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# CONDUCT DISORDER: AN EVALUATION OF A PARENTING INTERVENTION

A thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in Psychology at Massey University (Albany Campus)

> Susan Lawrence 2002

#### ABSTRACT

The primary aim of this study was to evaluate the parenting component of the Youth Horizon Trust programme for families of young people with severe conduct disorder. Empirical research supports the assertion that interventions designed to change parental discipline practices are the most effective interventions in reducing conduct problem behaviour in young people. Eleven parents of Youth Horizon Trust programme participants completed a multi-method questionnaire conducted with repeated assessments over a twelve week period. The constructs measured have been consistently linked to conduct disorder. The questionnaires and a similar evaluation method were used in prior North American research (Frick, Christian, & Wootton, 1999; Shelton, Frick, & Wootton, 1996). The present study was designed to determine whether there were differences in parenting practices during a three month portion of intervention (hypothesis 1), among parents in the first, second and third years of programme participation (hypothesis 2), towards the end of programme involvement, compared to parents early in the programme (hypothesis 3) and related to the level of the young person's distress at the time of intake (hypothesis 4). The present study found firstly, that the two positive parenting scale results differed from prior research but the three negative parenting subscales showed similarities in the direction of changes (Frick et al., 1999). Secondly, there was no overall relationship between the time duration of the intervention and improvement in parenting practices, but changes in the third year indicated reductions in negative parenting practices and improved parental involvement, monitoring, supervision, and consistency. In addition, the most distressed young people at the beginning of the treatment programme had parents who indicated less involvement in their parenting practices. The overall implication drawn from the findings is that improvement in supervision, monitoring, and consistency of discipline by parents are more readily adopted than involvement and positive parenting practices. Further research with more extensive monitoring, larger samples and over a greater time frame are discussed.

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#### **FOREWORD**

Conduct disorder is one of the disruptive behaviour disorders of childhood and adolescence (American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders, *DSM-IV*, 1994). Severe impact is often seen on the young person's family, teachers, and significant others, and can also be measured in the resultant property damage and police attention. These aspects of the disorder have aroused the popular media and politicians to comment widely upon causes and cures. New Zealand research has indicated that up to 25% of 15 year old young people experience adjustment disorders in adolescence (Fergusson & Horwood, 2001; McGee et al., 1990), and in the Dunedin Multidisciplinary Child Development Study it was estimated that 7% met the criteria for conduct disorder (Moffitt, 1993a).

Conduct disorder is understood to be multi dimensional in its causes; however much of the research has concentrated on familial influences upon the development and maintenance of this disorder (Amato & Keith, 1991; Dishion, Patterson, Stoolmiller, & Skinner, 1991; Loeber & Stouthamer-Loeber, 1986). A community organization, Youth Horizon Trust, located in Auckland, New Zealand, has developed a treatment programme for young people with severe conduct disorder. The present research is a preliminary study to evaluate the parenting component of the Youth Horizon Trust treatment programme for young people with conduct disorder.

This thesis starts with a literature review and brief exploration of two New Zealand longitudinal studies that highlight the presence of adjustment disorders in the adolescent population (Chapter 1). This section also defines the anti social behaviours that fall into the *DSM-IV* (1994) diagnostic category of Disruptive Behaviour Disorders including conduct disorder, the risk factors linked to this disorder, trajectories, and comorbidity. This is followed by a review of the two main multisystemic treatment options supported by empirical evidence, and subsequently incorporated into the treatment models developed by Youth Horizon Trust (Chapter 2). The significance of this particular research study and the research questions are also included in this section. An overview of the study, outline of the Youth Horizon Trust programme for severe conduct disorder and the role of the staff within the programme are next presented (Chapters 4 and 5). The details of the study's methodology, findings, and implications for further research are then outlined to conclude the thesis (Chapters 6 and 7).

#### **CHAPTER 1**

#### INTRODUCTION

The chapter that follows gives a background to studies on antisocial behaviour, both in New Zealand and overseas. Discussion of the prevalence of disruptive behaviour disorders in adolescence, including conduct disorder, is followed in this chapter by the salient aspects of family and parental functioning that define the risk factors for antisocial behaviour. The chapter ends by exploring the trajectories and comorbidities of severe conduct disorder.

#### 1.1 An Overview of Antisocial Behaviour

Adolescence is a transitional time between childhood and adulthood in Western cultures, and is usually defined for young people by behaviours that begin to establish their individual identities and a moving away from the parental dependence of their earlier years (Frick, 1998). Adolescence is anecdotally associated with rejection of parental guidelines; experimental, sometimes risk-taking behaviour and defiant acts that are often limited to this life-stage, that is the phase between approximately 11 to 19 years old (McGee et al., 1990). In this thesis those in this life-phase age group are referred to as "young people," a term used by Ritchie, (1984) to define young people approaching adulthood.

New Zealand has two studies each of approximately one thousand South Island young people: the Dunedin Multi-disciplinary Health and Development Study

(Silva & McGee, 1984) and the Christchurch Health and Development study (Fergusson & Horwood, 2001). The studies are longitudinal investigations of the health, development, and behaviour of birth cohort New Zealand children born in 1972 and 1977, respectively. The data from both studies suggest there are increasing rates of adjustment disorders for young people up to 18 years old, the most common being anxiety disorders, mood disorders, and conduct disorder (Feehan, McGee, Nada-Raja, & Williams, 1994; Fergusson & Horwood, 2001; McGee, et al., 1990). In the longitudinal study in Dunedin, New Zealand, almost all (94%) of the adolescents participating in the study admitted to engaging in some illegal behaviour (e.g., underage drinking, using fake identity), 6% showed severe enough antisocial behaviour to be arrested by the police and 7.3% of those young people met the criteria for conduct disorder (Moffitt, 1993a). While many problems are confined to the adolescent years and only some become chronic, they do indicate that mental health problems during adolescence are not uncommon in New Zealand.

In recent years, public concern has been expressed through the New Zealand media about the growing number of young people experiencing mental health problems (Fergusson, Horwood, & Lynskey, 1994 & 1997; Lashlie, 2002; Werry, 1996). This concern is also reflected in the growth of antisocial behaviours and truancy as noted in the New Zealand Education and Science Committee Report (1995). The committee expressed concern at evidence of the increase in dysfunctional, at-risk families, who in turn produced at-risk children unable to benefit from the schooling provided.

## 1.2 Disruptive Behaviour Disorders

Behaviour disorders have a significant impact on the functioning of the child or young person, and upon people in that young person's life. Conduct disorder is one of the disruptive behaviour diagnoses in the DSM-IV (1994). The DSM-IV identifies three syndromes within the broad category of disruptive behaviour disorders. The first, Attention-deficit and Hyperactivity Disorder, is characterised by developmentally inappropriate levels of inattention, impulsivity and motor activity. The second and third categories of disruptive behaviour disorder distinguish between two types of conduct problems, defined by the seriousness of the behaviour. Oppositional Defiant Disorder refers to a pattern of negativistic, hostile, non-compliant and defiant behaviour that does not include the violation of the basic rights of others (Frick, 1994). Whereas Conduct Disorder is defined as a persistent pattern of behaviour in which the child or young person disregards the basic rights of others, or violates the ageappropriate societal norms or rules (Frick, 1994). These externalizing behaviours include aggression, lying, stealing, destructiveness and fire setting. These behaviours may occur in the normal development of children, but the behaviours become clinically significant when there is significant impairment in everyday functioning at home, at school, or when behaviours are regarded as unmanageable (Kazdin, 1987).

#### 1.3 Risk Factors

The majority of research on conduct disorders has examined the familial influences that predict the occurrence of these disorders (Amato & Keith, 1991; Dishion et al., 1991; Loeber, & Stouthamer-Loeber, 1986; Pettit, Laird, Dodge, Bates, & Criss, 2001). While it is apparent that there is no single causal factor leading to disruptive behaviour disorders, the broad category of parent and family functioning is viewed as the primary causal agent. Other risk factors, including low socio-economic status and alcohol and drug abuse, which may be associated with criminal activity by a parent, are also related to conduct problems through their effect on parent and family functioning (Frick, 1993). Additional factors having an indirect effect on family functioning are individual child temperament (Lytton, 1990), child depression (Dadds, Sanders, Morrison, & Rebgetz, 1992), as well as parental psychopathology and parental antisocial behaviour (Campbell, 1997; Frick, 1998; Patterson, 1980).

Despite the fact that no one single causal factor has been isolated, there is consensus in the identification of several individual factors associated with conduct disorder. Research has demonstrated that individual temperament, intelligence, particularly low verbal skills (Moffitt, Lynam, & Silva, 1994), poor scholastic achievement (Kazdin, 1987a; Moffitt, 1993a), and frustration are all factors that can lead to antisocial behaviour (Frick, 1998; Moffitt, 1993a). While there may be genetic predispositions to conduct disorder, genetics are likely to predispose a particular temperament, which may in turn be triggered by problematic parental and family functioning (Gjone, Stevenson, Sundet, &

Eilertsen, 1996; Kendler, 1996). This is consistent with the diathesis–stress model widely accepted as an etiological model in clinical psychology (Davidson & Neale, 2001).

The influence of the family context on the developing child has been highlighted by many researchers (Campbell, 1997; Frick, 1993 & 1994; Hemphill, 1996; Kazdin, 1987; Loeber &Stouthamer-Loeber, 1986; Lytton, 1990). More specifically, three categories of family functioning have been most linked to conduct problems: parental psychological adjustment, parental marital adjustment and parental socialization practices (Frick, 1993). These are discussed below.

## Parental Psychological Adjustment

There is sufficient reliable evidence to link parental psychiatric disorders, such as depression (Downey & Coyne, 1990) and parental criminality (Osborn & West, 1979) with childhood adjustment difficulties. Similarly, research has demonstrated the links between parental antisocial behaviour and conduct disorder in children. For example, Lahey et al. (1988) found that boys diagnosed with conduct disorder under the DSM-III criteria, were more likely to have fathers diagnosed with antisocial personality disorder (46%) than were the no-diagnosis sample (17%). A further study found that children diagnosed with conduct disorder were more likely to have parents diagnosed with antisocial personality disorder (42%), than were children diagnosed with a psychiatric disorder (6%), or children with parents who had no diagnosis (4%) (Faraone,

Biederman, Keenan, & Tsuang, 1991). While those young people with serious and persistent conduct disorder cannot be distinguished on the basis of the psychiatric diagnoses of their parents, a child with a father who exhibits antisocial behaviour is more likely to be physically aggressive and commit serious law-breaking behaviour than one whose father had never been in physical fights, been arrested, or been sent to prison (Lahey et al., 1988). The strongest risk factor of parental adjustment is parental antisocial personality disorder, as demonstrated by the high rate of this disorder in the fathers and grandparents of children with conduct disorder (Frick et al., 1992). The consistency of criminal behaviour and alcoholism spanned across three generations in a study by Kazdin (1987b) and could be explained by modelling and environmental factors. However, the presence of the above-average criminality in the grandparents (who presumably exerted a less direct influence on the young person's antisocial behaviour) also makes a genetic interpretation plausible.

#### Marital Relationship

There is emerging evidence to suggest that marital conflict plays a larger role in the disruptive behaviour of children and young people than other factors such as separation and divorce (Davies & Cummings, 1994). Amato and Keith (1991) conducted a meta-analysis that involved 92 studies on the impact of divorce on children's psychological wellbeing. Interestingly, the study concluded that the impact of conflict that occurs prior to divorce produced the most detrimental effect on the child's adjustment. The study also found that

children in intact homes where there was a high degree of marital conflict exhibited the highest levels of psychological maladjustment. On the other hand, Loeber and Stouthamer-Loeber (1986) previously theorized that conflict affects parents' abilities to positively interact with their child, and therefore to use effective discipline strategies. A study of behaviour problems in preschool children has also linked conduct disorder, with family tension as a result of conflict, plus less effective, warm, or involved parenting (Campbell, 1997). Lytton (1990) suggested that children with conduct problems develop multiple responses within a negative feedback loop which places stress on the marital relationship. Conflict in the marital relationship, whether it is due to a parent with antisocial behaviour, a challenging and difficult to parent young person, or ineffective parenting and discipline, has been shown to have a detrimental effect on the psychological wellbeing of a child (Amato & Keith, 1991).

#### Parental Socialization Practices

The socialization dimensions of maternal parenting styles, supervision of children, and disciplinary consistency are also associated with conduct disorder (Frick et al., 1992). Parental socialization practices indirectly provide the emotional context in which a young person learns to follow rules and social norms, in addition to direct practices such as discipline and behavioural consequences (Loeber & Stouthamer-Loeber, 1986). The climate of parental socialization is important for healthy adjustment and protection against developing behavioural disorders (Frick, 1998; Frick et al., 1992). The meta-analysis by Loeber and Stouthamer-Loeber (1986) established that parental

involvement with their child's activities, friends and school life demonstrated the degree and quality of the emotional bond. Lack of involvement, poor parental monitoring and supervision, and harsh and inconsistent discipline practices were also significantly and positively correlated with conduct problems. Problematic familial factors, combined with individual characteristics for example, interact with school performance, peer relationships and community variables to influence the development of antisocial behaviour (Curtis, 2001). The multi causal nature of conduct disorder has resulted in the development of treatment models that are able to assess areas in the young person's life that may benefit from extra resources (Henggeler & Borduin, 1990). Several researchers have proposed behavioural and age factors that enable children and young people to be grouped into pathways or trajectories that indicate the likely progressive prognoses of their behaviour.

## 1.4 Trajectories

## Childhood Onset

The childhood onset of conduct disorder is signified by early problem behaviours that increase in severity as the child gets older (Frick, 1998; Moffitt, 1993a & 1997; Patterson, DeBaryshe, & Ramsey, 1989; Silverthorn & Frick, 1999). Negativity and very argumentative behaviour characterize early onset between about three to seven years of age (Frick, 1994). The severity increases with lying and aggressive behaviours between seven to ten years, and further aggression increasing into adolescence. The behaviours can involve physical cruelty to other people and to animals, rape, and other

antisocial behaviour, such as stealing, truancy, fire lighting, breaking and entering (Carlson, Tamm, & Hogan, 1999; Loeber, et al., 1993). In the Dunedin longitudinal study of children aged between five and seven, 14.8% were considered to have problems of inattention and hyperactivity identified by either teachers or parents. However, at the same time only 1.6% of these children were judged to have a behaviour problem by both the teacher and the parent. suggesting that children's behaviour may differ in different environments and situations. This study also found gender differences in behaviour problems. Incidences of antisocial behaviour, hyperactivity and difficult relationships with other children occurred 50% more among males, whereas rates of anxiety were equal between males and females (Silva & McGee, 1984). Consequently studies of New Zealand young people suggest that diagnoses of conduct disorder are greater among males than females, and therefore most studies focus on male populations. There is a lack of published research on female populations diagnosed with conduct disorder. The available evidence suggests that similar mechanisms operate to produce behaviour problems in boys and girls at a young age (McGee, Silva, & Williams, 1984). By adolescence however, observations indicate more males than females engage in violence and theft crimes while males and females participate in equal numbers in alcohol and drug related offences (Moffitt, Caspi, Rutter, & Silva, 2001).

