☐ No
☐ Youth Justice - Family Group Conference ☐ Police diversion
☐ Received Police warning(s)/caution(s)

B) Nonsexual offending?

☐ Unknown ☐ No
☐ Youth Justice - Family Group Conference ☐ Police diversion
☐ Received Police warning(s)/caution(s)

3. **Number of Family Group Conference organised due to offending?**
   ☐ Unknown ☐ Number (specify) ……

4. **If involved in a Youth Justice - Family Group Conference was the first prior to age 14?**
   ☐ Unknown ☐ No ☐ Yes

Sexual offending

5. **Firstly state in qualitative terms what this is:**

6. **Approximate age at first sexually inappropriate behaviour/offence: ….. years**

7. **Gender and Age of victims (use codes below)**
   If more than five victims use separate sheet for other victim details.

	Victim 1	Victim 2	Victim 3	Victim 4	Victim 5
Gender (M/F)	……..	……..	……..	……..	……..
Age (years)	……..	……..	……..	……..	……..
Ethnicity	……..	……..	……..	……..	……..
Relationship	……..	……..	……..	……..	……..
Type	……..	……..	……..	……..	……..
Frequency	……..	……..	……..	……..	……..
Duration	……..	……..	……..	……..	……..
Charge Codes (if known)	……..	……..	……..	……..	……..

Use this to for table above - select all that apply.

Type of sexual offending the ASO was involved in:

1. Using underwear for sexual arousal
2. Indecent Exposure/Exhibitionism
3. Voyeurism
4. Vaginal penile penetration/attempted penetration
5. Anal penile penetration/attempted penetration
6. Vaginal penetration/attempted penetration
7. Anal penetration/attempted penetration
8. Oral contact by perpetrator to victim's genitals
9. Oral contact by victim to perpetrator
10. Sexualised touch by perpetrator to other parts of victim's body, or victim to perpetrator's body (may include breasts, penis, vagina, bottom)
11. Sexual contact with an animal (bestiality)
12. Possession of child pornography
13. Other (specify) ……
14. Other (specify) ……

Relationship of victim to perpetrator

1. Sibling – full
2. Sibling – half
3. Sibling – step
4. Sibling – adopted/whāngai
5. Other relative (specify) ……
6. Other child in care (specify): …….
7. Non-familial – neighbour
8. Non-familial – friend/acquaintance
9. Non-familial – other (specify) …….
10. Stranger

8. **Touching occurred**
   ☐ Over clothes ☐ Under/inside clothes ☐ Both over and under clothing

9. **List charge codes for prior sexual offences (if known)**
   Code …… Code …… Code ……

10. **Strategies to overcome victims (methods of control)**
    ☐ Use of non-threatening grooming behaviours / rewards (i.e. money / games time / attention
    ☐ Use of threat (both physical & verbal)
    ☐ Use of overt force / power (i.e. holding down, pushing)
    ☐ Use of weapons (i.e. knife, gun, bat)
    ☐ Other (specify) ……

11. **Is the client known to have sexually re-offended while on the programme with or without being charged/arrested/convicted for these offences?**
    ☐ Unknown ☐ No ☐ Yes (Go onto complete Part C of this form)

Nonsexual offending

12. **Firstly state in qualitative terms what this is: (List offence codes if known)**

13. **Approximate age at first inappropriate nonsexual offending behaviour: ….. years**

14. **Types of nonsexual offending**

☐ None recorded in file		
☐ Property damage / Vandalism	Age …….	Frequency …….
☐ Assault / Violence	Age …….	Frequency …….
☐ Theft / Burglary / Stealing	Age …….	Frequency …….
☐ Arson / Fire Setting	Age …….	Frequency …….
☐ Drug and Alcohol	Age …….	Frequency …….
☐ Disorderly behaviour	Age …….	Frequency …….
☐ Fraud / Embezzlement / Misappropriation of funds	Age …….	Frequency …….
☐ Other (State) ……	Age …….	Frequency …….

SECTION C: REOFFENDING FORM (sexual and non-sexual)

Section C relates to:
Sexual and nonsexual offending that occurred while the adolescent was attending the treatment programme.

1. **Information based on (select all that apply)**
   ☐ Police/probation report/record ☐ Self-report
   ☐ Parent/caregiver report ☐ File information
   ☐ CYF report/record ☐ Other (specify): ……..

