

A photograph of a gnarled, leafless tree on a rocky shore overlooking the ocean under a blue sky. The tree is the central focus, with its branches reaching across the frame. The background shows a calm sea and distant mountains under a clear blue sky. The foreground is a rocky beach.

# When the Bough Breaks

A literature based intervention strategy  
for young offenders

by Linda Zampese  
Edited by Alison Gray

**“WHEN THE BOUGH BREAKS”**  
A LITERATURE BASED INTERVENTION STRATEGY  
FOR YOUNG OFFENDERS

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## TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	1
INTRODUCTION.....	5
Methodological Considerations .....	5
YOUNG OFFENDERS - DESCRIPTIVE INFORMATION.....	7
Young Offenders Have High Rates of Offending.....	7
Reconviction Rates are High Among Young Offenders.....	7
Young Offenders Are Unresponsive to Current Interventions .....	8
Young Offenders Are Generalists .....	8
ASSESSMENT AND CLASSIFICATION OF YOUNG OFFENDERS FOR TREATMENT ....	10
Assessing Risk in Young Offenders.....	10
Assessing Criminogenic Need .....	16
Assessing Responsiveness.....	19
Summary .....	22
SPECIFIC TREATMENT PROGRAMMES.....	23
TREATMENT PROGRAMMES FOR VIOLENT YOUNG OFFENDERS.....	23
SUBSTANCE ABUSE TREATMENT FOR YOUNG OFFENDERS .....	30
WILDERNESS PROGRAMMES FOR YOUNG OFFENDERS .....	34
EDUCATIONAL/EMPLOYMENT PROGRAMMES FOR YOUNG OFFENDERS.....	39
GENERAL FINDINGS.....	42
EXEMPLARY TREATMENT PROGRAMMES .....	48
AN INTERVENTION STRATEGY FOR YOUNG OFFENDERS .....	54
COMMUNITY-BASED TREATMENTS - SUGGESTED MODELS.....	56
REFERENCES.....	57
APPENDIX ONE .....	69
APPENDIX TWO.....	79



## Executive Summary

The aim of this literature review was to determine which types of treatment are effective in reducing recidivism among young offenders. Young offenders are defined as that proportion of the New Zealand Department of Corrections offender population aged 17-20 years. The review focused on young offenders because they are widely acknowledged as being unresponsive to treatment.

The review included studies of treatment that had some effect on recidivism or had some other notable characteristic. Because there have been few well-controlled evaluations of treatment programmes for young offenders in New Zealand, most of the material refers to overseas programmes.

Offenders in the 17–20 year age group have the highest officially recorded rate of offending of all age groups in New Zealand. The type of offences they commit parallel the pattern of offending by adult offenders. Crimes of property damage and violence are increasing which suggests that more young people entering the Department of Corrections system may have a background in violent crime. Maori have the highest rate of offending followed by Pacific people and other ethnic groups. Reconviction rates are also the highest of all offender age groups, with rates being particularly high among 14-17 year olds. Young offenders tend to be generalists in that they do not show any patterns of offence type specialisation. This means that programmes targeted to particular “types” of young offender are not likely to be useful.

Three principles have been developed for classifying offenders to ensure effective rehabilitation and targeting of treatment resources. According to these principles, offenders should be classified according to risk level, criminogenic need and response to different types of treatment.

Research shows that only small proportions of youth, less than 10%, are at risk of becoming persistent offenders. The risk profile of young offenders is remarkably similar to that of adults. The key characteristics of high-risk youth appear to be:

- a history of antisocial behaviour beginning at an early age
- antisocial attitudes, values and beliefs
- antisocial associates
- problems with interpersonal relationships including indifference, poor social skills and weak affective ties
- a difficult temperament which may be aggressive, callous, impulsive or egocentric
- problems at school, work or leisure and low levels of achievement in these areas
- early and current family conditions, including low levels of affection, cohesiveness and/or monitoring and problems at home.

Risk level is generally assessed through risk assessment instruments rather than through unstructured clinical judgement. The study reviews a number of instruments and refers to the risk assessment instrument developed by the Department of Corrections Psychological Service, which will be implemented as part of the Integrated Offender Management Plan.

Criminogenic needs are those characteristics of offenders and their circumstances that will reduce recidivism if changed. The most likely targets for change include:

- antisocial attitudes and feelings
- aggressive/violent behaviours
- antisocial peer associations and behaviours
- familial affection and communication and familial monitoring and supervision
- substance abuse and dependency

Changes can be made in different ways including by:

- promoting identification with anti-criminal role models and increasing association with pro-social others
- developing non-criminal activities which provide personal, interpersonal and other rewards
- increasing academic and work skills
- attending to relapse prevention issues
- increasing self-control, self-management and problem-solving skills
- changing antisocial attitudes and beliefs
- teaching anger management and conflict resolution skills
- increasing familial cohesiveness/levels of affection within the home
- treating substance abuse
- improving motivation for change.

The report reviews a number of risk/needs classification systems and concludes that no adequate instruments have yet been developed for assessing young offenders in the New Zealand context.

Assessing offenders' likely response to different styles and modes of service involves assessing their personality characteristics, conceptual levels, neuro-psychological deficits and levels of psychopathy, anxiety and motivation as well as addressing cultural issues. The study concludes that priority should be given to developing a treatment classification system that would enable resources to be targeted to moderate and high-risk offenders.

The report reviews a variety of specific treatment programmes beginning with programmes for violent young offenders. Studies of such programmes have adopted one of four major perspectives:

- a cognitive social learning perspective
- a behaviour/skill deficit perspective
- family/systems based therapy
- institutional treatment of violent young offenders

The review concludes that community-based programmes have an advantage over institutional programmes and are particularly successful when significant others in the youths' social sphere, such as family, peers and fellow gang members, are also treated. Institution-based treatments can be effective if they adopt a cognitive-behavioural approach, attend to relapse prevention issues, have highly skilled staff, a positive peer culture and pro-social environment and provide intensive community-based supervision and reintegration services once offenders are released.

The review notes a dearth of literature on substance abuse treatments for young offenders. It concludes that cognitive-behavioural and relapse prevention-based substance abuse treatments show promise but more work is needed in developing and evaluating these interventions with young offenders.

There is a similar lack of recent research on the effectiveness of wilderness programmes for young offenders. Most of the studies using follow-up measures with comparison groups report that the effects of the intervention fade over time. The most successful programmes have an explicit focus on challenging criminogenic attitudes or teach interpersonal skills. If they are viewed as a way to enhance motivation and used in combination with other treatments, wilderness programmes may be a valuable component within a wider spectrum of treatment services.

The review notes that the outcome results of educational/employment programmes are equivocal although strongly implemented and well-run programmes may have a significant impact on offending behaviour. Work programmes should be targeted to high- risk offenders who do not have job skills. They should:

- develop practical and interpersonal skills
- be based on behaviour modification schemes
- provide work that is socially reinforcing, personally meaningful, well supervised and not a form of punishment.

The review concludes that no single form of treatment will effectively reduce recidivism among young offenders. Programmes that produce the best results:

- are based on empirically sound and clinically relevant theories of criminality
- are well structured
- have a cognitive-behavioural format
- are multi-modal
- address criminogenic needs.

Treatment needs to be comprehensive and broad-based for high-risk young offenders. The more problems predictive of re-offending interventions target, the more effective they are.

The major treatment variables associated with reduced offending include:

- longer duration of treatment and more meaningful contact
- services provided in the community
- services for higher risk cases
- treatment that attends to extra-personal circumstances such as family and peers

The review describes a number of institution-based, community-based and aftercare services for young offenders, including Intensive Supervision Programmes. Evaluations suggest that these programmes may be at least as effective as institutional care at less cost, as long as increased community corrections contact includes treatment targeting criminogenic needs. The institution versus community issue is best seen as a continuum rather than a dichotomy. Various approaches can be used in each setting and may include transition options such as community residential centres, halfway houses, day treatment centres and intensive treatment focused supervision.