In a review of the existing literature, Lahey and Loeber (1994) suggested that males on an early onset path do not tend to change behaviours, but increase the severity of existing aggression and antisocial behaviour. Several studies have shown that few males develop the more severe aggressive antisocial

behaviour without first exhibiting earlier oppositional behaviour. Conversely, a large proportion of young males with less severe oppositional behaviour do not progress to severe anti social behaviour (Loeber, Green, Lahey, Christ, & Frick, 1992; Moffitt, 1993a; Silverthorn & Frick, 1999). In contrast the disruptive behaviour that appears to emerge at adolescence without prior disruptive behaviour has been named 'adolescent onset' conduct disorder (Moffitt, 1993a).

## Adolescent Onset Pattern

A large number of adolescents show severe antisocial behaviour without oppositional behaviour predating the diagnosis of conduct disorder (Moffitt, 1993a). Young people with adolescent-onset conduct disorder have an arrest rate equal to their childhood onset peers. At the same time, they are more prevalent in the population by a rate of 3:1 (Moffitt, Caspi, Dickson, Silva, & Stanton, 1996). Based on New Zealand data, adolescents with the late onset pattern also seem to be less aggressive and violent (Moffitt et al., 1996). less impulsive (Moffitt, Lynam, & Silva, 1994), come from less dysfunctional backgrounds (Moffitt,1993a), have fewer cognitive and neuropsychological deficits (Moffitt et al., 1994), and tend to have more adaptive social qualities such as leadership, than their childhood onset counterparts (Moffitt et al., 1996). One of the most important differences between the childhood-onset and the adolescent-onset group is that the latter group are less likely to continue their antisocial behaviour into adulthood. Moffitt (1993a) therefore labelled this group "adolescent-limited".

As with gender differences observed in the childhood onset trajectory, adolescent female patterns of conduct disordered behaviour have been shown to follow a different developmental pathway from the adolescent male pathway, but result in similar criminal behaviour. Results of the New Zealand Dunedin study showed in general more males than females emerge as antisocial in the first 20 years of their lives, and also that male antisocial behaviour is often more serious and often more officially sanctioned (McGee et al., 1990). Females do not follow the same early developmental pathway as males, however the similarities to male antisocial behaviour become evident around 15 years old when young women and men are most similar in drug and alcohol related offences (Moffitt, Caspi, Rutter, & Silva, 2001).

## Female Trajectory

In contrast to their male counterparts, females rarely display disruptive conduct behaviours before adolescence (Moffitt & Caspi, 2001). Nonetheless, antisocial females appear to show many correlates associated with the childhood-onset pathway in males (Frick, 1998; Silverthorn, Frick, Reynolds, 2001). Silverthorn and Frick (1999) argue for a female-specific pathway in which all antisocial females have the same risk factors as the childhood-onset males. They labelled this pathway "delayed onset", and indicated that females follow similar individual and social pathology, but that the antisocial behaviour does not become evident until adolescence. They propose that parental supervision decreases and peer acceptance of the behaviour increases at adolescence. Although these propositions have not been researched as fully as male

antisocial behaviour, the data Moffitt and colleagues (2001) observed from the Dunedin study suggested that female life-course persistent antisocial behaviour was rare (male:female ratio 10:1). While the rates of female antisocial behaviour are lower than male antisocial behaviour there is evidence that this is changing. The United States Report of the Office of Juvenile Justice and Delinquency Prevention (1998) indicated that more females are challenging the law, with their numbers increasing at a far greater rate than males. Although the female rate was two out of every eight juvenile offenders in United States, the increase in the past decade in violent crime has increased four times as much in the female population (16.5%) than among males (4.5%).

Furthermore, recent studies of female juvenile arrests in United States indicate although females constitute only about one-fourth of juvenile crime, the incidence and severity of criminal acts are increasing dramatically (Acoca, 1998). New Zealand data reflects a similar increase in violent female perpetrated crime (Lashlie, 2002).

Antisocial young females predominantly present internalized behaviour with anxiety and depression dominating the mental health disorders. Early pregnancy, criminal activity, school refusal, drug problems with health risking sexual behaviour, welfare dependence and early mortality are often characteristic of this group of young women (Moffitt, et al., 2001). In the Christchurch, New Zealand sample (*N* = 1000) the male to female ratio of early onset was 4:1 versus only 2:1 for late onset subjects (Fergusson, Horwood, & Nagen, 2000). This further highlights different developmental pathways between males and females with females exhibiting the early onset pattern less

but increasing antisocial behaviour by adolescence. Evidence of earlier onset for female antisocial behaviour may also be disguised by internalized symptoms such as depression and anxiety which does not invite the same social concern or community sanctions as the more visible externalized antisocial behaviour predominantly perpetrated by males (Zoccolillo, 1993).

Young males and females presenting with antisocial behaviours are often diagnosed with other disorders prior to a diagnosis of conduct disorder.

Attention-deficit and Hyperactivity Disorder or Attention-deficit Disorder as well as Oppositional Defiant Disorder are the earliest appearing behavioural disorders in childhood and for that reason are the earliest conditions to emerge comorbidly with conduct disorder (Loeber & Keenan, 1994). The comorbidity may result from impulsive behaviours being characteristic of the two disorders. The following section discusses these issues.

## 1.5 Comorbidity

There are high levels of comorbidity with conduct disorders. For both males and females, only 10% of life-time conduct disorder diagnoses are "pure" (Moffitt et al., 2001). Attention Deficit Hyperactivity Disorder (ADHD) is the most common comorbid diagnosis in children with conduct disorders. Rates range from 65% to 90% in clinic referred children also diagnosed with conduct disorders (Frick, 1998). Attention Deficit Hyperactivity Disorder and Oppositional Defiant Disorder (ODD) are frequently presented together in the early diagnosis of a young person and often predate a diagnosis of conduct disorder (Lahey & Loeber, 1997). Loeber and Keenan (1994) noted that the

early symptoms of ODD and ADHD are very similar which possibly indicates why the two disorders are often presented together.

Young males presenting with ADHD in childhood are also more likely to exhibit antisocial behaviours in adolescence and adulthood than those without an earlier diagnosis of attention disorders (Farrington, 1997). The co-occurrence of these two disorders is associated with a greater persistence of both disorders. Gender differences are marked in the prevalence of ADHD and conduct disorder as well as in the association between the two. Young females with attention deficit often have cognitive impairments (Giancola, Mezzich, & Tarter, 1998), depression and low self-esteem, and less of the overt behaviours shown by young males (Loeber & Keenan, 1994; Moffitt et al., 2001).

The plausibility of the same constructs (i.e., antisocial behaviour) having different behavioural manifestations at different ages was explored by Farrington (1997). This differing point of view proposed that that all types of antisocial behaviour could essentially be the same underlying syndrome with one type of antisocial behaviour acting as a stepping stone to, or facilitating another type of antisocial behaviour. For example, a two year old showing a difficult temperament, growing to be an eight year old exhibiting cruelty to animals and then shop lifting at 12 years, thereby indicating a continuity of antisocial behaviour and an early start to antisocial acts beginning of a career of offending behaviour. Furthermore, Rutter (1997) suggested that adolescent-onset conduct behaviours are largely environmentally influenced and do not persist into adulthood, whereas the childhood onset conduct behaviours are associated with early hyperactivity and inattention and persist into adulthood.

Evidence has also indicated a relationship between substance abuse and conduct disorder in male populations, whereas depression and anxiety are more prevalent in females with a conduct disorder diagnosis (Robins & Price, 1991). Half the population of girls in a sample of adolescent girls (Zoccolillo,1993) who had five or more conduct symptoms had a second, non-externalizing diagnosis (e.g., major depression or schizophrenia), further suggesting a high rate of comorbidity among young females with antisocial behaviour (Loeber & Keenan,1994; Robins & Price,1991).

In summary, the research over the past two decades has studied the antecedents, maintenance, and epidemiology of antisocial behaviour. The serious chronic and aggressive patterns of the behaviour are predictable milestones along developmental pathways that can be traced back to childhood. The earlier these trajectories start the greater the risk for a lifetime antisocial career (Loeber et al., 1992). While conduct problems in children and young people are not able to be explained by only one theory or model, family variables and children and young peoples' conduct problems were consistently related to each other in a meta-analysis of studies on the relationship of family factors to juvenile conduct problems. (Loeber & Stouthamer-Loeber, 1986). The most convincing indicators for understanding the causal status of familial variables associated with conduct disorder are the systematic changes in these variables resulting in positive changes in children's behaviour. This rapidly expanding knowledge of the development of antisocial behaviour has major implications for the strategies conceptualized for its prevention (Reid & Eddy, 1997).

#### **CHAPTER 2**

#### TREATMENTS FOR CONDUCT DISORDER

A range of treatment models have been applied to antisocial behaviour in young people both at the individual and family level. Zigler, Taussig, and Black (1992) reviewed the value of early interventions and attributed promising effects to interventions that treated the child through their broader environment rather than through isolated or individual intervention. They argued for the strengthening and improving interactions of families within the larger social systems in which they existed. Interventions for families with younger preschool children were demonstrated to be more effective and less labour intensive than interventions with older children (Patterson, Dishion, & Chamberlain, 1993).

One example of a family intervention study involved a comparison between parent training and intensive family and adolescent services delivered by the juvenile court (Bank, Marlowe, Reid, Patterson, & Weinrott, 1991). The parent training encouraged parents to supervise their children, monitor peer relationships, negotiate behavioural contracts, and to encourage school participation and homework completion. This parenting programme resulted in marked reductions in court reported offences over a three year follow-up period. Treatment gains were further maintained with these young people spending one third less time in foster placements in the three year follow-up period than previously. While effective interventions are available to amplify the parental

influence over the developmental process, comprehensive prevention of antisocial behaviours after the young person enters school require coordinated interventions in multiple risk settings (Frick, 1994).

## 2.1 Multisystemic Therapy

Multisystemic Therapy (MST) is one multiple setting approach that has shown effective results for older children and young people with severe conduct disorder. MST has been specifically designed to be flexible in its implementation and can be tailored to fit the needs of the young person and their family (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998; Frick, 1998). MST conceptualizes the individual within a complex of interconnected systems encompassing individual, family and extra-familial factors (i.e., peers, school, and neighbourhood) (Frick, 1994). The MST approach emphasizes that problem behaviours are maintained by problematic transactions within or between combinations of systems, and targets specific factors for each young person, their family, and the community environment.

The MST treatment programmes are practical, goal oriented, and emphasize the development of family strengths, with an overriding programme purpose of helping parents to manage their young person's problem behaviour. This includes removing them from deviant peer groups and addressing poor school performance. To accomplish the goal of family empowerment, MST also identifies barriers to effective parenting such as parental drug or substance abuse, and other parental mental health problems. To increase family collaboration and treatment generalization, MST is usually carried out in the home, school, and other community locations (Chamberlain & Mihalic, 1998).

The MST interventions described are based on nine core principles, as outlined below (Henggeler & Borduin, 1990).

## Core Principles of MST

- The primary purpose of assessment is to understand the fit between the identified problems and their broader systemic context.
- Therapeutic contacts should emphasize the positive and should use systemic strengths as levers for change.
- Interventions should be designed to promote responsible behaviour and decrease irresponsible behaviour among family members.
- Interventions should be present-focused and action-oriented, targeting specific and well-defined problems.
- Interventions should target sequences of behaviour within and between multiple systems that maintain identified problems.
- Interventions should be developmentally appropriate and fit developmental needs of the young people.
- Interventions should be designed to require daily or weekly effort by family members.
- Intervention effectiveness is evaluated continuously from multiple perspectives, with providers assuming accountability for overcoming barriers to successful outcomes.
- Interventions should be designed to promote treatment generalization
  and long-term maintenance of therapeutic change by empowering caregivers to address family members' needs across multiple systemic
  contexts.

MST interventions typically aim to improve several aspects of the young person's environment. These include: (a) caregiver discipline practices, (b) family affective relations, (c) a reduction in the young person's associations with deviant peers, (d) improvement in their association with pro-social peers, school or vocational performance, and pro-social recreational outlets. These improvements are encouraged by developing a network of extended family, neighbours, and friends to help caregivers achieve and maintain such changes. Specific MST treatment techniques, supported by empirical evidence, are utilized to facilitate these aims (see Henggeler et al., 1998).

## Empirical Support for Multisystemic Therapy

MST is very strongly supported as an effective and cost efficient treatment model for young people with severe conduct disorder. The cost savings are especially noteworthy when the clinical outcomes and reduction in criminal activity demonstrated by MST are considered (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998).

In one study, MST treatment was provided to 156 juvenile offenders with multiple arrests (Henggeller & Borduin, 1990). Eighty-eight of the offending young people and their families received MST and 68 were assigned to an alternative treatment approach involving individual psychotherapy. At the conclusion of the MST treatment, a number of young people showed improvements in both family functioning and individual adjustment. At a four year follow-up, only 26% of the sample had been rearrested, compared with

79% of those who had received the alternative treatment. The participants' race, social class, gender or number of pre treatment arrests did not seem to alter the effectiveness of MST (Henggeler & Borduin, 1990). These findings support a similar study where 57 adolescents received MST, and 23 received an alternative treatment. This study also included 44 non-clinical participants (Henggeler et al., 1986). The young people who received the MST treatment showed significant decreases in conduct problems, anxious withdrawn behaviours, immaturity, and association with delinquent peers. The mother-adolescent relationships were reported to be warmer and the young person was more involved in family interaction. In contrast, the young people who received the alternative treatment showed no positive change in conduct problems, but rather showed deterioration in affective relations. While these results are promising, this latter study was limited by an absence of follow-up assessment.

Further evidence for the use of MST with a group of serious repeat offenders was reported by Scherer, Brondino, Henggeler, Melton, and Hanley (1994). The participants were 45 male and 10 female rural African-American serious and chronic criminal offenders aged between 11 and 17 years. Mothers reported their young people engaged in significantly less socialized-aggressive problem behaviour and demonstrated marginally less conduct disorder symptoms following treatment. At six-month follow-up, mothers also reported improvements in parental monitoring, indicated by knowing the location and company of their young person. This result supports the model of parental empowerment which is a primary goal of MST treatment. Given that the chronic juvenile criminal population is traditionally difficult to engage and treat

successfully, achieving positive results with a group of serious repeat offenders indicated that MST could be at least as successful in treating more functional and less disturbed young people and their families (Scherer et al., 1994)

The Simpsonville study, South Carolina (Henggeler, Melton, & Smith, 1992; Henggeler et al., 1993) illustrated that an intensive home and family based service produced significant reduction in the criminal activity of chronic juvenile offenders without incarceration. Eighty-four violent and chronic young offenders, average age 15 years, were randomly assigned to either MST using a family preservation model of service delivery, or to the usual services provided by the South Carolina department of Juvenile Justice. The average duration of treatment was 13 weeks. Post treatment showed young people receiving MST reported a significantly greater reduction in criminal activity than those receiving the usual services. The families in the usual services group reported reductions in family cohesion with peer aggression remaining unchanged. Follow-up 2.4 years later showed MST doubled the percentage of youth non-recidivism, in comparison with usual treatment services.