New Sexual offending

2. **Firstly state in qualitative terms what this is:**

3. **Number of New Sexual re-offences while on the programme**
   ☐ Unknown ☐ None
   ☐ Number (specify): ……

4. Number of arrests for new sexual offences ……..

5. Number of charges for new sexual offences ……

6. List charge codes for new sexual offences
Code …… Code …… Code ……

7. Number of convictions or proven outcomes (Youth Court) for new sexual offences
……

8. Justice outcomes
- ☐ Police diversion
- ☐ Youth Court sentence
  - Specify sentence type……& length …….. (if known)
- ☐ District Court sentence
  - Specify sentence type……& length …….. (if known)
- ☐ Other (specify)
  - Specify sentence type……& length …….. (if known)

9. Gender and Age of victims (use codes below)

	Victim 1	**Victim 2**	**Victim 3**	**Victim 4**	**Victim 5**
Gender (M/F)	……..	……..	……..	……..	……..
Age (years)	……..	……..	……..	……..	……..
Ethnicity	……..	……..	……..	……..	……..
Relationship	……..	……..	……..	……..	……..
Type	……..	……..	……..	……..	……..
Frequency	……..	……..	……..	……..	……..
Duration	……..	……..	……..	……..	……..
Charge Codes	……..	……..	……..	……..	……..

Use this to for table above - select all that apply.

Type of sexual offending the ASO was involved in:
1. Using underwear for sexual arousal
2. Indecent Exposure/Exhibitionism
3. Voyeurism
4. Vaginal penile penetration/attempted penetration
5. Anal penile penetration/attempted penetration
6. Vaginal penetration/attempted penetration
7. Anal penetration/attempted penetration
8. Oral contact by perpetrator to victim's genitals
9. Oral contact by victim to perpetrator
10. Sexualised touch by perpetrator to other parts of victim's body, or victim to perpetrator's body (may include breasts, penis, vagina, bottom)
11. Sexual contact with an animal (bestiality)
12. Possession of child pornography
13. Other (specify) ……
14. Other (specify) ……

Relationship of victim to perpetrator
1. Sibling – full
2. Sibling – half
3. Sibling – step
4. Sibling – adopted/whāngai
5. Other relative (specify) ……
6. Other child in care (specify): ……
7. Non-familial – neighbour
8. Non-familial – friend/acquaintance
9. Non-familial – other (specify) ……
10. Stranger

10. Touching occurred
☐ Over clothes ☐ Under/inside clothes ☐ Both over and under clothing

11. Seriousness of sexual re-offending compared to past offending

- ☐ N/A (i.e., no re-offending)
- ☐ Less serious than original offence (i.e. less violent, did not involve force, less frequent).
- ☐ Similar to original offence
- ☐ More serious than original offences (i.e. includes penetration, increased violence, increased frequency).

12. Strategies to overcome NEW victims (methods of control)

- ☐ Use of non-threatening grooming behaviours / rewards (i.e. money / games / time / attention
- ☐ Use of threat (both physical & verbal)
- ☐ Use of overt force / power (i.e. holding down, pushing)
- ☐ Use of weapons (i.e. knife, gun, bat)
- ☐ Other (specify) ……

Nonsexual offending

New Nonsexual offences while attending the treatment programme (any illegal behaviour that if caught would result in arrest and possible prosecution)

13. Firstly state in qualitative terms what this is:

14. Types of new nonsexual offences

- Select all that apply and the approximate age the offence occurred and frequency

☐ Property damage / Vandalism	Age …….	Frequency …….
☐ Assault / Violence	Age …….	Frequency …….
☐ Theft / Burglary / Stealing	Age …….	Frequency …….
☐ Arson / Fire Setting	Age …….	Frequency …….
☐ Drug and Alcohol	Age …….	Frequency …….
☐ Disorderly behaviour	Age …….	Frequency …….
☐ Fraud / Embezzlement / Misappropriation funds	Age …….	Frequency …….
☐ Other (State) ……	Age …….	Frequency …….

15. Seriousness of nonsexual re-offending compared to past offending

- ☐ N/A (i.e., no re-offending)
- ☐ Less serious than original offence (i.e. less violent, did not involve force, less frequent).
- ☐ Similar to original offence
- ☐ More serious than original offences (i.e. includes increased violence and frequency).

16. Is the client known to have sexually re-offended since departing from the programme either with or without being arrested/charged/convicted?

☐ Unknown ☐ No ☐ Yes (Go onto complete Part D of this form)

SECTION D: REOFFENDING FORM (sexual and non-sexual)

Section D relates to:
New sexual and nonsexual offending that is known to have taken place post programme (i.e. since leaving the programme).