Seven programmes are described in some detail as examples of different approaches to treating young offenders.

The report concludes with an intervention strategy for young offenders and suggests two models for community-based treatment: day treatment centres and a brokerage model of intensive treatment focused supervision. It notes that if secure youth units are to be established, they will only be effective if they have highly trained and well-qualified staff who are skilled in creating a pro-social environment and in consistently applying behavioural management techniques to difficult behaviours. Excellent transitional services and community aftercare will also be essential.





## Introduction

The aim of this research is to identify types of treatment that are effective in reducing re-offending by young people. Young offenders are those members of the New Zealand Department of Corrections offender population aged 17-20 years. In most research, this age group is included among either the juvenile or adult offender populations. Because treatments specifically targeting this age group are rare, the review is based on a synthesis of data from those studies considered most relevant.

This review focuses on young offenders because it is widely acknowledged that they are unresponsive to treatment, despite having the highest offending and reconviction rates of all offender age groups. If this group can be effectively treated the implications for preventing crime and victimisation and increasing community safety are obvious. Those high-risk young offenders who are treated effectively early in their offending careers are less likely to follow a criminal career and more likely to lead pro-social lives. At the very least, treatment may reduce the frequency and seriousness of their offending. The criminal activities of young offenders are often sensationalised in the media. The widespread public perception, not supported by the statistical data (see Maxwell & Morris, 1997), is that youth crime is spiraling out of control. This often means that youth take the full brunt of public demands for retribution and "get tough" approaches. Research has proved conclusively that such approaches do not reduce re-offending by young offenders (Walters, 1997) and in some instances may actually increase it. It is therefore important to document efforts at rehabilitation which have been shown to work with young offenders.

### ***Methodological Considerations***

Researchers have identified a staggering array of factors that may affect the results of scientific research. It is virtually impossible to incorporate every methodological consideration in a single study. Research into youth offending is characterised by a trade-off between scientific accuracy and the practical realities of field research involving clinical samples. This review includes those studies that appear to have addressed methodological issues satisfactorily. The plethora of literature available makes a review of this area difficult but the advent of meta-analysis<sup>1</sup>, which has been widely used in recent years, has helped to simplify the task.

Generally studies were only included in this report if they indicated some treatment effect on participants' re-offending. Again, this narrowed the field substantially. However, some research was included without recidivism data, usually because the programme was new or had achieved some other notable feat (such as high attendance rates). With one or two exceptions, mainly with wilderness programmes, there have been no well-controlled outcome evaluations of treatment programmes for young offenders in New Zealand. Interesting initiatives certainly exist and are showing promise but as yet no outcome data have been reported (an example is the Mount Roskill Community Approach Programme, Tuatasi, 1997; see also Cheer, 1995). Consequently, this research has had to rely primarily on overseas studies.

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<sup>1</sup> A meta-analysis is a review of a number of pieces of research on a given topic to identify common themes and conclusions



## Young Offenders - Descriptive Information

### ***Young Offenders Have High Rates of Offending***

Offenders in the 17-20 year age group have the highest officially recorded rate of offending. (Department of Statistics,1996). Offending in this group increased from 158 offences per 1,000 during 1986-1990 to 213 per 1,000 in 1995. The highest rate of offending for males is in the 17-20 age group, for females it is among 14-16 year-olds. Maori have the highest rate of offending for both genders in the 17-20 age group, followed by Pacific Island people then other ethnic groups. Overall crime by juveniles is increasing at a slower rate than that of adults. However, crimes of property damage and violence are increasing which suggests that more of the young people who enter the Department of Corrections system may have a background of violent crime.

The pattern of offences committed by 17-20 year-olds is similar to those committed by adult offenders. The Psychological Service analysed offence data for 14-20 year-olds for 1995 and found that of the 8434 offences committed:

- 44% were dishonesty offences
- 17.6% were violent offences
- 17.4% were driving offences
- 8.5% were drug and alcohol related offences (see Appendix One, Table 1.)

The pattern of convictions was similar for both females and males with a majority in each case being sentenced for dishonesty offences. For females, these were followed by justice, violent and then drug and alcohol offences. Driving offences were the second most common offence for males, followed by violent and drug and alcohol offences (see Appendix One, Table 2). These offence trends roughly parallel those found in the Department of Statistics official crime statistics for this age group, allowing for variations in definitions.

### ***Reconviction Rates are High Among Young Offenders***

A Psychological Service analysis of the reconviction rates of young offenders over the five-year period from 1990-1995 shows that 83% of all offenders in the 14-20 age group were reconvicted over this period. 14-17 year-olds, had the highest rates of reconviction with a slight drop off in the reconviction rate from 18 to 20 years.

#### **Age Distribution for 1990 Youth (20 and Under)**

Age	14	15	16	17	18	19	20	Total
Offenders	78	259	443	1965	2400	2416	873	8434
Percent	1%	3%	5%	23%	28%	29%	10%	100%
Reconvicted	67	229	396	1683	1972	1962	679	6988
Percent	86%	88%	89%	86%	82%	81%	78%	83%

Maori males had the highest rate of reconviction followed by Pacific Island and Caucasian males. The pattern was the same for females (see Appendix One, Table 3).

The data supported the well-established relationship between offender age and likelihood of reconviction. In the under-20 age group, a previous history of offending, a first incarceration and a previous incarceration were particularly likely to increase an offender's chance of being imprisoned again. Once he or she reached the age of 25, a first offender was very unlikely to be re-incarcerated during the five-year follow-up period (see Appendix One, Table Four).

Young offenders were most likely to be reconvicted if they received a sentence of corrective training. Across all other age groups, offenders were most likely to be reconvicted if they had received a prison sentence (see Appendix One, Table Five). With males aged 14-20 years, the time before reconviction tended to decrease as age increased. The pattern for young female offenders was more variable with no clear trend emerging (See Appendix One, Table Six).

### ***Young Offenders Are Unresponsive to Current Interventions***

Among 14-20 year-olds, offenders aged 17-19 make up the bulk of those in any sentence category. The exception is Department of Social Welfare sentences, where most of those sentenced are juveniles. In 1995, 1588 young offenders were undertaking corrective training or in prison while 4828 were on community-based sentences. During 1995, most 17-20 year-olds were sentenced to either periodic detention or loss of driver's license (see Appendix One, Table Seven). Those sent to corrective training were most commonly sentenced for property and dishonesty offenses, escapes, breaches and violence (Appendix One, Table Eight). 17-20 year-olds were most commonly imprisoned for serious violence and dishonesty offences.

The data indicate that young offenders are not particularly responsive to sentences designed to deter them from offending. Young offenders have higher reconviction rates across sentences (except life imprisonment) than all other age groups. Reconviction rates range from 81.7% for those sentenced to license loss to 93% for those sentenced to corrective training (see Appendix One, Table Five). Reconviction rates for those sentenced to corrective training were very high over the five-year follow-up period at:

- 35.9% for a subsequent assault
- 60% for burglary
- 58% for an offence of property abuse/damage
- 47% for a possession of drugs offence (see Appendix One, Table Nine).

Data from the Psychological Service's five-year reconviction study (Bakker & Riley, 1996) show that the impact of psychological treatment on offenders under 20 was minimal compared with the significant reduction in reconviction rates for those in other age groups who complete psychological treatment. The impact was greatest for those over 30.