The most comprehensive and extensive evaluation of MST to date compared the effectiveness of MST with individual therapy (Borduin et al., 1995). In this study, 176 young people average age 14.8 years, were randomly allocated to either MST (n = 92) or individual therapy (n = 84). The total sample had an average of 4.2 arrests and 63% had been previously incarcerated. At post-treatment, families receiving MST reported increased family cohesion and adaptability, showed increased supportiveness, as well as decreased conflict-

hostility during family discussions. Four year follow-up showed those who completed MST were less likely to be rearrested than the group who completed the individual therapy (22% and 71.4% respectively). Young people receiving MST were also significantly less likely to be arrested for violent offences than the individual treatment group.

In summary, MST research demonstrates that this treatment model has the capacity to address the multiple determinants of serious clinical problems in a comprehensive, intense and individualized manner, resulting in positive changes for a challenging group of young people. The MST model described above is limited to young people remaining in their community and family; however foster caregiver placements are required for some young people. A cost effective alternative to group residential care and treatment for young people who have problems with chronic delinquency and antisocial behaviour and who are unable to remain in their parental home is Multidimensional Treatment Foster Care (MTFC; Chamberlain & Mihalic, 1998).

## 2.2 Multidimensional Treatment Foster Care

MTFC, an effective treatment option for addressing the behaviour of antisocial young people found to be beyond parental control, is outlined in the following section. This is concluded by a summary of empirically-validated research supporting the MTFC treatment model.

MTFC is a second treatment approach for conduct disorder. MTFC is based on social learning theory, which places great emphasis on the social contexts in which behaviour is acquired and maintained (Moore, Sprengelmeyer, & Chamberlain, 2002). Social learning theorists propose that behaviour is maintained by external stimulus events, environmental consequences and cognitive mediational processes that aid the development of structures and guidelines for future events. More specifically, individuals watch how others behave, observe what happens to them, and then imitate the behaviour (Martin & Pear, 1999). MTFC is considered a cost effective alternative to residential care for young people with problems of chronic delinquency and antisocial behaviour. Foster families are recruited, trained, and closely supervised to provide MTFC placements that have an emphasis on structured behavioural management methods for the young participants. The parents are also taught to use the same structured method used in the MTFC foster-caregiver homes.

## Empirical Support for Multidimensional Treatment Foster Care

The effectiveness of the MTFC approach has been indicated by several studies (Chamberlain & Reid, 1998; Moore, et al., 2002; Fisher & Chamberlain, 1998). The largest study evaluated seventy-nine 12 to 17 year old male offenders (Chamberlain & Reid, 1998). The young offenders were randomly assigned to a MTFC setting or to a group care setting (group care setting had both individual and group therapy). Three months after placement for each participant, the MTFC young offenders had better scores on supervision, consistent discipline, relationships with adults, and fewer delinquent

associations than that receiving group care. At post-treatment and one year follow-up, the MTFC group had significantly fewer arrests (M = 2.6) than the group care offenders (M = 5.4), and significant numbers had no further arrests (MTFC = 41% and group care offenders = 7%). Programme completion was also higher for the MTFC offenders (73% versus 36% for the group care). Self-report data at twelve month post-test indicated that MTFC young people reported fewer delinquent (M = 12.8) and criminal acts (M = 3.2) than group care young people (M = 28.9 and M = 8.6 respectively). Chamberlain and Mihalic (1998) reported the involvement with delinquent peers was the single most powerful predictor of continued offending. In addition, the quantity and quality of the supervision and discipline received from their adult caregivers determined their peer involvement.

A second study detailed the impact of conducting weekly foster parent support groups for regular foster care families (Chamberlain, Moreland, & Reid, 1993). Seventy-two foster care parents were assigned to three groups; 31 received enhanced treatment service involving weekly behavioural management strategy meetings, plus an increased monthly monetary payment (ETS group), 14 received extra payment but not the enhanced training (PO group), and 27 received an assessment only service, with no extra services or extra payment (AO group). The study effectively "teased out" the effects of enhanced support and training services over the effects of increased payments to foster parents. The foster parents who participated in the ETS group had fewer failed placements and less disrupted days for children in care over and above benefits observed in comparison treatment conditions. The children in the ETS group

also had the greatest reduction in problem behaviours at the three month followup, having also had the highest number of pre-treatment behavioural problems of the three groups.

In summary, MST is a unique and exciting treatment methodology, with evidence to support positive effects on serious, violent, and chronic juvenile offenders (Henggeler et al., 1993). The MST treatment model provides goal directed multi-dimensional services to young people with serious behavioural problems and to their families, improving their overall long-term effectiveness at significant cost savings on more traditional methods (Frick, 1994; Henggeler et al., 1998). MTFC is a further treatment modality for addressing chronic, delinquent behaviour in young people and their families. The MTFC model arose out of the effectiveness of behavioural parent training approaches and the need to address the behaviour of delinquents who were out of parental control and required a foster placement. The focus of the MTFC approach was on the need to return the young person to their family and therefore the programme stressed the generalization of treatment effects. Empirical evidence supports the effectiveness, utility, and cost-effectiveness of the MTFC programme (Fisher & Chamberlain, 2000).

### **CHAPTER 3**

### OVERVIEW AND AIMS OF THE PRESENT STUDY

# 3.1 Significance of Research on Conduct Disorder Treatment

Serious and repeated antisocial behaviour during childhood and adolescence has extensive personal, emotional, and social costs including long-term effects for the individual, significant people in the individual's life, and society. Further costs include the risks of self-harm or harm to others in the young person's environment, property and personal damage from fighting, assault, vandalism and arson, overuse of the criminal and mental health systems, the social work and educational supports over a lifetime, and, undeniably, the physical and emotional costs to the young person and their family. The successful targeting of interventions for children and young people with severe conduct disorder and the improvement in parenting practices of their families, have been identified in the literature as having the potential to interrupt the continuation of antisocial and adjustment problems (Frick, 1998; Henggeler & Borduin, 1990). Despite the implementation of a theoretically and empirically supported treatment at Youth Horizon Trust, the effectiveness of the parenting component of the programme has not been evaluated since the programme began in 1996. The current study was designed to examine changes in parenting practices during the course of participation in the Youth Horizon Trust treatment intervention.

# Prevalence of Conduct Disorder in the Greater Auckland Area

Data suggests the majority of serious recidivist offenders come from the childhood-onset type of conduct disorder, with only an occasional long term repeat offender from the adolescent-onset group (Werry, 1996). However, only 50% of the young people with childhood onset conduct disorder become serious offenders, representing 2% of the total male population. In 1996, treatment options for young people with conduct disorder were being considered by the Department of Child Youth and Family Services in Auckland (Guild, Werry & McGeorge, 1996). Estimates, extrapolated from the Dunedin study (Silva & McGee, 1984), suggested that there may be approximately 21,000 males in the 12 to 14 year age group in the Greater Auckland area. It was therefore predicted that 400 young people could be known within the criminal justice system, including a small number of females, resulting in concerns about the high social distress to the young people and their families and the community as a result of the antisocial behaviour of young people with conduct disorder. Consequently Werry and colleagues ascertained that treatment interventions would be appropriate for both the young people and their parents (Werry, 1996). This recommendation was based on empirical evidence indicating the most successful outcomes for the young people and their families have been programmes that consider the multi-causal nature of conduct disorder (Henggeler et al., 1998).

#### 3.2 Youth Horizon Trust

Youth Horizon Trust is a charitable trust that provides a service to the

Department of Child Youth and Family Services for the treatment of young

people with severe conduct disorder<sup>1</sup>. For entry into the programme, the young people and their families are required to have previous unsuccessful interventions and the diagnosis of severe conduct disorder confirmed by a mental health professional (Guild, Werry, & McGeorge, 1986)..

The Youth Horizon Trust programme aims to involve parents/whanau as fully as possible, and to provide parents with support and opportunities to learn new parenting skills appropriate to the young person. The Youth Horizon Trust philosophy envisages that most young people will return to their family/whanau permanently following participation in the programme (Youth Horizon Trust Programme Manual, 1996). The treatment programme acknowledges that working with family is integral to a successful outcome for the young person, and the programme supports an empowerment model (a model that affirms parent responsibility for their own decision making) that is designed to maximize the ability of families to change their own lives. The Youth Horizon Trust programme therefore encourages parents to engage in behaviours that prepare young people to become "competent members of society" (Werry, 1996). Parents are encouraged to use the behavioural strategies that they observe the staff using with their young person. The behavioural strategies are tailored for the individual and the family with the development of behavioural management skills, which will assist in the alteration of interactions that may contribute to or cause behavioural problems in the young person.

<sup>&</sup>lt;sup>1</sup> Young people participating in the treatment programme have a legal status with the Director General of C. Y. & F. under section 101 of the C. Y. & F. Act (1989)

## 3.3 The Present Research

While the present research aims to build on other research that isolates parental factors that identify mental health risks to young people, some factors (e.g., receiving warmth and nurturing from at least one parent) have been highlighted that protect and assist some at risk young people against mental health problems resulting from adversity in the family environment (Herrenkohl, Herrenkohl, & Egulf, 1994). This further encourages the notion of positive parenting as a key point of interest for conduct disorder.

The present preliminary study proposes to evaluate the parenting component of the Youth Horizon Trust programme. Empirical research supports the assertion that interventions designed to change parental discipline practices, such as increasing parental consistency and reducing harsh discipline practices, tend to be the most effective interventions in reducing conduct problem behaviour in young people (Kazdin, 1987; Patterson, 1976, 1980). The evaluation method being used for this research has been designed to focus on the most important aspects of parenting practices linked to disruptive behaviour problems in young people as outlined in prior research (Frick, 1994). The aims of the present study are to evaluate the parenting component of the Youth Horizon Trust treatment programme for the families of young people with conduct disorder, by measuring changes in parenting practices. As the questionnaires and similar assessment strategy were used in a study by Frick et al. (1999) the data from the present research will also be presented alongside the parent report data of the same age sample of previous research.

It is hypothesised that on average, parents will show differences in their parenting during the three months of intervention examined in the present study (Hypothesis 1). It is also hypothesised that parents will exhibit more positive parenting practices in the third year of their involvement with the programme, compared to parents in the first year (Hypothesis 2). Progress of young people through the treatment programme is dependant upon their achievements towards behavioural goals irrespective of the length of time in the programme (i.e., better behaved young people completed treatment in a shorter time frame), so thirdly, it is predicted that parents will indicate more positive parenting as young people move towards returning home at their programme completion (Hypothesis 3). As previously noted, prior research has established a relationship exists between positive parenting practices and positive child psychological and behavioural outcomes (see Campbell, 1997). Therefore, it is further hypothesised that families of those young people who were most distressed at the time of intake will demonstrate less positive overall parenting practices (Hypothesis 4).

## **CHAPTER 4**

### YOUTH HORIZON TRUST TREATMENT PROTOCOL

This section outlines the Youth Horizon Trust protocols for assessment and treatment of young people. This chapter concludes with a description of the care coordinator and family intervention roles within the programme.

Youth Horizon Trust implements a treatment programme for severe conduct disorder that utilizes a combination of MST and MTFC. The conduct disorder treatment programme provides residential care in group housing for the majority of its participants and has most similarities to the MTFC model. In addition, five individual foster-care families were engaged during 2002 and specifically trained by Youth Horizon Trust to provide foster-home care for a small number of young people within the programme<sup>2</sup>. The treatment protocol incorporates the nine MST principles outlined in Chapter 2 as components of its work with young people, their families and the wider community<sup>3</sup>. The MST principles practiced at Youth Horizon Trust incorporate assessment procedures that identify the problems of the young person and the wider systemic context.

A two stage process occurs within the Youth Horizon Trust treatment programme. These are referred to as stages two and three (stage one is reserved for secure residential care, which is not part of Youth Horizon Trust

<sup>&</sup>lt;sup>2</sup> No young people from the foster-care residential settings were included in the present research.

<sup>&</sup>lt;sup>3</sup> As there was no current protocol manual for treatment at Youth Horizon Trust at the time of this study this information was derived from documents, discussions, and emails with care co-ordinators, the clinical psychologist, and clinical director of Youth Horizon Trust.

programme). The focus of the first stage within the Youth Horizon Trust programme itself (called stage two) is on modifying the young person's behaviour. Initially half-day home visits are supervised by a staff member and higher staff ratios enable close monitoring and supervision of behaviour until the young person's behaviour stabilizes. Goals are established in consultation with the family, young person and other significant people, and the effectiveness of the interventions is monitored (through psychometric measures, family feedback, staff reports), re-evaluated, and new goals established<sup>4</sup>. The main aim of the final stage of the programme (stage three) is to attempt to link the person back into the family and wider community, once the targeted behaviour is maintained. The home visits become longer and staff ratios in the stage three residential settings are lower.

The initial assessment includes the completion of several psychometric measures that are used as a guide for assessing severity of presentation and medication requirements.

### 4.1 The Assessment Protocol

## Referral

Upon receipt of a referral to the Youth Horizon Trust treatment programme for conduct disorder, the clinical director ensures the young person meets the

<sup>&</sup>lt;sup>4</sup> Young people gave informed consent to access initial assessment data only. Further monitoring and reassessment data were not incorporated, as details of the assessment protocol were not specified or outlined at the outset of the present study.. The treatment protocol is not manualized at Youth Horizon Trust.

criteria for the programme. A Wechsler Intelligence Test and psychiatric reports may be requested if they have not been completed previously. Acceptance into the treatment programme requires the Department of Child, Youth and Family Services to take over the care and protection of the young person under sections 101 and 128 of the Child Youth and their Families Act (1989). The Youth Horizon Trust director and a care coordinator meet the young person and significant others in the family system and develop a plan that assists the transition of the young person into the treatment programme.

# Psychometric Assessments

A range of psychometric measures are administered to provide assistance with the planning of the behavioural interventions and possible medication once a young person has been accepted into the treatment programme. The initial assessment also provides a baseline for evaluating subsequent change<sup>5</sup>. More specifically, the assessment measures used are the Connors Scales (i.e., parent, teacher and adolescent self report), Children's Depression Inventory, the Piers-Harris Self-Concept Scale, the Suicidal Ideation Questionnaire, and the State-Trait Anxiety Inventory. Details of the measures are outlined in Chapter 5. The assessments that are of particular interest to the clinical psychologist and have implications for parenting interventions are the Connors hyperactivity and impulsivity scales, and the Child Depression Inventory. If an individual exhibits a high Suicidal Ideation Questionnaire score, adult supervision of the young person at school and by the caregiver increases.

<sup>&</sup>lt;sup>5</sup> Psychometric assessments are repeated six monthly, as this equates with DSM-IV diagnostic criteria for conduct disorder, which requires that symptoms be in place a minimum of six months.

Alternatively, if the young person also has a diagnosis of ADHD, the Connors scores are atypical and will have high oppositional-defiant and conduct disorder scales as well. Young women tend to exhibit higher scores in the emotive-aggressive subscales. Other scores that are considered particularly important are the "social problems domain" and "emotional lability" scales which have implications for internalizing disorders. Finally, high scores on the Child Depression Inventory will encourage other symptoms of depression (e.g., sleeping and eating patterns) to be examined.

# Evaluation

Multiple methods are used to evaluate the effectiveness of an intervention and reach successful outcomes including treatment generalization and long-term maintenance of the changes<sup>6</sup>. Parents/caregivers are encouraged to address their family member's needs across multiple systemic contexts (e.g., substance abuse, anger management), with the expectation that long term changes for the family and young person will be achieved. It is expected that progress of the young person in achieving the individualized established goals is reflected in their progress through the treatment programme.