1. Information based on (select all that apply)

- ☐ Police/probation report
- ☐ Parent/caregiver report
- ☐ Other (specify): ……..
- ☐ Self-report
- ☐ File information

New Sexual Offending

- New incidents of sexual offending since leaving on the programme

2. Firstly state in qualitative terms what this is:

3. Number of New Sexual re-offences since leaving the programme

☐ Unknown
☐ None
☐ Number (specify): ……

4. Number of arrests for new sexual offences ……..

5. Number of charges for new sexual offences ……

6. List charge codes for new sexual offences

Code …… Code …… Code ……

7. **Number of convictions or proved outcomes (Youth Court) for new sexual offences**

……..

8. Justice outcomes

☐ Police diversion
☐ Youth Court sentence
- Specify sentence type……& length …….. (if known)

☐ District Court sentence
- Specify sentence type……& length …….. (if known)

☐ Other (specify)
- Specify sentence type……& length …….. (if known)

9. Gender and Age of victims (use codes below)

	Victim 1	**Victim 2**	**Victim 3**	**Victim 4**	**Victim 5**
Gender (M/F)	……..	……..	……..	……..	……..
Age (years)	……..	……..	……..	……..	……..
Ethnicity	……..	……..	……..	……..	……..
Relationship	……..	……..	……..	……..	……..
Type	……..	……..	……..	……..	……..
Frequency	……..	……..	……..	……..	……..
Duration	……..	……..	……..	……..	……..
Charge Codes	……..	……..	……..	……..	……..

Use this for table above - select all that apply.

Type of sexual offending the ASO was involved in:

1. Using underwear for sexual arousal
2. Indecent Exposure / Exhibitionism
3. Voyeurism
4. Vaginal penile penetration / attempted penetration
5. Anal penile penetration / attempted penetration
6. Vaginal penetration / attempted penetration
7. Anal penetration / attempted penetration
8. Oral contact by perpetrator to victim's genitals
9. Oral contact by victim to perpetrator

Relationship of victim to perpetrator

1. Sibling – full
2. Sibling – half
3. Sibling – step
4. Sibling – adopted/whāngai
5. Other relative (specify) ……
6. Other child in care (specify): ……
7. Non-familial – neighbour
8. Non-familial – friend/acquaintance
9. Non-familial – other (specify) ……
10. Stranger

10. Sexualised touch by perpetrator to other parts of victim's body, or victim to perpetrator's body (may include breasts, penis, vagina, bottom)
11. Sexual contact with an animal (bestiality)
12. Possession of child pornography
13. Other (specify) ……
14. Other (specify) ……

10. Touching occurred

☐ Over clothes ☐ Under/inside clothes ☐ Both over and under clothing

11. Seriousness of re-offending compared to past offending

☐ N/A (i.e., no re-offending)
☐ Less serious than original offence (i.e. less violent, did not involve force, less frequent).
☐ Similar to original offence
☐ More serious than original offences (i.e. includes penetration, increased violence, increased frequency).

12. Strategies to overcome NEW victims (methods of control)

☐ Use of non-threatening grooming behaviours / rewards (i.e. money / games / time / attention
☐ Use of threat (both physical & verbal)
☐ Use of overt force / power (i.e. holding down, pushing)
☐ Use of weapons (i.e. knife, gun, bat)
☐ Other (specify) ……

New Nonsexual Offending

13. Firstly state in qualitative terms what this is:

14. Types of new nonsexual offences

- Select all that apply and the approximate age the offence occurred

☐ Property damage / Vandalism	Age …….	Frequency …….
☐ Assault / Violence	Age …….	Frequency …….
☐ Theft / Burglary / Stealing	Age …….	Frequency …….
☐ Arson / Fire Setting	Age …….	Frequency …….
☐ Drug and Alcohol	Age …….	Frequency …….
☐ Disorderly behaviour	Age …….	Frequency …….
☐ Fraud / Embezzlement / Misappropriation of funds	Age …….	Frequency …….
☐ Other (State) ……	Age …….	Frequency …….

15. Seriousness of nonsexual re-offending compared to past offending

☐ N/A (i.e., no re-offending)
☐ Less serious than original offence (i.e. less violent, did not involve force, less frequent).
☐ Similar to original offence
☐ More serious than original offences (i.e. includes increased violence and frequency).