### ***Young Offenders Are Generalists***

Research carried out both in New Zealand and overseas (Lovell & Norris, 1990; Capaldi & Patterson, 1996) shows that most young offenders commit a broad range of offences. Both recent and earlier studies confirm that the same factors predict violence, as defined by arrest records, as predict other criminal offences. Most violent acts committed by adolescent offenders appear to be part of a general involvement in criminal behaviour rather than the result of a developmental pathway to violence. According to Klein (1984), the evidence supports the general delinquency view, and is extremely weak for offence specialisation and for offending becoming progressively more serious. Lovell & Norris (1990) studied a cohort of New Zealand males born in 1957, following them from age 10 to 24. Only a small proportion of multiple offenders made the majority of their appearances for the same type of offence. When a multiple offender appeared in court for a particular type of offence, this tended to be one among a range of other types of offence which led to court appearances at different times during his offending history. The authors conclude that preventive programmes targeted at a particular "type" of offender would have limited application.

The Psychological Service's analyses of offence-related reconviction data also provide some evidence of general offending. Those youths who are convicted for a particular category of offense e.g. dishonesty, are highly likely to be reconvicted for a different type of offense e.g. violence. Young offenders initially convicted for a violent offense are slightly more likely than those initially convicted of a non-violent offense to commit another violent offense. However, they are more likely to be reconvicted for a different type of offense (see Appendix One, Table Ten).

## **ASSESSMENT AND CLASSIFICATION OF YOUNG OFFENDERS FOR TREATMENT**

The following discussion is based around three principles for classifying offenders. These have been developed by Andrews et al (1990) to ensure effective rehabilitation and targeting of treatment resources. According to the principles, assessment should:

- be based on risk level. High and intensive levels of service should be reserved for high-risk cases since research has shown that they respond best to this level of service while low-risk cases do as well, or better, with minimal service.
- be based on criminogenic need. Criminogenic needs are a subset of an offender's risk level and are characteristics which, when treated, are associated with changes in the likelihood of recidivism.
- attend to issues of different responses to treatment. Effective services are matched to the learning styles and abilities of offenders.

### ***Assessing Risk in Young Offenders***

The high offending rate of New Zealand's young offender population is typical of the situation in most western nations in recent years. The rates for both prevalence and incidence of offending in the west appear highest during adolescence, peaking sharply around age 17, with a substantial drop off in young adulthood. By the early twenties the number of active offenders decreases by about 50%. By age 28 about 85% of former delinquents have stopped offending (Farrington, 1986; Blumstein & Cohen, 1987; Freeman, 1996). Hence, while many youth in the 17-20 age group are offending, only a small percentage are at high risk of continued recidivism. According to Moffitt (1994), the high rate of adolescent delinquency conceals two distinct categories of offenders, each with a unique history and set of causes and a different level of risk. The two categories are:

- life course persistent – that is, children whose early neuro-psychological problems interact with their criminogenic environment throughout their development, resulting in a strongly antisocial personality. In Moffitt's view, these individuals engage in antisocial behaviour at every stage of the life course and are usually high-risk recidivist offenders who are difficult to treat.
- adolescent-limited - these individuals have little serious history of childhood antisocial behaviour, but are encouraged by the extended time span of adolescence in the late twentieth century to mimic antisocial behaviour in their teens as a way to enhance their adult status. They are probably at low risk of becoming chronic offenders and research has shown that, if left untreated, their behaviour will often improve naturally within a short time. Offending in adolescence is normal – most teenagers do it at some time – but because they are low risk they do not persist.

Blumstein & Cohen (1987) also identified two groups of young offenders with different risk levels and labelled them "desisters" and "persisters". In Lovell & Norris' (1990) longitudinal study of a cohort of New Zealand males born in 1957, persistent offenders made up just 6.5% of those who appeared in court once or more over the 24-year study period. However, they accounted for nearly a third of the appearances resulting in custodial outcomes and for nearly half of the appearances resulting in semi-custodial outcomes. The authors found little evidence that offending by this persistent group was decreasing by the end of the follow-up period. Clearly, it is important to identify these high-risk youths so that they receive the bulk of treatment resources and to avoid the inefficient targeting of treatment to low risk offenders, for whom improvement may occur naturally.

Various researchers have tried to establish the predictors of high-risk youth. After reviewing the findings of longitudinal research (including the Dunedin based

Multidisciplinary Health and Development Study) Moffitt (1994) concluded that the high-risk individual will show antisocial behaviour that:

- begins during childhood
- is sustained across time and circumstances
- is frequent and varied
- is aggressive and predatory
- does not depend on peer support.

Farrington's (1995) longitudinal research carried out in England concluded that the best predictors of chronic offending are:

- early conduct problems and aggressiveness in early adolescence
- poor educational performance
- juvenile arrest
- seriousness of offending
- individual family variables such as poor parental supervision and lack of discipline.

At age 18 high-risk young offenders in this study had a record of school failure, tended to be substance abusers, had antisocial peers and were sexually promiscuous.

Elliott, Huizinga & Ageton (1985) used a longitudinal design with a representative sample of adolescents to assess the psychosocial determinants of antisocial behaviour. Using path analysis, they showed that prior delinquency and current involvement with delinquent peers were the only variables that directly affected offending behaviour. This was true for both genders and across different types of offending. Two additional variables, bonding to family and to school, indirectly influenced offending behaviour by affecting adolescents' involvement with delinquent peers. Together the four variables accounted for 52% of the variance in predicting general delinquency.

Patterson and his colleagues (Patterson & Dishion, 1985; Patterson & Stouthamer-Loeber, 1984) used a cross-sectional design to test the hypothesis that antisocial behaviour is directly linked to poor family management skills, involvement with deviant peers, and poor academic skills. They used structural modelling analyses to reveal a direct link between these variables and antisocial behaviour. Morash (1986) showed that the variable, 'delinquent orientation of peers', was the single strongest correlate of delinquent activity. Cochran & Bo (1989) found that time spent with peers was the strongest of a set of correlates.

Numerous studies confirm a link between antisocial/procriminal attitudes and values and delinquent behaviour. Goldsmith et al (1989) were able to distinguish between delinquent and non-delinquent youths by their differing evaluations of delinquent acts and by measuring value orientations and goal priorities. Guerra (1989) investigated the extent to which young people assess the consequences of deviant behaviour. She found that antisocial youths minimised the importance, probability and severity of the consequences of their deviant and illegal actions. The Canadian "Youth at Risk" study carried out by Leschied et al (1993) reviewed the prediction literature for young offenders. It identified five major predictors of recidivist offending behaviour:

- early and generalised problematic behaviours
- weak attachment to ties of convention (family, school, peers)
- low levels of involvement in conventional pursuits
- delinquent associates
- antisocial attitudes, feelings, and thoughts.

There is some disagreement among researchers as to whether neuro-psychological deficits are significant risk factors for offending. Some assign them a major, and some a



minor, role. However, research suggests that the emergence of antisocial behaviour at the preschool stage is linked to neuro-psychological dysfunction that shows up as poor scores on tests of language and self-control. This is also an indicator that such behaviour will persist. Moffitt (1993) states that the link between verbal impairment and antisocial outcome is one of the largest and most robust effects in the study of antisocial behaviour.

The lack of clarity surrounding the role of neuro-psychological deficits as risk factors may relate to the unsound methodology of many neuro-psychological studies. They are often poorly controlled, attempt to compare heterogeneous populations and have simplistic definitions of the criterion variables. There is some support for a relationship between attention-deficit hyperactivity disorder (ADD) and adolescent offending. However, the combination of conduct disorder and ADD may be a critical factor in identifying high-risk young offenders. Moffitt (1990) found that antisocial behaviour began earlier in boys with both ADD and self-reported delinquency than those with only self-reported delinquency. Evidence from other researchers supports this contention (Wierson et al, 1992). It is unlikely, however, that a general classification assessment would include an in-depth assessment of neuro-psychological functioning. However, certain factors could be broadly assessed to indicate possible problems. These include:

- a history of brain trauma, accident or injury
- poor school performance
- poor concentration
- impulsiveness
- specific learning disabilities.