#### Medication

The psychologist and psychiatrist at Youth Horizon Trust utilize the information from the psychometric measures to decide the applicability of medication for the

<sup>&</sup>lt;sup>6</sup> Multimethod evaluations of progress are attained from multiple sources of data, including, family self-report, family evaluation forms, staff and teacher feedback, reports from Individual Care Plans, number of negative behavioural incidents per month. As previously noted in footnote 4, these were not available to the present researcher.

young person. Results from repeated measures over time are used track behavioural changes both on and off medication. These measures provide part of the ongoing evaluative process. Medication is used as a supportive tool and only with the young person's consent. No information on individual young peoples' use of medication was available to the researcher in the present study (see footnote 4).

### 4.2 The Treatment Protocol

The therapeutic contacts emphasise the positive attributes of the young person and their family, and are designed to promote developmentally appropriate responsible behaviour and decrease irresponsible behaviour among family members. The interventions are present-focused and action-orientated, targeting well defined problems that are based on interactions that have been observed within the multiple systems that maintain the defined disruptive behaviour. In particular, interventions include (a) specification of treatment goals, (b) behavioural management, (c) ongoing monitoring and evaluation, as well as (d) training for care-coordinators. Young people progress through the treatment programme contingent upon their achievement toward behavioural goals and are rewarded by increased lengths of time on weekend visits home. This was irrespective of the length of time in the programme (i.e., better behaved young people had longer weekend visits and completed the treatment programme in a shorter time frame).

# **Treatment Goals**

Family members are encouraged to participate in setting the goals for the young person and be part of the daily and weekly effort to resolve parenting and behavioural difficulties. Parents are encouraged to use the same method of rewarding behavioural goals as used by the residential setting staff. Parents are also encouraged to monitor and supervise their young person at all times during home visits. Individual goals for a young person (e.g., reduce incidences of violence towards mother, or increase days spent at school), are further broken down into the concrete steps necessary to achieve the goals (e.g., increase time spent in the chair in the classroom at school, take direction from staff).

# Behavioural Management

There are a series of behavioural parenting techniques that underlie management techniques used in the residential programme. These strategies encompass such techniques as positive attention for alternative behaviour, a rewards points system (e.g., affirmation of positive behaviour), a coloured card system (e.g., blue = desirable behaviour; yellow, and red = undesirable and escalating behaviour), as well as incidental learning (i.e., young people initiated learning of new information), and "thinking time" (e.g., temporary withdrawal from activities). This Parent Management Training has been based on the Triple-P programme developed by Professor Matt Sanders and colleagues from the Parenting and Family Support Centre, in the School of Psychology at the University of Queensland (Sanders, 2001). This behavioural management programme offers a series of strategies recognizing that participants have

differing needs regarding the type, intensity and mode of assistance they may require. Youth Horizon Trust care co-ordinator staff attend training in the standardized behavioural management programme conducted by the Healthy Families Trust and Youth Horizon Trust (1998).

### 4.3 Care Coordinators

Care co-ordinators are social workers temporarily transferred (i.e., seconded) from the Department of Child Youth and Family Services (CYFS) to the Youth Horizon Trust for up to three years. The Youth Horizon Trust has one care co-ordinator staff member per eight young people in the treatment programme. At the time of the present study, there were three full-time care coordinators from CYFS and a half-time care coordinator position funded by CYFS. All care co-ordinator staff are trained social workers, but additional specialist training is provided by a range of agencies upon a basis of its availability (e.g., MST training, alcohol and drug management, sexual offending and suicide prevention training). There are no formalized training manuals or procedures used within Youth Horizon Trust, with the exception of the Triple-P programme conducted by the Healthy Families Trust. In the 12 months prior to the present study, weekly training in Family Therapy, and parenting and behaviour management training have been completed.

# Care Coordinators and Families

The degree of contact with the families of the young people involved in the programme is dependant on the identified needs of the family during the initial assessment. Flexibility to respond to the individual needs of the parents, the

family and the young person is part of the philosophy of MST and of Youth Horizon Trust. For example, parents may request an individually delivered behavioural programme, whereas others could request support that may assist their management of anger or a drug addiction. The care co-ordinators work a forty-hour week and are also rostered on call outside these hours every six weeks. This provides the residential home caregivers after hours access to a care co-ordinator when problems arise.

Parents and family/whanau are welcome to visit the residential care homes in an attempt to normalize the environment, share mealtimes, and otherwise assist in ongoing involvement with their young person in a supportive environment. Behavioural management techniques are modelled to the parents continually via a process of "incidental learning" (Healthy Families Trust and Youth Horizon Trust, 1998). The intention of the programme is to maintain behavioural reinforcement consistency throughout all settings during the young person's treatment programme participation.

#### CHAPTER 5

#### METHODOLOGY

# 5.1 Participants

Twenty-nine families participating in the Auckland Youth Horizon Trust treatment programme for young people diagnosed with conduct disorder were invited to participate in an evaluation of the parenting component of the treatment programme<sup>7</sup>. Fifteen female and one male parent/caregiver agreed to participate, a response rate of 55%. Youth in the study were 15 male and one female residential treatment programme participants and of the 16 families, 68%(N=11) completed at least three of the four telephone interviews, thereby meeting data collection requirements and enabling their data to be included in the study (see Frick, Christian, & Wootton, 1999). Female caregivers made up the majority of the respondents (90.9 %), and despite the small sample size, participating families comprised a range of parenting, income, and age categories (see Table 1). The majority of parent/caregivers were between 40-49 years and the mean age of the young people in the treatment programme was 14.7 years. Income levels covered the range but the majority of total household incomes were over \$30,000 (n=6).

<sup>&</sup>lt;sup>7</sup> Parents were informed that their willingness to participate in the research would not affect the clinical services they received.

**Table 1**Demographic Characteristics of Participants (N = 11)

Participants	n	%
Parenting circumstances		
Parenting alone	3	27.3
Two biological parents	3	27.3
Biological and step-parent	3	27.7
Adoptive parents	2	18.2
Total family income range		
\$0-20,000	2	20.0
\$25,000-35,000	3	30.0
\$40,000-49.999	2	20.0
\$50,000 or more	3	30.0
Age of young person in treatment programme		
14 years	5	45.5
15 years	4	36.4
16 years	2	18.2

# 5.2 Measures

The Alabama Parenting Questionnaire (APQ). The parenting practices were assessed with the Alabama Parenting Questionnaire (APQ; Frick, 1991). The APQ is a non-standardized structured self-report questionnaire, designed to assess the parenting constructs most related to disruptive behaviour problems in young people. The full version of the APQ provides measures across multiple sources (i.e., parent and child) and using multiple formats (i.e., global reports on parenting and behaviour frequencies via telephone interviews). The APQ has advantages over measures of parenting "style" (i.e., Roberts, Block, & Block, 1984; Schaefer, 1965) as it assesses the practice of harsh discipline and parental supervision.

Only the parent global and telephone interview questionnaires were used in the present study (see Appendix A). The child reports were not used due to the difficulty accessing young people in their residential setting, and the number of residential home caregivers in the treatment programme. In addition, psychometric support has not yet been demonstrated for the children's responses (Shelton et al., 1996) and previous studies of parenting practices in New Zealand have used only the global parenting measure (e.g., Murphy, 1999).

The parent global and telephone interview questionnaires of the APQ included thirty-five items assessing five parenting constructs linked to disruptive behaviour patterns established from prior research (Shelton, Frick & Wootton, 1996). The

five constructs of parenting practice are grouped according to the following subscales: parental involvement (10 items), use of positive reinforcement (6 items), monitoring and supervision (10 items), consistency in applying discipline (6 items) and the use of corporal punishment (3 items) (see Table 2). Seven additional items (other discipline practices) measuring discipline practices other than corporal punishment were also included. As recommended by prior researchers, this ensured corporal punishment items were not being asked in isolation as this could place an implicit bias towards these items and similarly, the "other discipline practices" subgroup was excluded in the current analyses, as in previous analyses (Frick et al., 1999; Shelton et al., 1996).

The parent global questionnaire and telephone interview questionnaire are designed to measure the same five constructs, with the same questions, but request respondents to use different response scales. The global questionnaire items are rated on a Likert-type 5-point frequency scale to represent the "typical" parenting practices in the home, whereas the telephone interview requested data on the behaviour frequencies relating specifically to the young person in the treatment programme when on home visits (Frick et al., 1999).

The APQ has been chosen for use in this research because it provides assessment of parenting constructs that are most linked with disruptive childhood behaviour. It also has the ability to assess parenting practices in families with young people up to 17 years of age (Frick et al., 1999).

# Table 2

# Alabama Parenting Questionnaire: Parenting Scale Composition

#### Involvement

- 1 You have a friendly talk with your child
- 4 You volunteer to help with special activities that your child is involved in (sports, scouts, guides)
- 7 You play games or do other fun things with your child
- 9 You ask your child about his/her day at school
- 11 You help your child with his/her homework
- 14 You ask your child what his/her plans are for the coming day
- 15 You drive your child to a special activity
- 20 You talk to your child about his/her friends
- 23 Your child helps plan family activities
- 26 You attend parent teacher or other meetings at your child's school

#### Positive Parenting

- 2 You let your child know when he/she is doing a good job with something
- 5 You reward or give something extra to your child for obeying you or behaving well
- 13 You compliment your child when he/she does something well
- 16 You praise your child if he/she behaves well
- 18 You hug or kiss your child when he/she has done something well
- 27 You tell your child you like it when he/she helps around the house

#### Poor Monitoring and Supervision

- 6 Your child fails to leave a note or let you know where he/ she is going
- 10 Your child stays out in the evening past the time he/she is supposed to be home
- 17 Your child is out with friends you do not know
- 19 Your child goes out without a set time to be home
- 21 Your child is out after dark without an adult with him/her
- 24 You get so busy that you forget where your child is and what he/she is doing
- 28 You don't check that you child comes home at the appointed time
- 29 You don't tell your child where you are going
- 30Your child comes from school more than an hour past the time you expect him/her
- 32 Your child is at home without supervision

### Inconsistent Discipline

- 3 You threaten to punish your child and then do not actually punish him/her
- 8 Your child talks you out of being punished after he/she has done something wrong
- 12 You feel that getting your child to obey you is more trouble than it is worth
- 22 You let your child out of a punishment early (like lift restrictions earlier than you originally said)
- 25 Your child is not punished when he/she has done something wrong
- 31 The punishment you give your child depends on your mood

#### Corporal Punishment

- 33 You spank your child with your hand when he or she has done something wrong
- 35 You slap your child when he/she has done something wrong
- 38 You hit your child with a belt, switch, or other object when he/she does something wrong

#### Other Discipline Practices

- 34 You ignore your child when he/she is misbehaving
- 36 You take away privileges or money from your child as a punishment
- 37 You send your child to his/her room as a punishment
- 39 You yell or scream at your child when he/she has done something wrong
- 40 You calmly explain to your child why his/her behaviour was wrong when he/she misbehaves
- 41 You use time out as a punishment
- 42 You give your child extra chores or jobs as a punishment

Note. The items in the table are worded according to the Parent Global Format (Shelton et al., 1996)

There is only preliminary psychometric data for the APQ. One study provided both reliability and validity based on a moderately sized sample (e.g., Shelton et al., 1996), and consequently, as the psychometric properties are in the early stages of development, it has been proposed that the APQ be used only for research purposes (Frick et al., 1999).

# Reliability of the APQ

Shelton et al. (1996) tested the internal consistency of rationally derived scales tapping the relevant dimensions of parenting. This analysis was conducted to determine whether items were measuring homogeneous constructs, and whether the construct could be measured with similar item content across different methods of assessment. The internal consistency for the five global and telephone sub-scales ranged between .09 and .80, with the corporal punishment subscale producing a low internal consistency of alpha = .46 and .09. The temporal consistency of the scale scores across the four interview times was also evaluated, where the consistency estimate was the coefficient alpha for the scores across the four interview times. Generally, the scores were highly consistent across the telephone interviews, suggesting the interviews provided a stable estimate of the constructs. Once again, the lowest reliability estimates were the parental report on the corporal punishment and monitoring and supervision scales.

One possibility for the low internal consistency of the corporal punishment scale could be due to the construct having only three items. A second explanation is this could also be attributed to parents using one preferred method of corporal punishment, and as a result there is not a high degree of intercorrelation among corporal punishment items (Shelton et al., 1996). Similarly, the monitoring and supervision scale had low internal consistency despite having a number of items to measure the construct<sup>8</sup>.

In the present study the internal consistency for both the global and telephone formats ranged between .03 and .68. Despite the present study having used the same assessment window, and identified the same reliability scale, the overall reliability for the APQ was lower in the present study.

# Validity of the APQ

The preliminary psychometric data have demonstrated adequate convergent validity of APQ scores with parental involvement and positive parenting constructs having showing the highest correlations (i.e., Shelton et al., 1996). Across the five constructs all the correlations were statistically significant. The correlations for a construct across global and interview reports for parents ranged from .30 to .55 (The correlations were .29 to .51 in the present research).

<sup>8</sup> Shelton et al. (1996) proposed measuring behaviour over three days only, and may not have captured these low base rate behaviours over four telephone interviews. However, in the parent global questionnaire, requesting participants to respond to the "typical" parenting behaviour format was considered necessary to adequately capture this construct.

For the subscales monitoring and supervision, inconsistent discipline, and corporal punishment good divergent validity have been demonstrated in prior study. More specifically, the average intercorrelations between these three scales (ignoring the direction of the correlations) within the parent global format was .19, and within the parental interview format was .16. In the present research, comparable correlations were obtained with average inter-correlations of .34 in both the global and interview formats for these subscales. For the subscales positive parenting and involvement, high correlations were obtained across informant and assessment format (.41 - .85, M = .64) suggesting that these may measure a single dimension of parenting. In the present research the range was .16 to .68 (M = 29) across these constructs. In addition, the parent global and telephone interview formats have demonstrated the ability to distinguish families of children with disruptive behaviour disorder diagnoses and the normal samples of children (Frick et al., 1999; Shelton et al., 1996)

Analysis of the present study data included a comparison of the parent report adolescent data from a previous study by Frick et al. (1999). There were however, limitations in comparing the present study data and the comparable parent report data from the previous study, namely methodological and sample size differences. The present study sample of parents had (a) young people in a residential setting and, (b) they and their parents were participants in a treatment intervention. Furthermore, the sample size in the present research was smaller (N = 11) while in the Frick et al. (1999) adolescent sample N = 34.

Descriptive statistics and effect size indexes relating to the hypotheses of the present study are also presented.

# Demographic Questions

The global questionnaire was designed to include several questions on demographic variables. These demographic questions were placed at the end of the global questionnaire as recommended as part of good survey design (Frazer & Lawler, 2000). Respondents were asked for their gender, age, age of biological father, age of children living at home, marital status, family income, and usual occupation. Gender and marital status questions were the same as those used in previous research in this population (Fergusson, Horwood, & Lawton, 1990).