APPENDIX B - Cohen's kappa coefficients

Table B-1. Cohen's kappa coefficients

Variable	Kappa	Range
History of animal cruelty	0.36	Poor
History of behaviour problems	0.52	Good
History of Conduct Disorder	0.58	Good
History of learning disability	0.60	Good
History of social skills deficits	0.61	Good
History of attachment difficulties	0.62	Good
History of Oppositional Defiant Disorder	0.62	Good
History of Encorpresis	0.65	Good
History of Enuresis	0.65	Good
History of Childhood Physical Abuse (CPA)	0.66	Good
History of alcohol abuse	0.68	Good
History of nonsexual offending history	0.68	Good
History of other abuse	0.70	Excellent
Mandated treatment attendance	0.70	Excellent
History of drug abuse	0.75	Excellent
History of fire setting	0.75	Excellent
History of Post Traumatic Stress Disorder(PTSD)	0.79	Excellent
History of Depression	0.82	Excellent
History of suicidal ideation, suicide attempts or Deliberate Self-Harm (DSH)	0.84	Excellent
Parent's marital status at referral	0.86	Excellent
Referral source	0.86	Excellent
History of Childhood Sexual Abuse (CSA)	0.87	Excellent
History of Attention Deficit Hyperactivity Disorder (ADHD)	0.92	Excellent
Ethnicity	0.95	Excellent
History of Anxiety	Constant	Excellent
History of Autism/Asperger's	Constant	Excellent
History of Eating Disorder	Constant	Excellent
History of Obsessive Compulsive disorder (OCD)	Constant	Excellent
History of Sleep Disorder	Constant	Excellent
'Special Needs' programme	1.00	Excellent
Foetal Alcohol Syndrome	1.00	Excellent
Gender	1.00	Excellent
History of head injury(ies)	1.00	Excellent
Treatment group	1.00	Excellent

APPENDIX C - Ethnicity

Table C-1. Ethnicity – Using prioritising and multiple response methodologies

	Prioritising		Multiple response [53]	
Ethnicity	***n***	**%**	***n***	**%**
European / Pakeha	395	56.3	470	67.0
Māori / Māori & Other	215	30.6	215	30.6
Pacific Island / Pacific Island & Other	56	8.0	70	10.0
Other (e.g., Asian)	13	1.9	14	2.0
Unknown	23	3.3	23	3.3
Total	**702**	**100.0**	**-**	**-**

An individual could identify with more than one ethnic group therefore could be recorded in more than one ethnicity group using the multiple response. For this reason the percentages will add up to more than 100%. The multiple response approach is currently the preferred output of Statistics New Zealand (Statistics New Zealand, 2004).

[53] Due to multiple responses the total percentage adds up to more than 100%

APPENDIX D - Relationship of perpetrator to victim

Table D-1. Details on the relationship between perpetrators and victims

	Relationship	*n*	%
Family	Sibling – full	219	9.7
	Sibling – half	165	7.3
	Sibling – step	72	3.2
	Sibling – adoptive/whāngai	5	0.2
	'Special needs' sibling	3	0.1
	Other relative – adult (e.g., adoptive/biological mother, step mother, aunt, father, grandmother, 'special needs' aunt & uncle)	57	2.5
	Other relative – child/adolescent (e.g., cousin, niece, nephew)	209	9.3
Known	Friend/School peer	811	35.9
	Child in out-of-home care placement (e.g., foster sibling)	257	11.4
	Neighbour	100	4.4
	'Special needs' peer/friend/foster sibling	52	2.3
	Caregiver in out-of-home placement (e.g., foster mother)	33	1.5
	Teacher/Tutor	23	1.0
	Other (e.g., baby sitter, boarder, camp leader, prison cellmate, school cleaner, school dental nurse, social worker, work colleague, youth group leader)	19	0.8
Strangers	Stranger/'special needs' stranger	132	5.8
	Multiple unidentified stranger victims	16	0.7
Unknown	Relationship unknown	86	3.8
Total		**2259**	**100.0**

APPENDIX E - Referral Sources for second referrals

Table E-1. Sources of second referrals

Referral Source	*n*	%
CYF	34	73.9
Family/Whānau & self referral	4	8.7
Child, Adolescent & Family Mental Health Service	3	6.5
Māori service provider/counsellor	0	0
Other government agency/service (e.g., hospital, SES)	1	2.2
Community non-governmental agency/service[54]	2	4.3
Police	0	0
School	0	0
Community Probation Service	3	6.5
Other specialised sex offender treatment programme	0	0
Court/Lawyer	0	0
Unknown	0	0
Total	**46**	**100.0**

[54] For example, Presbyterian Support Services, private counsellors or psychiatrists

APPENDIX F - Treatment details for special populations

'Special needs' youth

Status at termination from treatment programme & reasons

Thirty-six percent of 'special needs' youth referred to the programmes did not commence treatment (Comparison group) while 28% (*n* = 39) dropped out before successfully completing treatment (Treatment Dropout group) and 35% successfully completed treatment (Treatment Completers group) (see Table F-1).