This would determine whether a young offender needed specialist assessment of neuro-psychological functioning prior to treatment.

Mental illness is often considered to be a risk factor for young offenders, many of whom are viewed as having "emotional" or "mental health" problems. Relatively few studies have investigated how many mentally disordered young offenders there are, with most being limited to adults. Wierson et al (1992) reviewed the literature on the incidence of mental disorder in young offenders and found high rates of major affective disorders (ranging from 10-30%) in incarcerated juvenile delinquents in the United States. The rates were significantly higher than lifetime prevalence rates for such disorders in the general American population. Brinded et al (1996) carried out a pilot epidemiological study among prison inmates in New Zealand (including 10 offenders aged 17-19). They found levels of major depression twice that of the general population as well as high levels of bipolar illness.

Literature is building on a link between depression and crime. Researchers suggest a variety of ways in which adolescent depression may increase the potential for criminal conduct. For example, depression among young people may:

- be associated with alienation from the family. Reduced parental attachment and supervision may result in an increase in antisocial behaviour (Malmquist, 1971)
- lead to increased substance abuse and association with drug-using others (Lempers et al, 1989)
- weaken general problem-solving abilities and increase young people's sense of persecution, thereby increasing the risk of illegal conduct (Sas & Jaffe, 1986).

Reactive depression may be evident in particularly aggressive hostile cases, including homicide (Malmquist, 1990).

Brinded et al's (1996) results showed that 51% of sentenced females, 43% of sentenced males and 33% of remand males had attempted suicide during their lifetimes. This compared with results from the Canterbury Suicide Study (Beautrais et al, 1994) of around 4% for the general population. In a Canadian Youth Management study of a

sample of incarcerated young offenders, Wormith (1995) reported that females were more often assessed as being at risk of self-harm, due to their increased rates of suicide/self-injury. These rates were around 20% compared to 9.4% for male youths. Given New Zealand's extremely high youth suicide rate, young offenders in this country may need to be especially carefully assessed for mood and suicide potential.

Wierson (1992) reported that the prevalence of psychotic disturbance and schizophrenic spectrum disorders among young offenders is not clear. Many may be in the prodromal phase (i.e. showing symptoms of an approaching disease) of such disorders, which makes them more difficult to detect. Wierson suggests that approximately 1% of high-risk young offenders may be schizophrenic, a result not much different from the general population rate which ranges from 0.2 -1%. There are no thorough epidemiological studies of anxiety disorders in the offender population. However, Brinded et al's (1996) New Zealand pilot study found very low rates of anxiety disorders among their mainly adult sample of the prison population.

Most research indicates a high prevalence of personality disorders among young offenders. This is particularly so for antisocial and other Cluster B personality disorders (narcissistic, borderline, histrionic). However, adolescent populations in general tend to exhibit symptoms of personality disorder due to the nature of the developmental period. Researchers estimating rates of personality disorder in this age group need to exercise caution.

Conduct disorder is extremely common in young offender populations. McClure et al (cited in Andrews et al, 1992) investigated the incidence of mental disorder in a survey of over 350 children and youth in residential care in Canada. McClure et al found that all of the young people they found in open custody settings met the criteria for conduct disorder. Compared to all other types of settings (e.g. emergency homes, treatment centres, transition homes) the open custody residents received the highest mean conduct disorder scores and the lowest mean emotional disorder scores. These findings are interesting in that they demonstrate that traditional mental health constructs such as "conduct disorder" or "antisocial personality" are less useful in making treatment decisions for young people since everyone has a conduct or antisocial personality disorder at the deep (i.e. custody) levels of criminal justice processing. However, assessments of antisocial personality/ conduct disorder do distinguish between offenders and non-offenders and can predict future criminal behaviour as well or better than many other measures. Assessments of psychopathic personality disorder are even more useful as predictors of criminality. Evidence suggests that a diagnosis of psychopathy is associated with increased risk of recidivism, and of violent re-offending in particular (Harris, Rice & Cormier, 1991). Assessments of psychopathy are especially useful for predicting difference in risk within offender samples.

Wierson et al (1992) note that there is some support for a higher prevalence of intellectual impairment among young offenders compared to non-offenders. The authors recommend further research into the prevalence of mental retardation and borderline cognitive functioning in the young offender population.

Most studies of offender populations (Whitney, 1992; Brinded et al, 1996) report high prevalence rates for substance abuse. Later drug use is consistently associated with varied and frequent early antisocial behaviour (Greenwood, 1992; Kandel et al, 1986). Conduct and antisocial personality disorders are strongly associated with substance abuse in incarcerated delinquents. Most researchers agree that where juvenile delinquency and substance abuse coexist, the former precedes the latter and both indicate an underlying propensity for antisocial behaviour. For example, in Kandel et al's (1986) study, delinquency was a much stronger predictor of illicit drug use than vice versa.

While there is little evidence that substance use leads to offending, serious drug use (such as intravenous use) may be a causal factor in some individuals' offending. In addition, serious drug use may be associated with maintaining offending behaviour in youth as well as with prolonged serious offending. There also seems to be a clear link between substance abuse and suicidal behaviour in young persons. Hoberman & Garfinkel (1988) reported a history of substance abuse in from 30-40% of their sample of adolescent suicides. It is not yet clear, however, whether the substance abuse contributes directly to the behaviour or is associated with other factors related to suicide.

Researchers have also explored the relationship between childhood neglect and abuse and subsequent offending. While family variables generally predict antisocial behaviour, the more extreme problems of abuse and neglect may be especially relevant to predicting high risk or chronic offending behaviour. Rates of official juvenile offending ranging from 14 - 32% have been reported for victims of child abuse (Lewis, Mallough & Webb, 1989). This contrasts with a base delinquency rate of 1.3 - 3.75% in the general population (Griffen & Griffen, 1978). Retrospective studies, which use self-reports to compare rates of offending for samples of young offenders and non-offenders, have found a strong link between abuse and offending. Lewis, Mallough & Webb (1989) reviewed studies with large samples of young offenders and reported incidences of abuse ranging from 26 - 84%. West & Farrington's (1973) data from their longitudinal study showed that 62% of the violent boys had been exposed to harsh parental discipline, compared with 33% of the non-violent delinquent boys and 7% of the non-offending subjects. Similarly, Welsh (1976) found a significant relation between severity of physical punishment in the home and degree of aggressiveness in the subjects' offending. The research supports a link between physical abuse and neglect and the propensity to commit antisocial, and particularly, violent antisocial acts. However, a range of variables may mediate the abuse-delinquency link. These include the temperament of the child, his or her neuro-psychological status, the availability of support and the presence of parental psychopathology (Salmelainen, 1996).

Some researchers suggest that aggression combined with social withdrawal or shyness signals a greater potential for deviance than aggression or shyness on their own. Andrews, Leschied (1992) state that notable risk factors include early involvement in deviant pursuits without peer support, and early experimentation with breaking rules during periods of psychological distress. Moffitt (1994) agrees, regarding an early history of antisocial behaviour combined with peer rejection and social isolation as a strong predictor of high risk in young persons.

Fagan (1991) asks the question "In mentally disordered offenders do we treat mental illness or the social development variables that underlie much delinquent behaviour?" (p. 49). Having a mental disorder may insulate some people from criminal behaviour. However, recidivism among offenders with mental disorders correlates positively with juvenile delinquency and an antisocial personality (Gendreau, Little & Goggin, 1996). "Most of the mentally-disordered inmates with antisocial personality disorder reported having a juvenile record, and they were younger when first incarcerated than the mentally-disordered inmates without antisocial personality disorder" (Hodgins, Cote, 1993, p.125).