# Young People's Assessment Information

Assessment information completed at each young person's admission to Youth Horizon Trust was also gathered and integrated into the study. These standard assessment measures are completed by every young person upon admission to the programme<sup>9</sup>. The assessment measures used were Connors Rating Scales-Revised (Parent, Teacher and Adolescent), the State- Trait Anxiety Inventory, Suicidal Ideation Questionnaire, Child Depression Inventory, and the Pier-Harris Children's Self-Concept Scale.

<sup>&</sup>lt;sup>9</sup> Access to this data was consented to by the Research Access Committee of Child, Youth and Family Services, Youth Horizon Trust and the informed consent of the young person.

Connors Rating Scales-Revised (CRS-R). The CRS-R (Connors, 1997), scales are completed by the parent (Connors Parent Rating Scale-Revised; CPRS-R) and teachers (Connors Teachers Rating Scale-Revised; CTRS-R). The Connors measures include Oppositional, Anxious-Shy, Hyperactivity, Cognitive Problems, and Psychosomatic, Perfectionism, and Social Problems scales. A feature of both the parent and teacher reports is the usefulness of the instrument for assessing ADHD and its concomitant behaviours in children and adolescents aged three to 17 years (Kamphaus & Frick, 2002; Plake & Impara, 2001). Youth Horizon Trust clients often have a diagnosis of ADHD confirmed by the Connors results. The measure therefore often indicate results high on the oppositional and conduct scales, however the anxiety-shy subscale index may be interpreted as an indicator of an internalized disorder in a client. Often

Conner's-Wells Adolescent Self-report Scale (CASS). The CASS (Connors et al., 1997), is a revised self-report adolescent scale measuring conduct problems, cognitive problems/inattention, hyperactivity, ADHD index, family problems, anger-control problems, DSM-IV inattentive, DSM-IV hyperactive-impulsive, DSM-IV total. This revised edition used by Youth Horizon Trust includes a ten item Connors Global Index (CGI) that was designed by Connors and colleagues (1997) to be sensitive to treatment effects used especially for follow-up assessments after treatment has begun.

The normative samples for the CRS-R numbered 2,482 mostly Caucasian Canadian and American individuals, accessed over hundreds of clinical locations. The reliability and validity of all the scales have varied reports. However the Connor's scales, after thirty years of use, present psychometric integrity and functional utility (see review in Knoff, 2001).

The State -Trait Anxiety Inventory (STAI). The STAI (Spielberger, 1973), is a brief, reliable, internally consistent (.90 or higher alpha-coefficients for the normative samples) self-report measure for assessing state and trait anxiety in a variety of populations and settings. The validity coefficients range between .73 and .85, in correlation with two other anxiety scales that were widely used before the STAI (Spielberger, 1988). Psychologists at Youth Horizon Trust interpret scores on this measure as an index of a young person's anxiety and use this interview information to determine whether this is global or situational. The results are tracked over time.

Suicidal Ideation Questionnaire (SIQ). The SIQ (Reynolds, 1988) is a self-report inventory designed to assess thoughts about suicide in adolescents and young adults. The reliability for the 30 item form was .97 with mid-western American adolescents aged between 14 to 18 years and .96 with a sample aged between 19 to 21 years. Significant relationships were found between SIQ scores and scores on measures of depression, hopelessness and other constructs. Content validity was reported to be high also with significant results demonstrated by correlations with highly related suicidal cognitions, identifying young people who may need psychological attention (Reynolds, 1988). The psychologists at

Youth Horizon Trust interpret this measure as an index of self-harm potential in a young person and once again this is monitored over repeated measures.

Children's Depression Inventory (CDI). The CDI (Kovacs, 1991), is a self-report pencil and paper measure which provides a scale of depressive symptoms. It is an individually administered test for children and adolescents from 8 to 17 years of age. The normative data was collected from 1,490 American young people. The coefficients on split half reliability tests showed statistically significant results indicating good internal and test-retest reliability (Saylor, Finch, Spirito, & Bennett, 1984). Criterion-related studies are generally supportive of the CDI as a measure of internalizing symptomatology. It correlates significantly with other measures of anxiety and depression. Although the CDI has shown validity in differentiating between non-clinical and clinical samples of children with depression, there are mixed results, and Saylor et al (1984) showed the CDI could not distinguish between samples with depression and other psychiatric disorders. A long research history has contributed to considerable utility of the CDI by the psychological community (Kamphaus & Frick, 2002). The psychologists at Youth Horizon Trust have established from this measure that the anhedonia index will be high, as the young people are often distressed at restrictions placed upon their behaviour in the treatment programme. High scores on the CDI are interpreted as an index of depression in a young person and this interview information will encourage other symptoms of depression (e.g., sleeping and eating patterns) to be examined.

Piers-Harris Children's Self-Concept Scale (Piers-Harris). The Piers-Harris (Piers & Harris, 1991) assesses 6 areas of self-esteem: behaviour, intellectual and school status, physical appearance and attributes, anxiety, popularity, happiness and satisfaction. High scores on all clusters indicate a high level of assessed self-concept in that dimension. The Piers-Harris provides a T-score with a mean of 50 and a T score below 35 is considered to be significantly low (Kamphaus & Frick, 2002). Youth Horizon Trust interprets scores on this measure to track inconsistencies over time on social desirability scales.

## 5.3 Procedures and Data Collection

Consent was sought and received from the Massey University Human Ethics
Committee and the Research Access Committee within the Department of Child
Youth and Family Services. Confidentiality agreements were signed for both
Department of Child Youth and Family and also with the Youth Horizon Trust
prior to the researcher contacting potential participants through their care coordinators at Youth Horizon Trust. The care co-ordinators were briefed,
encouraging a standardized procedure in the delivery of the information sheets
to participants (see Appendices B, C, D). Part of this informed consent involved
allowing the researcher access to the young peoples' initial assessment results.
The care co-ordinators delivered the Parent Information Sheet to all parent/care
givers of young people in the Youth Horizon Trust programme. Parents wishing
to take part in the research agreed for their names to be passed on to the
researcher who arranged to meet with them in their localities and complete the
consent form and the global parenting questionnaire.

Data collection was conducted from mid June to end of September 2002, and consisted of two parts: (a) global assessment of "typical" parenting practices via a structured self-report questionnaire, including demographic information, and (b) four follow-up structured telephone questionnaires elicited data on behaviour frequencies relating to the young person in the treatment programme (two parents completed only three telephone interviews). The same researcher conducted the telephone interviews following standardized administration procedures, and requested specific numbers of occurrences of behaviours from the parent/caregiver for each question. The parent/caregiver was telephoned within three days of contact (i.e., weekend leave) with their young person in the Youth Horizon Trust programme.

Difficulties arose in maintaining the regularity of follow-up interviews because the young people's contact with their parents varied. In particular, inappropriate behaviour during the previous week disallowed the following weekend home visits for several young people on five occasions. As a result, the telephone interviews were completed within three days of their next home visit. Two young people went missing from their homes between completion of the global questionnaires and prior to telephone interviews being conducted. Their data was excluded.

Table 3 summarizes the initial assessment data of the young people entering the Youth Horizon Trust treatment programme for conduct disorder. The re-

assessment and other monitoring of behaviour data were not incorporated, as the details of the assessment protocol were not specified or outlined at the outset of the present study. 10 As a result, informed consent was only requested from the young people for access initial assessment data.

Table 3

Means and Standard Deviations of Young People's Initial Assessment Scores

Assessment Score	М	SD	
CDI Raw score	9.9	6.64	
CPRS Diagnosis	25.43	15.02	
CTRS Diagnosis	19.83	19.04	
CWASR Diagnosis	17.33	8.66	
STAI-State	32.67	8.94	
STAI-Trait	40.44	8.68	
SIQ Raw score	31.86	44.46	
Piers-Harris	50.00	5.40	

Note. CDI = Children's Depression Inventory (Kovacs, 1991) CPRS = Connors Parent Report; CTRS = Connors Teacher Report; CWASR = Connors-Wells Adolescent Self Report (Connors, 1997); STAI = State Trait Anxiety Index (Spielberger, 1973); SIQ = Suicide Ideation Questionnaire (Reynolds, 1998); Piers-Harris Self Concept Scale (Piers and Harris, 1991) Diagnosis = DSM IV total score for the scale.

<sup>&</sup>lt;sup>10</sup>There was no current protocol manual for treatment at Youth Horizon Trust at the time of this study

### **CHAPTER 6**

### RESULTS

# 6.1 Parenting Evaluation

Descriptive statistics are presented as means and standard deviations in the following results. In order to indicate the consistency between subgroups of the sample, the effect size of the difference between subgroup means and total sample means are also presented. Effect size calculation has been recommended as a more meaningful method of within group mean comparison to assess the magnitude of the observed effect or relationship particularly where small samples would be unlikely to yield significant results. The effect size index Cohen's r was chosen as recommended when total sample size is small and group sizes are disparate (Aaron, Kromrey, & Ferron, 1998).

Table 4 shows descriptive statistics for the global and the telephone questionnaire positive and negative parenting subscales for all participants<sup>11</sup>. There are limitations in comparing the present data and the comparable parent report data from a previous study by Frick et al. (1999), namely, differences in the sample size and demographics, as previously noted in Chapter 5 However, noting these limitations, comparisons with the adolescent data from the

All statistical analyses were computed within the Statistical Package for the Social Sciences for Windows (SPSS version 11)

earlier research is presented for effect size comparison<sup>12</sup>. When compared with Frick's data, data from the parent global questionnaire subscales involvement, positive parenting, poor monitoring and supervision, and corporal punishment in the present study show small and medium differences (M = 35.27, ES = .18; M = 24.36, ES = .15; M = 20.82, ES = .24; M = 4.18, ES = .42, respectively), while comparison of the corresponding telephone interview subscales indicate medium and large differences from the previous research (ES = .71, ES = .49, ES = .30, ES = .23, respectively). <sup>13</sup>

In the negative parenting subscales (poor monitoring and supervision, inconsistent discipline, corporal punishment), the observed reductions in the resulting data in the present study between the global questionnaire and the telephone interview, are consistent with the reductions seen in previous data between these two questionnaire formats (Frick et al., 1996).

<sup>&</sup>lt;sup>12</sup> Previous research has been conducted in New Zealand using the APQ Global Questionnaire, but only used the global parenting scale, thereby making it difficult to contrast the results of the present study (see Murphy, 1999).

 $<sup>^{13}</sup>$ Cohen's (1988) ES conventions (r = .10 for small effects, r = .30 for medium effects and r = .50 for effects of a large magnitude.)

Table 4

Means and Standard Deviations of APQ Global and Telephone Interview Questionnaires for New Zealand (NZ) and North American (USA) Data

	NZ		110/	·	
	NZ		USA		
Subscales	M (n =	<i>SD</i> 11)	M (n = 3	SD 34)	ES (r)
Parental Involvement					
Global Telephone Interview	35.27 10.64	6.03 3.28	37.31 37.94	5.40 18.70	0.18 0.71
Positive Parenting					
Global Telephone Interview	24.36 12.20	3.32 5.62	23.32 32.01	3.40 24.30	0.15 0.49
Poor Monitoring & Supervision					
Global Telephone Interview	20.82 1.30	6.78 1.28	17.83 5.24	5.30 8.90	0.24 0.30
Inconsistent Discipline					
Global Telephone Interview	16.27 1.45	4.03 1.87	15.58 5.16	3.40 8.20	0.09 <b>0.30</b>
Corporal Punishment					
Global Telephone Interview	4.18 0.02	1.60 0.08	5.69 1.50	1.70 0.53	0.42 0.23
Other Discipline Practices					
Global Telephone Interviews	23.54 3.18	4.25 2.72			

Note. Data in column 2 and 3 represent global and telephone interview means and standard deviations for the present study (NZ). USA (adolescent only) data is presented in column 4 and 5.

Effect size estimates represent differences between present study means and Frick et al., (1996) (adolescent) study data mean, divided by pooled standard deviation (Rosenthal & Rosnow, 1991). *ES* in bold are those that reach the conventional classification (Cohen, 1988) r = .10 for small effects, r = .30 for medium effects, and r = 50 for effects of a large magnitude..

Hypothesis One: On average, parents will show improvements in their parenting during the intervention examined in this study.

Table 5 shows comparisons between each individual telephone interview with the overall average of all telephone interviews. The data represents mean values, with standard deviations, and effect size indexes (Cohen, 1998). On the parental involvement subscale, small differences were noted between the first three telephone interviews and the overall telephone mean for the sample (M =10.00, ES = .10; M = 12.80, ES = .20; M = 9.73, ES = .12, respectively). The increased score at telephone interview 2 suggested an increased level of involvement for the sample (M = 12.8, ES = .20), but it should be noted that with the small sample size data is very sensitive to behaviour changes that occurred in one family over one weekend visit. In the positive parenting subscale a small difference was noted at telephone interview 3 (M = 9.64, ES = .22). The poor monitoring and supervision subscale indicated small differences in both telephone 1 (M = .82, ES = .21) and telephone 3 (M = 2.05, ES = .14), while the inconsistent discipline subscale differences were noted at telephone 2 and 3 (M = 2.09, ES = .12; M = .19, ES = .15). Upon closer inspection of the data it was noted the behaviour ratings for one family were lower at telephone interview 3, which may have influenced poor monitoring and supervision data and may correspond with a decrease in inconsistent discipline at telephone interview 3. The parental involvement telephone interview response in the second telephone interview showed a difference in the predicted direction, but this improvement and the inconsistent results for the other subscales were not sufficient to support Hypothesis 1.

Table 5

Descriptive Data Showing Differences between Telephone Interviews

Subscale	Telephone 1 (n = 11)	Telephone 2 (n = 11)	Telephone 3 (n = 11)	Telephone 4 (n = 9)
Parent Involvement	10.0 (3.29)	12.8 (6.72)	9.73 (3.98)	10.44 (4.53)
	ES = 0.10	ES = 0.20	<b>ES</b> = <b>0.12</b>	ES = 0.03
Positive Parenting	12.09 (5.41)	13.81 (13.32)	9.64 (5.71)	1.33 (2.06)
	ES = 0.01	ES = 0.08	ES = 0.22	ES = 0.03
Poor Monitoring and	0.82 (0.98)	1.14 (3.00)	2.05 (3.58) <b>ES</b> = <b>0.14</b>	1.33 (2.06)
Supervision	ES = 0.21	ES = 0.03		ES = 0.01
Inconsistent	1.18 (4.45)	2.09 (3.42)	0.19 (1.76)	0.67 (1.20)
Discipline	ES = 0.05	ES = 0.12	ES = 0.33	ES = 0.25
Corporal Punishment	0.0 (0.00)	0.09 (0.30)	0.00 (0.00)	0.00 (0.00)
	ES = 0.20	ES = 0.16	ES = 0.20	ES = 0.20
Other Discipline Practices	4.73 (6.15)	3.09 (4.87)	3.09 (2.02)	1.56 (2.13)
	ES = 0.16	ES = 0.01	ES = 0.02	<b>ES = 0.31</b>

*Note*. Data represents means with standard deviations in parenthesis. Effect size estimates represent differences between individual telephone interview data means and total subgroup telephone mean, divided by pooled standard deviations. *ES* in bold are those that reach the conventional classification (Cohen, 1988) r = .10 for small effects, r = .30 for medium effects, and r = 50 for effects of a large magnitude.