Table F-1. Treatment status at first termination

Treatment group	Status	*n*	%
Comparison	Referral only (not assessed)	12	8.8
	Assessment not completed	15	11.0
	Assessed and did not commence treatment	22	16.2
Treatment dropouts	Treatment not completed successful	39	27.9
Treatment completers	Treatment – successful completion	48	35.3
	Total	**136**	**100.0**

Reasons why 'special needs' youth did not commence or complete the assessment process are summarised in Table F-2. The most common reason for non-completion of assessment was the client's and/or family/whānau's refusal to continue the process.

Table F-2. Reason assessment not completed/commenced

Reason	*n*	%
Family/whānau and/or client refused/didn't attend/withdrew	7	25.9
CYF withdrew referral/Referral not followed up other (e.g., Family, CYF or/and Police)	4	14.8
Unknown	3	11.1
Unable to engage youth and/or family	3	11.1
Referred to other specialised community-based treatment programme	3	11.1
Did not meet criteria for entry (e.g., low intellectual ability)	2	7.4
Lifestyle criteria not meet (i.e., no safe placement)	2	7.4
Other	3	11.1
Total	**27**	**100.0**

There were a number of reasons why a 'special needs' youth was assessed but did not commence treatment (see Table F-3). The most common reason 'special needs' youth did not commence treatment was that they were referred to another service/agency.

Table F-3. Reason treatment not commenced

Reason	*n*	%
Unknown	3	13.6
Did not meet criteria for entry (e.g., low intellectual ability) behaviour did not meet threshold for entry	6	27.3
Referred for other treatment/service	7	31.8
Refused to attend	3	13.6
Client imprisoned	1	4.5
Accepted – Lifestyle criteria not meet (i.e., no safe placement)	2	9.1
Total	**22**	**100.0**

Approximately 29% commenced but did not successfully complete treatment. Reasons why the 'special needs' youth did not complete treatment include 28% being terminated due to poor attendance, progress or behaviour, 21% (being withdrawn from treatment by their family/whānau, 10% being imprisoned and 18% moving out of the area or had a placement breakdown. Other reasons noted in Table F-4 including two 'special needs' youth who withdrew after CYF involvement/funding ceased.

Table F-4. Reason treatment was not completed

Reason	*n*	%
Terminated by programme (e.g., poor attendance/progress/behaviour	11	28.2
Family/Client withdrew from treatment	8	20.5
Client moved out of area/Placement breakdown	7	17.9
Imprisoned/Sentence Imposed	4	10.3
CYF involvement/funding withdrawn	2	5.1
Unknown	7	17.9
Total	**39**	**100.0**

Thirty-nine 'special needs' youth who were referred to the programme for a second time; outcomes of their second referral are can be seen in Table F-5.

Table F-5. Treatment status at second termination

Status	*n*	%
Not assessed	3	33.3
Assessed & completed treatment (successful completion)	3	33.3
Assessed, commenced treatment but did not complete successfully	2	22.2
Currently on adolescent programme	1	11.1
Total	**9**	**100.0**

Female

Status at termination from treatment programme & reasons

Of those female youth who were referred to the community treatment programmes, five successfully completed treatment. Four female youth were only referred and not assessed. All four females were referred onto another service for counselling. One did not complete assessment, and three were assessed but did not commence treatment.

Children

Status at termination from treatment programme & reasons

Two thirds (69%, *n* = 24) of children who were sexually abusive did not commence treatment, 26% (*n* = 9) were referred but not assessed and 43% (*n* = 15) completed the assessment process but did not commence treatment. The most common reason for non-completion of assessment was the client was referred to another counsellor or service.