In their meta-analysis of the predictors of recidivism, Gendreau, Little & Goggin (1996) reported that personal distress (including low self-esteem and depression/worry) and psychiatric symptoms were weak predictors of recidivism. In their view, programmes that insist on alleviating offenders' personal distress will have little success in reducing recidivism. Several researchers have noted that children with "emotional problems" without conduct disorder are less likely to become antisocial, maladapted, or delinquent (Loeber & Stouthamer-Loeber, 1987). These findings suggest that the risk assessment protocol for mentally-disordered young offenders should be the same as for those without a mental

disorder. Assessing and treating the antisocial propensities of such offenders will be most effective in reducing the likelihood of recidivism. However, assessors would need to note the presence of some form of mental disorder, which should be treated for humane reasons. The disorder could also impair the offender's problem-solving ability and affect their response to treatment. Programmes should anticipate several types of youth - those whose needs emphasise mental health care (the more severely mentally-disordered youth) and those for whom mental health care is an adjunct to treatment aimed at reducing their offending.

Researchers generally agree on the characteristics of youth at risk for becoming chronic offenders. The risk profile of young offenders is remarkably similar to that of adults. In meta-analyses, the ranking of predictors for adults and juveniles has been virtually identical (Loeber & Stouthamer-Loeber, 1987; Simourd & Andrews, 1994). This is perhaps not surprising if we consider recent longitudinal research which demonstrates the stability of the antisocial syndrome over a lifetime. Generally, research indicates that the key characteristics of high-risk youth are:

- a history of antisocial behaviour beginning at an early age
- antisocial attitudes, values and beliefs
- antisocial associates
- problems with interpersonal relationships (indifference, poor social skills, weak affective ties)
- a difficult temperament i.e. aggressive, callous, impulsive, egocentric
- problems at school, work or leisure and low levels of achievement in these areas
- early and current family conditions (low levels of affection, cohesiveness and/or monitoring, problems at home).

Predictors of risk can be assessed in two ways: by using standardised instruments or by using professional or clinical judgement. Using risk assessment instruments is considered more valuable than using unstructured clinical judgement. The Canadian Community and Social Services developed a procedure for evaluating risk called the Youth Management Assessment Procedure (Wormith, 1995). Staff complete a form for all young offenders entering residence to help identify their potential risk to the community. Wormith's study identified a range of risk factors in a residential sample of Ontario young offenders. He assessed the validity of each factor, and their aggregate, for predicting offenders' adjustment to the programme and their re-offending. In descending order of frequency (high to low), the four most frequently cited risk indicators were: sexually/physically aggressive; escape from custody; assault on an authority figure; conviction for a violent offense. The total interim risk score predicted adjustment both in-programme and during the follow-up period. Previous suicide attempts predicted later self-destructive behaviour and assault on an authority figure and escape from custody predicted later aggressive behaviour. However, case manager estimates of risk were a better predictor of re-offending than the individual factors or total risk score, indicating the usefulness of clinical judgement in this setting. Clearly, the Youth Management Assessment Procedure has shown some success in identifying certain static predictors of risk for youth in institutional settings in Canada.

Bakker & Riley (1996) of the Department of Corrections Psychological Service have developed a risk prediction instrument based on static predictors (age, gender, race, criminal history) which is similarly accurate in predicting risk in young and adult offenders. This instrument will be implemented as part of the Department of Corrections Integrated Offender Management Plan. This means the Department does not need to import or develop a static risk assessment instrument especially for young offenders. However, staff will still need to be able to perform a systematic assessment that takes account of more than static predictors in determining the risk level of young offenders.

Appendix Two lists the full range of risk/need factors for assessment and associated interventions.

Many instruments are available for assessing behavioural difficulties that may indicate delinquency in young people (Millon Clinical Multi-Axial Inventory for Adolescents, Achenbach, Wisconsin Juvenile Probation and Aftercare Risk Instrument). However, most are individualised and diagnostic in nature and/or do not adequately assess the full range of factors associated with risk of recidivism. Shields (1993) developed the Young Offender Level of Service Inventory (YO-LSI), based on the Level of Supervision Inventory, to assess a wide range of factors associated with risk in adolescents. The YO-LSI is a structured interview that asks the young offender about 76 problem areas. It takes approximately 30 minutes to administer. The higher the score, the higher is the offender's risk or propensity to break rules. The instrument groups items into seven sub-tests which assess criminal history, substance abuse, education/employment problems, family problems, peer relation problems, accommodation problems, and psychological variables. The norms in the YO-LSI are based on individual administration of the test to approximately 1000 adolescents aged 12 –17. It has subsequently been extended for use with 18 year-olds. Evidence to date suggests that the YO-LSI is effective in predicting "predatory" behaviour among incarcerated young offenders (Shields & Simourd, 1991). In a one-year follow-up study of 162 young offenders released from incarceration, YO-LSI scores predicted recidivism (Shields, 1993).

### ***Assessing Criminogenic Need***

Criminogenic needs, or dynamic predictors of risk, are those characteristics of offenders and their circumstances that, if changed, actually reduce recidivism. While the YO-LSI described above identifies groups of at-risk individuals (i.e. low, medium, high), offenders within risk groups may have different criminogenic needs. Instruments that assess dynamic predictors of risk need to be developed. The number and density of criminogenic needs may influence the probability of offending behaviour. High-risk groups will tend to have multiple criminogenic needs, moderate-risk groups will have fewer and low-risk fewer still. Moffitt (1994) suggests that youths who fall into the moderate-risk category are likely to be 'adolescent-limited' individuals who have been trapped by the damaging consequences of teen forays into delinquency. For example, young people will need extra effort and time to escape from the effects of a drug habit, an incarceration, interrupted education or a teen pregnancy. In Moffitt's view, these youths have the resources to stop offending eventually as they do not have the personality disorders and cognitive deficits that characterise high-risk individuals. This research implies that treatment focused on the criminogenic needs of moderate risk individuals should aim at remedying the damaging effects of their adolescent behaviour. This may help them stop offending earlier than if left to their own devices.

Current literature (Andrews & Bonta, 1994; McLaren,1992) suggests that the most likely targets for change (i.e. criminogenic needs) are:

- antisocial attitudes and feelings
- aggressive/violent behaviour
- antisocial peer associations
- affection/communication within the family and familial monitoring and supervision
- substance abuse and dependency
- academic and work skills

Change can be achieved by:

- improving pro-social bonding
- replacing antisocial with pro-social behaviours
- promoting identification/association with anti-criminal role models
- attending to relapse prevention issues
- increasing self-control, self-management and problem-solving skills

- improving motivation for change
- developing non-criminal activities which provide personal, interpersonal and other rewards.

Shields (1993) states that current risk/needs assessment instruments emphasise the concerns of adult offenders (e.g. marital and financial problems) at the expense of concerns more germane to adolescents (e.g. conflict with parents). At present we know little about how the criminogenic needs of young offenders differ from those of adults. Given that adolescence is a stage of identity formation, interventions designed to promote identification with pro-social persons, values and behaviours may be most effective at this time. However, there is little literature that looks specifically at how to facilitate pro-social bonding in offenders. Farrington (1992) notes that a developmental focus in research would help to determine which particular factors are associated with stopping offending in adolescence.