Hypothesis Two: Parents will indicate more positive parenting in the third year of the programme than parents in the first year

Table 6 and 7 show descriptive data for parenting subscales in years one, two and three of the treatment programme. The data represents mean values, with standard deviations, and effect size indexes (Cohen, 1998). As shown in Table 6 differences among sub-samples of each year in the programme, and the total sample of the global parenting data were expressed as effect size (Cohen, 1988). Data on the positive parenting subscale year 2 shows a small difference (M = 23.00, ES = 26), and in year 3 a large difference from the total sample mean (M = 30.00, ES = .77). Furthermore, in year 3 the poor monitoring and supervision, inconsistent discipline and corporal punishment subscales showed medium and large effect sizes. A degree of caution should be exercised in interpretation of effect size estimates obtained in year 3 as they are based on a sample of one family. Overall, the findings in Table 6 show there are differences between families in years 1, 2, and 3 of the programme.

In Table 7 the parent telephone interview data is presented. Differences are observed in the parental involvement subscale in years 1, 2, and year 3 (M = 12.00, ES = .25; M = 9.87, ES = .10; M = 9.70, ES = .20, respectively) and the total telephone interview mean for this subgroup (M = 10.64). The positive parenting subscale showed medium difference in year 1 subgroup (M = 15.18, ES = .30) and a large difference in year 3 subgroup (M = 6.25, ES = .60), relative to the overall positive parenting mean. Of the further differences noted on the negative parenting subscales in years 1 and 3, the corporal punishment subscale showed small differences in a direction supportive of hypothesis 2.

**Table 6**Global Questionnaire Parenting Data for Young People in Years 1, 2, and 3 of the Youth Horizon Trust Programme

Subscales	Year 1 (n = 4)	Year 2 ( <i>n</i> = 6)	Year 3 (n = 1)
Parent Involvement	36.50 (6.95) <i>ES</i> = 0.09	34.33 (6.44) ES = 0.08	36.00 (0.00) ES = 0.09
Positive Parenting	25.00 (4.25) ES = 0.08	23.00 (1.55) <b>ES = 0.26</b>	30.00 (0 00) <b>ES = 0.77</b>
Poor Monitoring and Supervision	21.50 (9.95) ES = 0.04	20.83 (5.53) ES = 0.0	18.00 (0.00) <i>ES</i> = <b>0.28</b>
Inconsistent Discipline	16.75 (4.11) ES = 0.06	17.33 (2.66) ES = 0.15	8.00 (0.00) <b>ES = 0.82</b>
Corporal Punishment	5.50 (2.08) <b>ES = 0.34</b>	3.5 (0.55) <b>ES = 0.27</b>	3.00 (0.00) <b>ES = 0.46</b>
Other Discipline Practices	26.25 (3.09) <b>ES = 0.34</b>	21.17 (3.90) <i>ES</i> = <b>0.28</b>	27.00 (0.00) <i>ES</i> = <b>0.50</b>

Note. Means are presented with standard deviation in parenthesis.

Effect size represents differences between subgroup mean and total sample mean for global questionnaire, divided by the pooled standard deviation (Rosnow & Rosental, 1996). ES in bold are those that reach the conventional classification (Cohen, 1988) r = .10 for small effects, r = .30 for medium effects, and r = .50 for effects of a large magnitude.

**Table 7**Telephone Questionnaire Parenting Data for Young People in Years 1, 2, and 3 of the Youth Horizon Trust Programme

Subscales	Year 1 ( <i>n</i> = 4)	Year 2 ( <i>n</i> = 6)	Year 3 (n = 1)
Parent Involvement	12.00 (1.70) <i>ES</i> = <b>0.25</b>	9.87 (4.17) ES = 0.10	0.00 (0.00) <b>ES = 0.20</b>
Positive Parenting	15.18 (4.03) <i>ES</i> = <b>0.30</b>	11.20 (6.24) ES = 0.0	6.25 (0 00) <b>ES = 0.60</b>
Poor Monitoring and Supervision	1.25 (1.51) ES = 0.02	1.54 (1.24) ES = 0.09	0.00 (0.00) <b>ES = 0.58</b>
Inconsistent Discipline	1.25 (1.73) ES = 0.06	1.29 (2.12) ES = 0.04	3.25 (0.00) <b>ES = 0.56</b>
Corporal Punishment	0.00 (0.00) <i>ES</i> = <b>0.20</b>	0.04 (0.55) ES = 0.03	3.00 (0.00) <b>ES = 0.20</b>
Other Discipline Practices	2.57 (1.19) <b>ES = 0.14</b>	3.08 (3.43) ES = 0.02	6.25 (0.00) <i>ES</i> = <b>0.62</b>

Note. Means are presented with standard deviation in parenthesis

Effect size represents differences between subgroup mean and total sample mean of telephone questionnaire, divided by the pooled standard deviation (Rosnow & Rosental, 1996). ES in bold are those that reach the conventional classification (Cohen, 1988) r=.10 for small effects, r=.30 for medium effects, and r=.50 for effects of a large magnitude.

# Hypothesis 3. Parents will indicate more positive parenting as young people increased their time on weekend home visits

Family data was categorized to three groups based on the length of weekend visits earned by their young people for appropriate behaviour (i.e., full time, few hours, full weekend). Table 8 shows the descriptive data for the parenting subscales for the different home visit schedules as mean values, with standard deviations, and effect size indexes. In the full-time subgroup small and medium differences from the overall subscale means are noted on positive parenting (M = 22.50, ES = .32) poor monitoring and supervision (M = 16.00, ES = .33) and inconsistent discipline (M = 18.50, ES = .24) on the global questionnaire. In the telephone data for this subgroup, there are small and medium differences on the involvement (M = 10.13, ES = .11), positive parenting (M = 10.38, ES = .18), inconsistent discipline (M = 2.75, ES = .20), and corporal punishment subscales (M = .13, ES = .37). Overall, global questionnaire data indicated that the full time subgroup increased monitoring and supervision relative to other families in the sample.

The few hours subgroup showed small differences on global questionnaire data from the total sample on the positive parenting and poor monitoring and supervision subgroups and small differences on the remaining parenting subscales in the telephone interview data. Overall, this subgroup had lower involvement (M = 9.75, ES = .17), and increased monitoring and supervision relative to the fulltime and full weekend subgroups (M = .25, ES = .49), as measured by the telephone interview data.

The full weekend subgroup scored the highest on the involvement subscale (M = 11.55, ES = .11), and had the most consistent discipline as measured by the global and telephone assessments (M = 15.20, ES = .17; M = .40, ES = .35) of all the subgroups. However, close inspection of individual data for this subgroup showed that one young person behaved inappropriately and was sent back to residential care earlier than had been planned. This means that the large effect size observed on the poor monitoring and supervision telephone subscale for the full weekend group (M = 2.07, ES = .29) should be interpreted with caution.

Overall, the full time subgroups global questionnaire data indicated increased monitoring and supervision relative to other families in the sample and similarly, the full weekend subgroup data indicated improvement in parental involvement and consistency in discipline as measured by the telephone interview data. These results supported hypothesis 3.

**Table 8**Data Indicating Parenting Subscales and Subgroups Defined by Time Spent on Home Visits

	Time at home			
Subscale	Full time (n = 2)	Few hours ( <i>n</i> = 4)	Full weekend (n = 5)	
Involvement				
Global	34.50 (6.36) ES = 0.06	35.50 (6.55) ES = 0.02	35.40 (6.95) ES = 0.01	
Telephone	10.13 (0.53) <b>ES = 0.11</b>	9.75 (1.79) <b>ES = 0.17</b>	11.55 (4.73) <b>ES = 0.11</b>	
Positive Parenting				
Global	22.50 (2.12) <b>ES = 0.32</b>	25.25 (4.99) <b>ES = 0.10</b>	24.40 (2.30) ES = 0.00	
Telephone	10.38 (4.07) <b>ES = 0.18</b>	12.56 (6.04) ES = 0.03	12.65 (6.74) ES = 0.04	
Poor Monitoring and Supervision				
Global	16.00 (7.07) <b>ES = 0 33</b>	24.75 (8.06) <b>ES = 0.26</b>	19.60 (4.98) <b>ES = 0.10</b>	
Telephone	1.44 (1.50) ES = 0.05	0 25 (0.32) <b>ES = 0.49</b>	2.07 (1.27) <b>ES = 0.29</b>	

(table continued)

Table 8 (continued)

	Time At Home			
Subscale	Full time (n = 2)	Few Hours ( <i>n</i> = 4)	Full weekend (n = 5)	
Inconsistent Discipline				
Global	18.50 (4.95) <b>ES</b> = <b>0.24</b>	16.50 (5.97) ES = 0.02	15.20 (1.95) <i>ES</i> = <b>0.17</b>	
Telephone	2.75 (3.88) <b>ES = 0.20</b>	2.13 (1.61) <b>ES = 0.19</b>	00.40 (0.58) <i>ES</i> = <b>0.35</b>	
Corporal Punishment				
Global	04.00 (0.00) ES = 0.08	04.50 (2.38) ES = 0.08	04.00 (0.00) ES = 0.06	
Telephone	00.13 (0.18) <b>ES = 0.37</b>	00.00 (0.00) <b>ES = 0.17</b>	00.00 (0.00) <i>ES</i> = <b>0.17</b>	
Other Discipline Practice				
Global	25.00 (4.24) <b>ES = 0.17</b>	24.50 (4.2) <b>ES = 0.11</b>	22.20 (4.82) <b>ES = 0.15</b>	
Telephone	4.63 (6.54) <b>ES = 0.14</b>	03.26 (2.33) ES = 0.02		

Note. Means are presented with standard deviations in parenthesis

Effect size represent differences between subgroup and total sample means for global and telephone questionnaires, divided by the pooled standard deviations (Rosnow & Rosental, 1996). ES in bold are those that reach the conventional classification (Cohen, 1988) r = .10 for small effects, r = .30 for medium effects, and r = 50 for effects of a large magnitude Full time = young people returned home full-time. Few hours = Max. 4 hours visit. Full weekend = two days and evenings over the weekend.

Hypothesis 4: On average parents of the Youth Horizon Trust young people who were most distressed at the time of intake into the programme will demonstrate less positive parenting practices overall relative to other parents in the programme.

Table 9 presents the raw scores of the CDI for a sample of young people in the treatment programme (Kovacs, 1991). The CDI is used as a measure of depressive symptoms and also a measure of general distress by Youth Horizon Trust, as recommended in the literature for this population (Kamphaus & Frick, 2002)<sup>14</sup>. In Table 9, all of the "above average" distress group (total CDI scores of 19 and above, Kovacs, 1991) showed differences in the subscales of the data when compared with the "below average" subgroup. The involvement subscale indicated a small difference, and represents less involvement when compared with the total sample (M = 33.00, ES =.15). Small and medium differences in positive parenting (M = 25.50, ES = 0.12), poor monitoring and supervision (M = 19.50, ES = .13), inconsistent discipline (M = 11.50, ES= .45), corporal punishment (M = 18.50, ES = .30) and other discipline practices subscales were observed between the "above average" distress subgroup and the total sample. The data, as measured by the global parenting questionnaire, suggests that the greater the distress, the more parents are consistent, monitor more closely and employ alternative discipline practices in this group. Conversely the "below average" distress group only differ from the total sample on the inconsistent discipline subscale suggesting that the less distressed young people were, the less consistent parents became in this present sample. Taken together, these findings suggest there is less parental involvement in the "above average" subgroup compared to the total sample, and therefore providing partial support for Hypothesis 4.

<sup>&</sup>lt;sup>14</sup> While subscales of CDI scores have been developed, the present research used the total score interpreted as per the CDI manual (Kovacs, 1992).

Table 9

Global Parenting Constructs and Youth Distress on Child Depression Inventory at Initial Assessment

33.0 (4.24) <b>ES = 0.15</b>	34.88 (6.27) ES = 0.03	
	04.00 (0.27) 20 - 0.00	34.50 (5.76)
25.50 (6.36) <i>ES</i> = <b>0.12</b>	24.00 (3.07) ES = 0.05	24.30 (3.50)
19.50 (2.12) <i>ES</i> = <b>0 13</b>	21.25 (8.01) ES = 0.02	20.90 (7.14)
11.50 (4.95) <i>ES</i> = <b>0.45</b>	17.25 (3.41) <b>ES = 0.15</b>	16.10 (4.20)
3.50 (0.71) <i>ES</i> = <b>0.30</b>	4.50 (1.77) ES = 0.06	4.30 (1.64)
27.50 (0.70) <i>ES</i> = <b>0.51</b>	22.75 (4.49) <i>ES</i> = <b>0.11</b>	23.70 (4.45)
	19.50 (2.12) <i>ES</i> = <b>0 13</b> 11.50 (4.95) <i>ES</i> = <b>0.45</b> 3.50 (0.71) <i>ES</i> = <b>0.30</b>	19.50 (2.12) <b>ES</b> = <b>0</b> 13

Note. Means are presented with standard deviation in parenthesis.

Effect size represents differences between subgroup mean and total sample mean on the Global Parenting Questionnaire, divided by the pooled standard deviation (Rosnow & Rosental, 1996). ES in bold are those that reach the conventional classification (Cohen, 1988) r = .10 for small effects, r = .30 for medium effects, and r = 50 for effects of a large magnitude.

CDI total scores of 19 and above represent above average distress subgroup (Kovacs, 1991)

#### CHAPTER 7

#### DISCUSSION

The main objective of the present study was to conduct a preliminary investigation to examine changes in parenting practices among parents/caregivers during the course of the Youth Horizon Trust treatment intervention. The present study used questionnaires designed for use with outpatient referral services in prior research (Frick, 1991, 1994, 1999; Shelton et al., 1996). There are limitations in comparing the present study data and the parent report data of the adolescent sample from previous studies, namely, differences in the sample size and demographics. However, noting these limitations, the results showed overall scores on positive parenting indexes differed when compared with data from previous research by Frick et al. (1999). The three negative parenting subscales indicated reductions between the global questionnaire data and the telephone interview data, consistent with the previous research. The results of the present study also examined parenting practices for subgroups allocated by length of time in the treatment programme, length of home visitations, and level of distress at entry into the programme. Whilst noting methodological and sample differences, comparisons with previous research will be addressed below, followed by the implications for parenting practices on each subgroup, before outlining limitations of the present study and rationale for future research.

## 7.1 Comparison of Present Study and Previous Research

The parenting questionnaires measured two positive and three negative parenting constructs. In prior research, the parental involvement subscale data for the adolescent subgroup on both the global and telephone interview questionnaires showed similar scores, as did these two formats on the positive parenting subscale (see Frick et al., 1999). In contrast the present study obtained large differences between the global and telephone interview data on both the involvement and positive parenting subscales. The lower overall positive parenting data in the present research may be explained by the parent not complimenting, praising or rewarding good behaviour to any meaningful extent as part of parenting practices. In fact, as part of the global questionnaire responses, one of the eleven parent participants did comment that "they did not believe in praise." These results are consistent with prior New Zealand research suggesting New Zealand parents perceive praise to be unhelpful (e.g., "gives a child a swollen head", "makes them unmanageable", "spoils them", or "leads the child to expect such praise") (Ritchie & Ritchie, 1970, 1978, 1997). The Youth Horizon Trust residential caregivers' programme explicitly encourages positive praise and reinforcement for alternative behaviour as a focus of its behavioural training for parents and caregivers. The present research suggests that positive parenting in the form of praise and complements was less readily adopted by the Youth Horizon Trust programme parents in the present sample.