Table F-6. Treatment status at first termination

Treatment Group	*n*	%
Comparison Referral only (not assessed)	24	68.6
Treatment completed	9	25.7
Treatment dropouts	2	5.7
Total	35	100.0

APPENDIX G - Results from the additional logistic regressions

Predicting sexual recidivism (excluding Treatment Dropouts)

A logistic regression analysis was performed with sexual recidivism as the dependent variable (DV) and the following independent variables: dropping out of a specialised community treatment prior to successful completion, history of nonsexual (general and violent) offending prior to referral, any child victims (12 years and younger), poor social skills and/or poor peer relationships, history of childhood sexual and/or physical abuse, history of behavioural problems (e.g., impulsivity, anger, aggression, delinquency, etc.), any male victims and multiple victims (3 or more identified victims).

A total of 517 cases were analysed and the full model was not significantly reliable (χ^2 (7) =13.40 p > 0. 05). This model accounts for between 3% and 8% of variance in sexual recidivism status, with 100% of those who **did not** sexually re-offend successfully predicted. However, 0% of predictions for the sexual re-offenders were accurate. Overall, 96% of predictions of whether or not adolescents had sexually re-offended were accurate. Table G-1 gives coefficients (B) and the Wald statistics and associated degrees of freedom (df) and probability values (Exp(B)) for each of the predictor variables.

Table G-1. Logistic regression for sexual recidivism

Independent variable	B (S.E.)	Wald	df	Exp(B)	95% C.I. for Exp(B) Lower	Upper
History of non-sex offending	0.33 (0.47)	0.48	1	1.39	0.55	3.49
Child victims	0.50 (0.57)	0.78	1	1.65	0.54	5.05
History of trauma	-0.68 (0.50)	1.84	1	0.51	0.19	1.34
Multiple victims (3 or more)	-1.05* (0.49)	4.54	1	0.35	0. 13	0.92
History of behavioural problems	0.58 (0.47)	1.50	1	1.78	0.71	4.47
Any male victims	0.74 (0.49)	2.27	1	2.09	0.80	5.44
Social deficits	-0.97* (0.48)	4.03	1	0.38	0.15	0.98

Note: * p< 0.05 ** p< 0.01 *** p< 0.000

Predicting nonsexual recidivism (excluding Treatment Dropouts)

Logistic regression analysis was performed with nonsexual recidivism as the dependent variable (DV) and the following predictor variables (IV): history of behavioural problems (e.g., delinquency and aggression), history of any nonsexual offending prior to referral, any child victims (12 years or younger) of sexually abusive behaviours, parental divorce or separation, history of mental health issues (e.g., symptoms consistent with diagnoses such as depression, anxiety, Obsessive Compulsive Disorder, Autistic Spectrum Disorders, and Post Traumatic Stress Disorder), use of strategies (e.g., threats, violence and grooming behaviours) during the commission of at least one sexual offence and age at first known sexual offence.

A total of 436 (81 were excluded due to missing data on age at first known sexual offence) cases were analysed and the full model was significantly reliable (χ^2 (7) = 32.42, p < 0.000). This model accounts for between 7% and 10% of variance in nonsexual recidivism status, with 83% of those who did not re-offend successfully predicted. However, 38% of predictions for the nonsexual re-offenders were accurate. Overall, 65% of predictions of whether or not an adolescent had non-sexually re-offended were accurate. Table G-2 gives coefficients (B) and the Wald statistics and associated degrees of freedom (df) and probability values (Exp(B)) for each of the predictor variables. This indicates that nonsexual offending history and parents being divorced or separated reliably predicted nonsexual recidivism status. The values of the coefficients revealed that a history of nonsexual offending and parents being divorced or separated were associated with a decrease in the odds of nonsexual recidivism by a factor of 0.63 and 0.94 respectively.

Table G-2. Logistic regression for nonsexual recidivism

					95% C.I. for Exp(B)	
Independent variable	**B (S.E.)**	**Wald**	**df**	**Exp(B)**	**Lower**	**Upper**
History of non-sex offending	-0.88 *** (0.21)	17.16	1	0.41	0.27	0.63
Use of strategies	-0.42 (0.21)	3.81	1	0.66	0.44	1.00
Age at first known sexual offence	0.07 (0.04)	3.16	1	1.07	0.99	1.15
History of behavioural problems	-0.04 (0.23)	0.03	1	0.96	0.62	1.50
Any child victims	0.26 (0.29)	0.79	1	1.29	0.73	2.28
Parents divorced/separated	-0.54* (0.24)	4.99	1	0.58	0.36	0.94
History of mental health problems	0.02 (0.22)	0.01	1	1.02	0.66	1.58

Note: * p< 0.05 ** p< 0.01 *** p< 0.000

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