When Mulvey & LaRosa (1986) investigated stopping offending in a study of 15-20 year-old males, they found that this occurred as part of broad-based behavioural change. The shift was a result of attempts to force a number of behavioural changes at the same time, for example, decreasing drug use and making an earnest effort to find a job. Many of the "problem" youths who stopped offending identified cognitive change as a precursor to behavioural change. The authors concluded that interventions that target several areas of criminogenic need at once may be the best way to foster the type of broad-based progress reported by these youths. Research has shown that even with a high-risk group, favourable development is more likely to happen when certain social or personal resources are available (Rutter, 1985; Losel, 1994). The former can be a positive reference person, social support from non-deviant people or adequate education; the latter may include cognitive abilities, temperament characteristics and the experience of being successful in pro-social activities. The development of these personal resources is likely to address primary criminogenic needs of young offenders and represents an important focus for treatment programmes.

The literature supports giving priority to changing antisocial behaviours, feelings and thoughts and increasing the pro-social involvement of high-risk young offenders (Eron & Huesman, 1984; Borduin & Henggeler, 1990). Given that antisocial attitudes and thoughts have such a robust association with recidivism (Hoge, Andrews & Leschied, 1994) instruments that reliably assess antisocial thinking in young offenders would be valuable. To date only a few such instruments have been developed. Gibbs (1996) developed the "How I Think" (HIT) questionnaire for use in a socio-moral group treatment programme. The HIT questionnaire can be used as either an assessment or a teaching tool for four categories of thinking errors or cognitive distortions in youth. The HIT is currently in the early stages of development and validation. Shields & Whitehall (1994) have developed a Neutralisation Scale to assess thoughts differentiating recidivist from non-recidivist offenders. These thoughts include denying injury to others, denying the victim, condemning the accusers, and appeals to higher loyalties. Initial studies show that this scale is reliable and valid in terms of its internal consistency and relationship to other measures of a propensity toward antisocial behaviour. It is able to differentiate between delinquents and non-delinquents and predict subsequent recidivism among incarcerated young offenders (both while they are in institutions and during a one-year post-discharge follow-up).

Other instruments have been used to assess aspects of socio-moral competence in young offenders. They include the Adolescent Problems Inventory (API) and the Social Reflection Questionnaire. Various analyses show that the API has acceptable levels of reliability and validity (Freedman, et al, 1978; Simonian et al, 1991). A form developed for use with female young offenders (Gaffney & McFall, 1981) demonstrated similar

psychometric properties to the original API, which was developed for use with males. The Social Reflection Questionnaire - Short Form (SRM-SF) has had its psychometric properties investigated by Basinger et al (1995). However, both these instruments measure only a particular aspect of risk (e.g. antisocial thoughts, lack of social skills) and it is difficult to determine whether they could be adapted and used as part of a more general risk/needs classification system. They certainly appear to be helpful evaluation devices for use in particular treatment programmes.

Simourd, Hoge et al (1994) sought to promote the design of a case classification system which would assess a broad range of risk/need factors. They developed an empirically-based typology of Canadian young offenders based on the Young Offenders-Level of Service Inventory (YO-LSI) outlined earlier. Cluster analysis of scores on the YO-LSI yielded five unique types of young offenders:

- the low risk type comprised approximately 45% of the sample and had uniformly-depressed YO-LSI scores and a relatively benign criminal conduct pattern.
- the high risk/needs type comprised approximately 31% of the sample and had high scores on most YO-LSI subtotals with peaks on attitude, family and delinquent history. Their criminal conduct pattern showed that this type included the more serious offenders.
- the "difficulties in the community" type comprised approximately 10% of the sample. The YO-LSI profile suggests this type of individual has personality problems, associates with a negative peer group, uses leisure time unproductively and has problems in school. In terms of criminal conduct, this type had a low number of offences but was one of the most violent. Offenders had a high probability for recidivism, particularly violent recidivism.
- the "family and personal distress" type comprised approximately 7% of the sample and had high YO-LSI scores on family finances and personality.

These findings are preliminary and obviously require further exploration through replications of the study. The typology suggests different young offender groups with different criminogenic needs, although the authors do not discuss the treatment implications of their findings. The usefulness of the typology in clinical practice needs to be examined, especially as other authors have documented the pitfalls of attempting to establish typologies of offenders.

Dembo et al (1996) have also tried to develop a prediction and classification system for high-risk youth in Florida. They developed the Problem Oriented Screening Instrument for Teenagers (POSIT) which was administered to over 2,000 youth (12-19 years of age) at a juvenile assessment centre. They assessed youths' potential problems in 10 psychosocial areas of functioning (substance use, physical/mental health status, family relationships, peer relationships, educational and vocational status, social skills, leisure/recreation, aggressive behaviour and delinquency) and identified four groups of young offenders according to severity of difficulties. A discriminant analysis supported the usefulness of the typology. Youths identified as having the most problems re-offended the most during follow-up. The researchers noted that substance use/misuse was a more salient indicator of recidivism among youths with severe problems than extreme educational or mental health problems. The POSIT appears to have some value as a risk/needs instrument for young offenders. Again it requires further validation and its usefulness in targeting treatment is unclear.

While some promising developments are under way, there is no adequate risk/needs classification system for young offenders. Both the YO-LSI and the POSIT show promise but neither has been validated under New Zealand conditions. It is unclear whether they adequately assess the full range of criminogenic needs important in young offenders.

Such an instrument needs to be developed and validated for use within the New Zealand context.

### ***Assessing Responsiveness***

This classification principle has to do with the response of offenders to different styles and modes of service. The impact of any intervention is the result of an interaction between offender characteristics and treatment types yet most evaluations of treatment effectiveness treat young offenders as a single, homogeneous category.

A limited amount of research has attempted to relate **personality characteristics** to youth offending. Studies analysing data from behavioural checklists (Mulvey, Arthur & Repucci, 1993) have typically revealed four categories of young offender:

- the “unsocialised aggressives” are most problematic in terms of behaviour within an institution, recidivism and risk for adult criminality. These youth appear to be less responsive to external stimuli, less empathic to others and in greater need of sensory reward (novelty seeking).
- the “socialised aggressives” appear to be particularly responsive to peer pressure and may be the most responsive to treatment
- “attention deficit” and
- “anxious/withdrawn” youths fall somewhere in the middle in terms of response to treatment.

Research rooted in the California Interpersonal Maturity Level (I level) system of the 1970s found three similar subtypes of delinquents - passive conformist, power-oriented and neurotic. Van Voorhis' (1988) research attempted to explore the construct and predictive validity of five offender personality classification systems. He found statistical agreement among systems on dimensions relating to cognitive maturity, neurosis and criminal orientation. He found no agreement on more finely grained dimensions of criminal behaviour (e.g. sub-cultural, aggressive psychopath, manipulator). Instead, the systems identified a serious, committed offender type through a combination of these factors.

In making this identification, these personality classification systems may, in different ways, be measuring some aspect of the psychopathic personality. There is now no question that a diagnosis of **psychopathy** is a valid predictor for risk of recidivism. Researchers have found psychopathy to be a valid construct in young persons as it is in adults. Work has begun on a youth version (the PCL-YV) of the psychometrically sound Psychopathy Checklist-Revised (PCL-R) to assess youths from 13 - 17 years of age (Forth, Hart et al, 1990). The PCL-R screening version (PCL-SV) can be used for those aged 16 and upwards. It should probably be given routinely to young offenders entering treatment programmes. This would provide information on which treatments may be effective with psychopathic individuals and would ensure that their general unresponsiveness to treatment does not bias outcome evaluation results. This is particularly important given that there are likely to be increased numbers of them in any programme aimed at high-risk individuals.