Additionally, as the young people are in a residential setting during the week, the three questions in the parental involvement subscale of both the global and

telephone questionnaire formats, regarding helping or attending related to the young person's school activities, may be less relevant to the present sample. Furthermore, contextual and cultural differences may explain some differences between the New Zealand and the overseas data. Nonetheless, when compared with previous data the present results indicate a similar pattern of results for the three negative parenting subscales, where lower behaviour frequencies reported by parents in the telephone interview than in the global questionnaire data are consistent with the behaviour frequencies reported between the telephone and global subscales in previous studies (Frick et al., 1996)<sup>15</sup>. This suggested improvements in parental supervision, monitoring, and consistency of discipline towards their young person, are more readily adopted than parental involvement and positive parenting, by the participants in the present study.

#### 7.2 Parenting Practices during the Three month Evaluation

Improvement in parenting practices in the present research was not consistently related to the amount of treatment time. While there was no overall relationship between the time duration of the intervention and improvement in parenting practices, there were relationships between the parenting subscales within the telephone interviews (e.g., lowered positive parenting, and increased poor monitoring and supervision). However, these relationships could be attributed to incidents of individual behaviour within a family and the small sample size which made the data very sensitive to these changes. The three month time

<sup>&</sup>lt;sup>15</sup> As noted in Chapter 6, previous New Zealand data is not included in the comparison due to only the APQ Global Parenting scale being used in that research (Murphy, 1999). The results of that prior research were not reported as subscales, but as one single parenting scale mean.

frame of the present research may not have been long enough to expect measurable changes in parenting to take place in the present sample.

### 7.3 Time in the Youth Horizon Trust Programme

The data in the present study did not consistently support more positive parenting practices among parents in the third year than the earlier years in the programme. However, the direction of changes in the second and third years indicated a trend towards increased positive parenting including reduced behaviour reported on the negative parenting subscales. The small sample size in the third year of the sample means that there can be limited confidence in concluding that positive parenting increases the longer a family are in the treatment programme.

#### 7.4 Positive Parenting at the Completion of Programme

Progress of young people through the treatment programme depended upon achievements in behavioural goals, rewarded by increased lengths of time on weekend visits home. This is irrespective of the length of time in the programme (i.e., better behaved young people had longer weekend visits and completed treatment in a shorter time frame). Families were allocated to three subgroups based on the length of their young person's weekend visits (few hours, full weekend, full-time). The full-time subgroup experienced increased monitoring and supervision, relative to the other families, while parental involvement and consistency in discipline was improved in the full weekend

subgroup. These inconsistent results may be explained by differences between the behavioural improvements experienced by young people within their highly consistent residential setting, and the distinct possibility of less consistent parenting practices in the home environment. Furthermore, less positive parental involvement was observed in the few hours subgroup, however it was expected that the involvement subscale results would be influenced by home visits of shorter duration. Overall the global questionnaire data indicated the monitoring and supervision of the fulltime subgroup was greater relative to the other families. Similarly the full weekend group indicated improvement in the parental involvement and consistency in discipline, as measured by the telephone interview data. The findings partially supported the hypothesis that parenting practices improved as the young people neared completion of the programme.

## 7.5 Distressed Young People and Positive Parenting

The data suggested that the greater the distress exhibited by the young person at entry into the treatment programme, the more consistent parents are with their discipline and the more closely monitoring and supervision occurs. The data also suggested there was an increase in alternative discipline practices relative to the less distressed group. Interestingly, the group showing the least distress experienced more inconsistent discipline from parents. One explanation for higher levels of monitoring and supervision and consistency of discipline in the most distressed group may represent a response to the level of distress parents were observing in their young person. While the level of distress of young people measured at the initial interview was not consistently

related to parenting practices, the findings provided partial support for

Hypothesis 4, in that there is less parental involvement in the above average

distress subgroup compared to the total sample.

Previous research on the adolescent age group has demonstrated that there is an association between the level of parental involvement, inconsistent discipline, poor monitoring and supervision, and the presence of conduct problems (Frick et al., 1999). Consequently, the importance of maintaining a degree of positive parental involvement, while still allowing development of some autonomy is considered highly important for the adolescent group (Patterson, 1975). Other research has also demonstrated decreases in positive parenting practices with increases in parent and child distance as the young person reaches adolescence (Paikoff & Brooks-Gunn, 1991). Furthermore, parents who initiated more positive verbal communication and physical proximity experienced young people with lower aggression and withdrawal (Pettit & Bates, 1989). Similarly, a lack of parental warmth was a significant factor for later behaviour problems (Patterson, DeBaaryshe, & Ramsey, 1989). Accepting the limitations of the present study, one plausible explanation of differences in both the parental involvement and positive parenting telephone subscales in particular, relative to previous research, is that data collection involved parents of young people in a residential setting who "earned" weekend visits contingent on their appropriate behaviour. This means that the nature of the programme requires that young people be motivated by clear behavioural consequences that result in increasing contact with their families. If this is not considered an attractive consequence, a young person may not progress through the treatment programme. Furthermore, the telephone interview on the parental involvement subscale in particular, was largely limited to questions of day to day household and family activity which participant parents in the present research were not experiencing day to day due to their young people living in residential care. This could explain the results that show differences in the involvement subscales data relative to the previous research.

### 7.6 Limitations of the Present Study.

There were several limitations in the present study, due mainly to the practical constraints of the time frame in which it was completed. The accuracy of measurements, generalizability of the data to other families, and the part time parenting that was afforded as a result of the young people being in residential care are discussed in the following section.

One limitation of the present study was the non standardized delivery of the treatment protocol in the parenting component of the Youth Horizon Trust treatment programme. This presented methodological difficulties in the accurate measurement of changes over a small time frame. Although prior research has successfully measured the effect of a similar protocol for parenting over a twelve time-week period, that research was conducted using a manualized parenting programme, and measured consistent discipline, positive reinforcement, and monitoring three weeks after placement, and at a twelve week follow-up (i.e., Fisher & Chamberlain, 2000). However, this limitation in the present study was partially overcome by the use of a global parenting questionnaire measuring parenting practices that typically occur for the family.

The global parenting questionnaire can be considered as a measure of usual practices, followed by the telephone interviews over the next four to six weeks, which measured parenting practices relating to the particular young person in the programme, as was used in prior research (Shelton et al., 1996; Frick et al., 1999).

A second limitation to accurate measurement resulted from the non manualized treatment programme at Youth Horizon Trust. The details of regular monitoring of behaviour and repeated psychometric measures of the young people were not initially specified, and therefore not requested from participants during informed consent procedures. This presented methodological difficulties in evaluating the degree of change that young people may have experienced as a result of their involvement in the programme and how these changes may have influenced the ongoing parenting. This was partially overcome by young people giving informed consent to access their initial assessment data, which enabled a measure of the distress of young people at intake into the programme and of parenting practices.

A third limitation of the present study is that the sample does not represent all families in the Youth Horizon Trust programme for young people with severe conduct disorder. The process of self-selection resulted in the majority of respondents being mothers, who may have also represented parents who were confident in exposing their parenting practices to a survey. While the results could not be generalized to the parenting practices of fathers, the small sample size was offset by obtaining a sample of parents who demonstrated a range of ages, parenting circumstances, and socio-economic groups. The small number

of participants also reduced generalizability to the overall sample of parents involved in the Youth Horizon Trust programme, and other families in the region. Furthermore, some families who initially agreed to be part of the study were not able to meet the criteria in terms of completion of the questionnaires sufficiently to be included in the data analysis. Some young people were not able to reach appropriate standards of behaviour to be rewarded with regular weekend home-visits(or they absconded). Therefore the present research was only able to include families with young people visiting most weekends, suggesting that therefore the sample is more representative of more "successful" families.

A fourth limitation of the present study resulted from participant parents having young people who were in residential care for up to three years. The questionnaire used was originally developed and used with families and children referred to an outpatient clinic and residing together. It is likely that parental involvement between the young person and their parent in the present study would not be strongly developed, as a result of time restrictions on the relationship. As acknowledged previously, several of the questions on parental involvement referred to parent activities that were less likely for the participants due to their young person being in residential care (e.g., parental help with homework, parental attendance at scouts and PTA, and other school meetings). However, the Youth Horizon Trust treatment programme has a goal to encourage whanau/family presence with the aim of enabling continuation of parental involvement during the week within the residential setting.

Consequently it is possible that parental participation in this manner may not have been adequately measured by the questionnaire in the present research.

This limitation may have also have influenced the reliability of the instrument used. Even though the APQ was used in the same way and with similar assessments, reliability scales were low in the present study.

#### 7.7 Rationale for Further Research

The present study provided preliminary evidence to support the efficacy of parenting training programmes for conduct disorder. This evaluation could have been improved by (a) a larger sample and (b) a longer sampling timeframe.

However, further research into parenting practices of parents with a young person diagnosed with severe conduct disorder is clearly warranted.

The evaluation of parenting programmes could be enhanced by a further group with young people receiving a generic intervention as a further comparison condition. The purpose of further study could involve the evaluation of the effectiveness of the parenting component within Youth Horizon Trust residential model, by comparing the treatment to a wait-list group, and a further group receiving some other treatment, such as parent management training (PMT; Bank, Patterson, & Reid, 1987). As outlined in Chapter 2, PMT is a treatment procedure in which parents are trained to alter their young person's behaviour at home (Kazdin, 1997). The procedures of PMT are based on social learning principles that are used to decrease deviant behaviour and increase pro-social behaviour. This focus develops positive behaviours through positive reinforcement. Therefore a study would be able to examine the extent to which parents participating in the Youth Horizon Trust programme demonstrated higher levels of consistent discipline, monitoring their young person's

whereabouts, and positive reinforcement, as compared to the PMT, wait list and the generic community group.

Given the known comorbidity among young people with conduct disorder, more extensive assessment and monitoring of comorbid conditions as an influence on parenting could improve the sensitivity of such programme evaluations. As outlined in Chapter 1 the presence of both ADD and conduct problems, compared to the presence of only one disorder, has been shown to be associated with the persistence of deviant behaviour and with more serious antisocial behaviour (Loeber & Keenan, 1994).

An area that has been largely neglected within the study of parenting changes is the influence of cultural and ethnic issues on parenting practices. Variation in parenting and family values among ethnic groups may influence receptivity to changes in parent-child interaction patterns (Ritchie & Ritchie, 1997). For example, the role of corporal punishment or the raising of children by extended family (Forehand & Kotchick, 1996), and the role of "multiple parents" bringing up a child as described in Polynesian society (Ritchie & Ritchie, 1983), may significantly influence the effectiveness of (western style) parenting training. Of the New Zealand parents interviewed by Ritchie and Ritchie (1978), 64% believed "smacking" was an effective way of controlling behaviour and in their study, more Maori used this form of punishment than Pakeha. More recent research by these authors, further examined the role of cultural influences in parenting (Ritchie & Ritchie, 1997). This needs further investigation within the recent New Zealand context, where frequent debate on the rights of parents to use reasonable force when disciplining children is considered.

## 7.8 Summary and Conclusions

The present study demonstrated large differences between the global questionnaire and telephone interview data on the parental involvement and positive parenting subscales, unlike that demonstrated in previous research by Shelton et al., (1996) and Frick et al., (1999) where the global and telephone interview data reflected results similar to each other on these subscales. The three negative parenting subscales however showed similarities in the present study data, to the lower behaviour frequencies reported in the telephone interview results for these parenting subscales in the previous research by Frick et al. (1999). Furthermore, while there was no overall relationship between the time duration of the intervention and improvement in parenting practice, there was a trend in the third year towards reductions in negative parenting practices and improved parental involvement, monitoring, supervision, and consistency, as young people neared completion of the programme. In addition, the young people who were most distressed at the beginning of the treatment programme had parents who indicated less involvement with their young people.

When compared to North American data, the present sample found preliminary support for the idea that there are differences in the amount of praise and compliments directed by New Zealand parents towards their young people. This preliminary finding further supports earlier New Zealand research that reflects this parenting trend (Ritchie & Ritchie, 1997). However, not withstanding methodological and sampling differences, parental monitoring and supervision, and the consistency of discipline were more similar between North American and New Zealand samples. The overall implications from the findings

are that improvement in supervision, monitoring and consistency of discipline are more readily adopted by parents in the programme than parental involvement and positive parenting.

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#### APPENDIX A

## QUESTIONNAIRE for PARENT'S STUDY

## THIS QUESTIONNARE IS CONFIDENTIAL TO THE RESEARCHER

Young Person's Name		
Parent Completing Form (Circle one)	Mother	Father
	Other	

<u>Instructions:</u> The following are a number of statements about your family. Please rate each item as to how often it *TYPICALLY* occurs in your home. The possible answers are <u>Never (1)</u>, <u>Almost Never (2)</u>, <u>Sometimes (3)</u>, <u>Often (4)</u>, <u>Always (5)</u>. <u>PLEASE ANSWER ALL ITEMS</u>.

		Never	Almost Never	Sometimes	Often	Always
1.	You have a friendly talk with your child	1	2	3	4	5
2.	You let your child know when he/she is doing a good job with something	1	2	3	4	5
3.	You threaten to punish your child and then do not actually punish him/her	1	2	3	4	5
4.	You volunteer to help with special activities that your child is involved in (such as. sports, scouts or guides, youth group)	1	2	3	4	5
5.	You reward or give something extra to your child for obeying you or behaving well	1	2	3	4	5
6.	Your child fails to leave a note or let you know where he/ she is going	1	2	3	4	5
7.	You play games or do other fun things with your child	1	2	3	4	5
8.	Your child talks you out of being punished after he/she has done something wrong	1	2	3	4	5
9.	You ask your child about his/her day at school	1	2	3	4	5

		Never	Almost Never	Sometimes	Often	Always
10.	Your child stays out in the evening past the time he/she is supposed to be home	1	2	3	4	5
11.	You help your child with his/her homework	1	2	3	4	5
12.	You feel that getting your child to obey you is more trouble than it is worth	1	2	3	4	5
13.	You compliment your child when he/she does something well	1	2	3	4	5
14.	You ask your child what his/her plans are for the coming day	1	2	3	4	5
15.	You drive your child to a special activity	1	2	3	4	5
16.	You praise your child if he/she behaves well	1	2	3	4	5
17.	Your child is out with friends you do not know	1	2	3	4	5
18.	You hug or kiss your child when he/she has done something well	1	2	3	4	5
19.	Your child goes out without a set time to be home	1	2	3	4	5
20.	You talk to your child about his/her friends	1	2	3	4	5
21.	Your child is out after dark without an adult with him/her	1	2	3	4	5
22.	You let your child out of a punishment early like lift restrictions earlier than you originally said	1	2	3	4	5
23.	Your child helps plan family activities	1	2	3	4	5
24.	You get so busy that you forget where your child is and what he/she is doing	1	2	3	4	5

	Never	Almost Never	Sometimes	Often	Always
25. Your child is not punished when he/she has done something wrong	1	2	3	4	5
26. You attend parent teacher or other meetings at your child's school	1	2	3	4	5
27. You tell your child you like it when he/she helps around the house	1	2	3	4	5
28. You don't check that you child comes home at the appointed time	1	2	3	4	5
29. You don't tell your child where you are going	1	2	3	4	5
30. Your child comes from school more than an hour past the time you expect him/her	1	2	3	4	5
31. The punishment you give your child depends on your mood	1	2	3	4	5
32. Your child is at home without supervision	1	2	3	4	5
33. You spank your child with your hand when he or she has done something wrong		2	3	4	5
34. You ignore your child when he/she is misbehaving	1	2	3	4	5
35. You slap your child when he/she has done something wrong	1	2	3	4	5
36. You take away privileges or money from your child as a punishment	1	2	3	4	5
37. You send your child to his/her room as a punishment	1	2	3	4	5
38. You hit your child with a belt, switch or other object when he/she does something wrong	n, 1	2	3	4	5
39. You yell or scream at your child when he/she has done something wrong	1	2	3	4	5
40. You calmly explain to your child wh his/her behaviour was wrong when he/she misbehaves	y 1	2	3	4	5

	Never	Almost Never	Sometimes	Often	Always
41. You use time out as a punishment	1	2	3	4	5
42. You give your child extra chores or jobs as a punishment	1	2	3	4	5

# TO FINISH OFF COULD YOU TELL ME A LITTLE BIT ABOUT YOU AND

	n non o	YOUR FAMILY	71112		
1.		licate your current parenting circumstances. Please tick <u>one</u> box ies to your family:	c that		
	1.	Parenting alone			
	2.	Two biological parents sharing parenting			
	3.	Biological parent and a step-parent			
	4.	Adoptive parent(s)			
	5.	Extended whanau/family			
	6.	Foster caregivers			
	2. Please indicate the age of your child in the Youth Horizon Trust programme:  (in years)  3. Please indicate the age of other children living with you:				
	Child 1(years) Child 2(years)				
	Child 3	(years) Child 2(years)(years) Child 4(years)(years) Child 6(years)			
4.		dicate the age of the Father of the child in Youth Horizon Trust ne (please tick box):			
5.	□ 20-29 Usual job	□ 30-39 □ 40-49 □ 50-59 □ 60-69 □ 70-79  of the Father (give description):			

<ol><li>Please indicate age of the Mother of the child in Youth Hor programme (please tick box):</li></ol>						orizon Trust
	□ 20-29	□ 30-39	□ 40-49	□ 50-59	□ 60-69	□ 70-79
7.	Usual job	of the Moth	er (give des	cription):		
8.	How many	y adults in y	our househo	old are in pa	id employm	ent?
			-	adult	s	
9.	Please ind	icate the ran	ge of your t	otal family	income:	
	Un	der \$15,000	D: 🗆			
	\$1.	5,000-\$19,9	99:			
	\$20	0,000-\$24,9	99: 🗆			
	\$2.	5,000-\$29,9	99:			
	\$30,000-\$34,999: \( \square\)					
	\$3.	5,000-\$39,9	99:			
	\$4	0,000-\$49,9	99:			
	\$5	0,000 or mo	re:			

Thank You Very Much for Your Co-Operation

# PARENT TELEPHONE INTERVIEW

Child's Name:						
Interview Number 1			2	3	4	
Parent Responding (circle one)			Mother Other		Father ver	
<u>w</u>	To be responded to by care eekend home visit by their y					
Ins	structions: (Please read the fol	lowing	stateme	ent to t	he parent).	
oft	am going to read a number of ten each thing described occur.  If you are not sure and give your best estimate"	red in th	ne past	three d	ays. That is since	
75.75	the parent does not give the nact number (eg., "Is it closer to "How many times in	o 2 or 3	") DO	NOT S	SKIP ANY ITEM.	have:"
1.	You had a friendly talk with	your c	child			
2.	You told your child that he/ something	she wa	as doin	g a go	ood job with	
3.	You threatened to punish y punish him/her	our ch	ild and	then	did not actually	
4.	You helped with a special a such as sports, scouts or g					
5.	You rewarded or gave som you or behaving well	nething	extra	to you	r child for obeying	
6.	Your child failed to leave a was going	note o	r let yo	ou kno	w where he/ she	
7.	You played a game or did	some o	other fu	ın thin	g with your child	-
8.	Your child talked you out o done something wrong	f punis	hing h	im/her	after he/she had	
9.	You asked your child about	t his/he	er day	at sch	ool	
10.	Your child stayed out past home	the tim	ne he/s	he wa	s supposed to be	
11.	You helped your child with	his/he	r home	ework		y fluide:

12.	You gave up trying to get your child to obey you because it was too much trouble	
13.	Your child did something well and you complimented him/her	2
14.	You asked your child what his/her plans were for the coming day	
15.	You drove your child to a special activity	
16.	You praised your child for behaving well	
17.	Your child was out with friends you did not know	
18.	You gave your child a hug or kiss when he/she did something well	
19.	Your child went out without a set time to be home	
20.	Your had a talk with your child about his/her friends	
21.	Your child was out after dark without an adult with him/her	
22.	You let your child out of a punishment early (like you lifted restrictions earlier than you originally said)	
23.	Your child helped plan a family activity	
24.	You got so busy that you forgot where your child was and what he/she was doing	
25.	Your child was not punished when he/she had done something wrong	
26.	You attended a parent teacher or some other meeting at your child's school	
27.	You told your child that you like it when he/she helps around the house	
28.	You didn't check that your child came home at the time he/she was supposed to	
29.	You left the house without telling your child where you were going	
30.	Your child came home from school more than an hour past the time you expected him/her	
31.	You gave your child a more severe punishment than usual because you were in a bad mood	
32.	How many hours in the last three days was your child at home without an adult with him/her	

"Now I am going to ask some questions about different methods of discipline. me how many times in the past three days, since, that you did e of the following after your child had done something wrong"				
33. Spanked your child with your hand				
34. Ignored the behaviour				
35. Slapped your child	-			
36. Took away privileges or money				
37. Sent your child to his/her room				
38. Hit your child with a belt, switch, or other object	-			
39. Yelled or screamed at your child	_			
40. Calmly explained to your child why his/her behaviour was wrong	=			
41. Used time out, that is made him/her remove themselves	-			
42. Gave your child extra chores or jobs as a punishment	-			
42. Gave your crilic extra criores or jobs as a purishment	-			
Interviewer Rating of the Accuracy of Parent's Responses				
Very Inaccurate Somewhat Inaccurate Neither Somewhat Accurate Very Accurate				

### APPENDIX B

10.06.02

### PRESENTATION TO YOUTH HORIZON TRUST CARE CO-ORDINATORS

# PROVIDE AN OVERVIEW OF THE INFORMATION AND CONSENT PROCESS FOR PARENTS AND YOUNG PEOPLE

#### BARRIERS TO PARTICIPANTS COMPLETING QUESTIONNAIRE

Information sheet will be given to the parent/caregiver by the care co-ordinator. The sheet contains a lot of information. Care will need to be taken to explain the process by going through the information sheet with the parent/caregiver. Barriers to their participation could be literacy, social class, economic status, ethnicity & family cultural differences.

Barriers envisaged by care co-ordinators?

### PROCEDURE TO ENGAGE THE PARENT/CAREGIVER

### **EMPHASIS ON:**

The use of their questionnaire responses especially the confidentiality and anonymity. The only person seeing their responses is the researcher. Care coordinators can further emphasise that they will not see the responses (until they are anonymously collated)

### PROCESS ONCE PARENT/CAREGIVER HAS AGREED TO BE INVOLVED

### Parent agreement first

Young person agreement secondly

Care co-ordinators approach the young person with a "young person /information sheet" once their parent has given their agreement to be involved. Same process /ensuring the young person is able to understand to use of their information and the confidentiality and anonymity. Care co-ordinators have the most important connection with the young person through rapport established over time.

Parent consent form signed and questionnaire completed.

The researcher requests accompanying care co-ordinators visiting the participating family, completing the consent, the questionnaire and arranging the telephone follow-up questionnaire at this visit.

### ONGOING CONTACT WITH RESEARCHER

Can come to Monday meetings when requested.

Cellphone or landline phone contact and email for questions/ clarifications especially while the information sheets are being distributed.

### APPENDIX C

### PARENTING STUDY

### CONSENT FORM

I have read the Information Sheet dated April 2002 for the study about the support and training for parents through the Youth Horizon Trust programme for young people with behaviour problems. My questions have been answered to my satisfaction and I understand that I may ask further questions at any time.

I understand that participation is voluntary and my refusal to participate or answer any questions will not affect the service I receive from Youth Horizon Trust.

I understand that my participation involves the contribution of the questionnaire responses that were completed when my child started the Youth Horizon Trust programme (this includes questionnaires my child completed). This information will only be used anonymously for this research project, and I understand all identifying information will be removed and replaced with a code before information is copied.

I agree to provide information to the researcher on the understanding that my name will not be used without permission. (The information will only be used for this research and publications arising out of this research, and my personal information will not be identifiable on any reports in this study). I understand that the questionnaires I complete will be securely stored until they have been collated and analysed and then they will be destroyed.

I have had time to consider whether to take part, and I know whom to contact if I have questions about the study. I understand the project has been approved by the Massey University Ethics Committee and also the Research Access Committee of the Department of Child, Youth and Family. This means that these Committees may check this study is running smoothly and that the study has followed appropriate ethical procedures.

I understand that complete confidentiality is ensured, and my individual responses will not be made available to my care	
coordinator.	Yes/No
I consent to providing this information anonymously for this study only.	Yes/No
I wish to have my name placed on the list to receive	
a report of the results when they are ready	Yes/No
Signed	
Signed	
Full Name	
Date	

# PARENTING STUDY INFORMATION SHEET

This study is being conducted by Sue Lawrence Masters student, through Massey University. If you would like to talk with Sue, she can be contacted through the School of Psychology, Massey University, Albany on (09) 4439799, extention 9180 or directly on 0256170284. The study is being supervised by Dr Nik Kazantzis, Lecturer at the School of Psychology, Massey University. Contact with Nik can also be made through the Massey University, Albany on (09) 4439799 extension 9098.

### What is this study about?

The aim of the study is to collect information on the parenting part of the Youth Horizon Trust programme for young people with Conduct Disorder. The results of this study will help Youth Horizon Trust to evaluate the programme they are delivering to families who have struggled with their young people's challenging behaviour. This study will contribute information to further assist parents facing parenting difficulties. Your individual responses will not be made available to care coordinator staff.

### What would you have to do?

You will have been given this information by a staff person of Youth Horizon Trust who has regular contact with you. Participation is voluntary. If you do not wish to take part in this study the service you receive from Youth Horizon Trust will not be affected. If you agree to take part you will be contacted and asked to fill out a consent form and a 15 minute questionnaire. You will also be asked to answer some questions by phone, on four occasions over the next few weeks (call will be 15 minutes). The consent form also requests your permission to access questionnaire responses that were completed upon your child's admission to Youth Horizon Trust. Identifying information will be removed and replaced with a code before the information is copied.

### If you take part in the study you have the right to

- Refuse to answer any particular question.
- Expect that your personal information will be kept confidential to the researcher and not be made available to care coordinators.
- Provide information on the understanding that it will be anonymously coded. Only anonymous data will be used for the research and subsequent publication.
- Be given a summary of the findings from the study when it is concluded.
- Ask any questions about the study that you wish (see contact number).

This project has been reviewed and approved by the Massey University Regional Human Ethics Committee, Albany Campus, Protocol MUAHEC 02/032. If you have any concerns about the conduct of this research, please contact Associate-Professor Kerry Chamberlain, Chair, Massey University Regional Ethics Committee, Albany, phone 09 4439799, email

K.Chamberlain@massey.ac.nzTHANK-YOU FOR TAKING THE TIME TO READ THIS

### APPENDIX D

#### PARENTING STUDY

## YOUNG PERSON / CONSENT FORM

I have had the Information Sheet dated April 2002 explained to me and I have a copy. I understand the study is about the support and training for parents of young people in the Youth Horizon Trust programme. My questions have been answered and I understand what I am being asked to do.

I understand that I can volunteer to share my information and my refusal to give permission will not affect the service I receive from Youth Horizon Trust.

I understand that I am being asked to share the questionnaire responses that I completed when I started the Youth Horizon Trust programme (these questionnaires will only be used anonymously for this\_research. Identifying information will be removed and replaced with a code before any information is copied)

I agree to provide my information to the researcher on the understanding that my name will not be used without permission. (The information will only be used for this research and publications arising out of this research, and my personal information will not be identifiable on any reports in this study)

I understand that my coded information will be securely stored until it has been analysed and then it will be destroyed.

I have had time to consider whether to take part, and I know who to contact if I have questions about the study. I understand the project has been approved by the Massey University Ethics Committee and also the Research Access Committee of the Department of Child, Youth and Family. This means that these Committees may check that the study is running smoothly and that it has followed appropriate ethical procedures.

•	i understand that complete confidentiality is ensured.	Y es/No
•	I consent to providing this information anonymously, and	
	for this study only.	Yes/No
•	I wish to have my name placed on the list to receive a report of the results when they are ready	Yes/No
Signed	***************************************	
Full Na	me	
Date		

### PARENTING STUDY

### YOUNG PERSON / INFORMATION SHEET

(to be read through with the young person)

This study is being done by Sue Lawrence, a Masters student at Massey University. If you would like to talk with Sue, she can be contacted through the School of Psychology, Massey University, Albany on (09) 4439799, extention 9180 or directly on 025 6170284. The study is being supervised by Dr Nik Kazantzis, Lecturer at the School of Psychology, Massey University. Contact with Nik can also be made through the Massey University Albany, (09) 4439799 extension 9098.

### What is this study about?

The aim of the study is to collect information on the parenting part of the Youth Horizon Trust programme. As part of the study, Sue would like to look at the questionnaires you and your parent(s) filled out when you first came to Youth Horizon Trust. The reason she wants to look at these early questionnaires is to understand how your parents' style of parenting related to your answers in the questionnaires. The results of this study will help let Youth Horizon Trust know how well their family programme is working. Your individual information will not be discussed with your care coordinator.

### What would you have to do?

You will have been given this information by your care co-ordinator at Youth Horizon Trust. You can choose whether or not you want to be involved in Sue's project. If you decide not to make your information available for the research, it will not affect your participation in the Youth Horizon Trust programme. If you agree to take part you will be asked to sign a consent form giving your written permission to access questionnaire responses that were completed when you first came to Youth Horizon Trust. The consent form also reminds you that the researcher will keep your information private from anyone else. Your name will be removed from any information taken or copied from the questionnaires, and replaced with a code number.

### If you take part in the study you have the right to

- Refuse to answer any particular question.
- Expect that your information will be kept confidential to the researcher
- Provide information on the understanding that it will not have your name on it.
   Only this anonymous data will be used for the research and subsequent publication.
- Be given a summary of the findings from the study when it is concluded.
- Ask any questions about the study that you wish (see contact number).

  This project has been reviewed and approved by the Massey University Regional Human Ethics Committee, Albany Campus, Protocol MUAHEC 02/032. If you have any concerns about the conduct of this research, please contact Associate-Professor Kerry Chamberlain, Chair, Massey University Regional Ethics Committee, Albany, phone 09 4439799 email K.Chamberlain@massey.ac.nz

THANK-YOU FOR TAKING THE TIME TO READ THIS