Findings based on the early young offender personality classification systems were influential in promoting treatment efforts with young offenders in the United States. In the Preston Typology Study, Jessness (1971) assigned institutionalised delinquents to one of six living units depending on their I-Level (interpersonal maturity level). The units differed in the personality characteristics of the staff and their approach to helping offenders. For example, in one that housed the manipulators, the staff were sensitive to manipulation, and the programme used a token economy to shape behaviour and had strict rules. The few studies evaluating this matching principle have been quite encouraging in terms of the



in-programme management of young offenders and recidivism rates (Andrews, Bonta & Hoge, 1990).

The Conceptual-Level Matching Model (CLMM) is similar to I-Level and estimates a young offender's cognitive ability within the social domain. Reitsma-Street & Leschied (1988) report their findings on the validity of conceptual level within primarily young male offender populations. Overall, lower conceptual level offenders displayed greater asocial, impulsive, aggressive and less problem-solving types of behaviour. Higher conceptual level offenders used more socialised, complex and independent approaches to conflict or in interpersonal situations. They concluded that there was adequate theoretical, practical and empirical work to continue applying conceptual level matching in designing rehabilitation programmes with young offenders.

Researchers using findings based on the Conceptual Level system and I-level systems have suggested that young offenders functioning at **low conceptual levels** respond best to structured programmes. Indeed, low conceptual level can probably now be regarded as both a risk factor (since it indicates cognitive deficits) and a responsiveness factor (Reitsma-Street & Leschied, 1988). Andrews et al (1990) recommend that services with low structure (i.e. styles and types of service that are interpersonally and verbally demanding and that depend upon self-regulation, self-reflection, and interpersonal sensitivity) should only be used with those offenders who present relatively high levels of interpersonal and conceptual functioning. The evidence regarding the effectiveness of "high structure" for low functioning cases is strong. Ross & Fabiano (1985) consider it essential that classifying offenders according to their programme needs should be based on a system that pinpoints the offender's specific cognitive deficits more clearly than the I-level or conceptual level systems. They recommend that each offender be given a battery of cognitive tests to assess a wide range of socio-cognitive functions so that interventions may be more specifically tailored to individuals' needs. Some programme designers have based treatments around teaching methods especially tailored to remedy neuropsychological deficits (in particular verbal deficits) in high-risk youth. These programmes tend to emphasise concrete and visual types of learning using modelling, role play, action methods, behavioural rehearsal, interesting games and other practical activities.

Other research (Sarason & Ganzer, 1973; Andrews, 1980) has looked at the interaction of **anxiety** and the level of interpersonal and intrapersonal confrontation involved in treatment. Anxious individuals appear to be less able to respond to stressful interpersonal confrontation of the kind that which may occur in group treatments. Other less anxious individuals may profit from this. It may be particularly appropriate to assess anxiety for those young offenders being considered for group treatments.

Simourd & Andrews (1994) reviewed the research examining the relationship between offending and **gender**. They found that the predictors of male and female delinquency were the same and that no risk factor was more important for a particular gender. Given the high reconviction rates of New Zealand's young female offenders, designing effective treatments for this group may be a useful focus for research. Albrecht (1995) suggests that the Interpersonal Maturity Classification System (I-Level) is particularly useful in working with young women. It is based on a developmental model derived from a theory of interpersonal maturity that is more consistent with what is known about girls' development. Chesney-Lind (1992) suggests that treatment for female young offenders should target issues such as sexual abuse, rape, violence in teenage sexual relationships, and pay attention to the special problems that girls face in housing and employment. She considers that building skills, particularly in the area of employment, should be a major part of the programme and programmes should meet the needs of young women who cannot safely return to their families.

Any treatment programme aimed at young offenders in New Zealand must address major **cultural** considerations, particularly as large numbers of young offenders are Maori. The Psychological Service Bicultural Therapy Project initiated in Auckland and the phase three model of Montgomery House are examples of collaborative efforts in treatment between Maori and Pakeha which appear to have been successful. If this group of young offenders' responsiveness to treatment is to increase, it is necessary to provide treatment which is culturally appropriate and addresses the special needs of Maori youth (including loss of culture and alienation). Such treatment needs to be devised in consultation and collaboration with Maori.

**Motivation** is clearly of major importance in determining an offender's responsiveness to treatment interventions. Young offenders can generally be characterised as a highly resistant group. Typically, they see little need to modify their behaviour and are unwilling to take responsibility for change. They view their offending as something they are good at, a skilled behaviour that brings tangible rewards. The development of techniques such as motivational interviewing offers practitioners a way to engage and work with client resistance. Hollin (1994) notes that practitioners would welcome the application and refinement of this technique with the young offender population. Harris (1991/1995) has identified different functions of resisting treatment and suggests techniques to deal with these. He recommends:

- setting expectations and providing structure
- maximising choice and minimising demand,
- allowing clients to save face
- stimulating clients to think
- piquing curiosity
- creating optimum anxiety to stimulate self-examination
- timing interventions for critical moments
- using nonverbal techniques.

Motivation is also likely to be increased by the use of strategies (outlined earlier) to match teaching styles with the learning abilities of young offenders. Non-verbal learning and action methods may be useful in engaging verbally deficient youth in treatment. In Goldstein & Glick's (1995) research projects, young offenders were given extrinsic motivators such as money, food, movie privileges and specially designed "angerbuster" T-shirts when they deserved them. Goldstein & Glick noted that for the young offenders intrinsic motivation came from the growing sense that they were learning skills which were practical and relevant to their everyday lives on the street, in school and at home. Juveniles were encouraged to "negotiate the curriculum" by selecting the skill to be taught from a discussion of their current lives and events. The researchers reported that the most consistently effective motivator was "catching them being good", where staff gave approval to the youths when they were competent at using a skill, or participated in a programme in one form or another. They looked for opportunities to do this as often as possible.

Researchers have found that interventions guided by peers have increased young offenders' amenability to therapeutic change. However, while peers often want to help fellow group members they often lack the skills to do so effectively. Leeman, Gibbs & Fuller (1993) found that a combined treatment, which teaches skills to young offenders then enables them to use these with peers in a group format, is effective.

Strategies such as reduced sentence length, changes in conditions, reduced reporting, increased chances of parole and home leave can provide incentives and rewards for participating in and completing programmes.

## **SUMMARY**

If reducing offending by young persons is the primary concern, then assessment should initially focus on risk/need factors relevant to criminality. Secondly, factors of general importance should be assessed (e.g. suicidal intent, what is important to the client). Finally, specialist staff or the specific treatment programmes themselves should assess responsiveness factors in youths classified as needing treatment. This includes assessing conceptual level, neuro-psychological deficits, anxiety/worrying, cultural issues, psychopathy and motivation.

If staff are to use risk assessment as a tool to determine appropriate treatment services for young offenders, they should be thoroughly trained in the value of systematic assessment as a prerequisite to sound case management. It is not enough to be able to tick off criminogenic needs in a checklist format. Staff need to know how to specifically assess risk/needs, for example, antisocial attitudes, and do so in a uniform and standardised way. They need to:

- be familiar with the risk assessment instruments they use, including their psychometric properties and rationale for use
- understand the literature on risk prediction so that they can make sound assessments of factors pertaining to an individual offender's risk level,
- have access to as many information sources as possible so that they can carry out multi-domain assessments to reduce measurement error
- be able to make ongoing assessments of risk in order to detect changes in a client's level.

Ease of access to information from the Youth Justice area is relevant to determining risk for young offenders. This would enable a Community Corrections case manager to determine more easily whether a young offender had displayed the early history of antisocial behaviour which is a robust indicator of high risk. In the transition from one service to another, valuable information concerning offender characteristics and responses to past attempts at treatment is often lost, resulting in fragmented and poorly coordinated attempts at treatment. Altschuler & Armstrong (1995) state that, "Common among the examples of fragmentation and discontinuity is the tendency for assessments of the same juvenile to be conducted separately or at a number of points in processing without information ever being shared. There is no justifiable reason for multiple assessments if findings from these evaluations are not shared, not tied directly to the development of a master case plan involving all parts of the system, and not used to guide practitioners to provide a service in response to an identified problems or need (p.98)." Access to Youth Justice information would be of enormous benefit to Corrections staff and to the young offender in ensuring appropriate, effective treatment is planned.

One or two needs-based classification systems for young offenders have been developed overseas but they await further validation. Given the multi-determined nature of youth offending it follows that a risk/needs assessment should be comprehensive and assess as broad a range of factors as possible. Priority should be given to developing an instrument to assess criminogenic needs to form the basis of a treatment classification for young offenders. Such a classification system would need to be evaluated and validated through research. An effective treatment classification system would allow treatment to be targeted to moderate and high-risk offenders, with more intensive services being provided as an offender's risk level increases. Low-risk young offenders should be provided with only minimal/supportive type services. Wider social policy initiatives could target this group, including actions designed to lessen the maturity gap between adolescence and adulthood and provide young persons with productive activities that would increase their self-esteem and pro-social behaviour.

## **Specific Treatment Programmes**

### **Treatment Programmes For Violent Young Offenders**

Defining "violent" young offenders is a difficult task. The literature on violent youth contains articles on youths in diversion programmes, school-based programmes, treatments for "high-risk" young offenders in a variety of contexts, and neurologically-impaired aggressive/impulsive youths. Gendreau & Ross (1987) suggest that truly violent offenders are elusive and exist in only very small numbers. The rate of conviction for a violent offense in young adult males is between 3% and 6% (Moffitt, Mednick & Gabrielli, 1989) and about 4% of male adolescents report sustained careers of serious violence (three or more violent offenses per year for five years (Elliott, Huizinga & Morse, 1986). Moffitt (1994) suggests that 'life-course persistent' individuals are most likely to become violent offenders. These are young people who engage in antisocial behaviour throughout their lives (although its outward expression may change) and have the highest level of risk for repeat offending. Other researchers concur with Moffitt's view. Capaldi & Patterson (1996) compared violent and nonviolent adolescents who had been arrested and found no significant differences between them in family background and childhood behaviour. This replicated Farrington's (1991) earlier study which found that "the causes of aggression and violence must be essentially the same as the causes of persistent and extreme antisocial, delinquent, and criminal behaviour" (p.25). New Zealand's prisons increasingly contain people convicted of a violent offence (around 60% of prison inmates are serving a sentence for a violent offence, see Lash 1996). Violence is the second most common offence category for which young offenders are sentenced. Curiously enough, violent young offenders have received little special attention. This reflects the tendency for research to distinguish between offenders and non-offenders and to ignore distinctions between offenders.

Three classes of variables have been explored in relation to violent offending by young persons - personality, peer relations and family dynamics/functioning. The literature on personality and violent crime has highlighted high levels of psychiatric symptoms in samples of violent youth (McManus, Alessi et al, 1984) as well as high levels of emotional disturbance (Van Ness, 1984). On the other hand, Blaske et al (1989) report that their sample of violent offenders displayed similar levels of socialised aggression to other types of offenders or non-offenders. Hanson et al (1984) reported a similar finding for their sample of serious offenders, many of whom were violent.

The psychopathic personality is characterised by a particular pattern of interpersonal, affective and behavioural symptoms. These include grandiosity, egocentrism, manipulation, domination, affective coldness, novelty-seeking and lack of empathy. Given these personality characteristics, it is no surprise that there is a strong association between psychopathy and violent crime (Hare & McPherson, 1984; Serin, 1991) and growing evidence that careful assessments of psychopathy can predict future violence (Harris, Rice & Cormier, 1991; Serin, Peters & Barbaree, 1990). Robert Hare, the acknowledged expert in the field, considers that psychopathy can probably be diagnosed in childhood (personal communication, 1996) and is equally useful for predicting violence in both youth and adult offenders. A diagnosis of antisocial personality disorder assesses social deviance. Individuals with this diagnosis will probably have some sort of criminal history. However, a diagnosis of psychopathy is a more robust predictor of violent criminality since it takes into account both personality traits and social deviance. This allows the contribution of each domain to be evaluated.

There is considerable research describing a link between dysfunctional family life and violent delinquency (Blaske et al, 1989; West & Farrington 1973; Henggeler et al, 1985). This research supports the social learning theory view that youths and adults committing violent crime are generalising responses learned in the home environment. Jaffe, Wolfe &

Wilson's (1990) recent summary of this literature underscores the importance of the family's style of conflict resolution as a major determinant of childhood aggression.

Support from the peer group may also play an integral role in reinforcing aggressive behaviour. Fagan & Wexler (1987) found that experience within the peer group and school setting contributed significantly to the prediction of violent crime.

While there is still confusion over the definition of a "violent" offender, knowledge of how to treat offenders with problems of aggression and violence has increased over the last decade. Goldstein (1986) reviewed the literature on psychological skills training programmes for aggressive youth and found 42 well-designed experimental studies. He noted the lack of long-term follow-up assessing how well the principles could be generalised from the clinical setting to the community. Since that time a number of studies have attempted to bridge that gap. These have provided useful information regarding the effects of treating aggression in young offenders and the effects on recidivism at follow-up. These studies have adopted one of four major approaches to the treatment of violence and aggression:

- the cognitive social learning perspective
- the behaviour/skill deficit perspective
- family/systems based therapy
- institutional treatment of violent young offenders

The **cognitive** perspective emerged from models of delinquent behaviour that can be traced to research in the early 1950s by Glueck & Glueck (1950) and Sarbin (1952). The view that the offender's thinking has been developmentally delayed is central to an eclectic variety of theories, including:

- the social learning perspective (Sarason, 1978)
- interpersonal problem-solving (Spivack, Platt & Shure, 1976)
- moral reasoning (Kohlberg, 1969).

However, many of the early claims for the success of these treatments contained no before or after assessments and only unsubstantiated statements that the programmes were effective (Gendreau & Ross, 1987).

Later cognitive programmes have been more rigorously evaluated. A nine-month follow-up of Ross, Fabiano & Ewles' (1988) "reasoning and rehabilitation" cognitive skills training programme compared high-risk **adult** probationers to controls. It showed a reduction in re-arrest and incarceration rates of between 30-50%. An almost identical "Straight Thinking on Probation" (STOP) programme was implemented with high-risk offenders (age not specified) in the British probation service. It produced similar results (Raynor & Vanstone, 1996). Overall, results indicated that the cognitive treatment programme had an impact on reducing re-offending in the first year of follow-up. In particular, it reduced the incidence of serious offences committed (defined as violent, sexual or burglary offences). By the end of the second year of follow-up the reduction in re-offending had diminished but the reduction in seriousness of re-offending was still evident, although less than in the first 12 months. The authors concluded that the STOP programme represented much better value than a custodial sentence both financially, being far cheaper than incarceration, and in terms of the incidence of reconviction. They suggested that improved long-term results could be obtained if follow-up support and reinforcement of programme learning were provided for those who completed the programme.

Robinson (1996) evaluated a large sample of 2,125 offenders (ages unspecified) assigned to either wait-list control or cognitive skills training in correctional and community-based programmes in Canada. All were followed-up for at least 12 months on release. Violent offenders, sex offenders, and drug offenders who had completed the programme all had lower recidivism rates than their counterparts in the control groups. It

was notable that the highest risk offenders appeared to gain little from the programme when it was institution-based, whereas the community-based programmes seemed to reduce recidivism rates even with these offenders. The overall recidivism rate for offenders who took the programme in the community declined by 22.4% compared with controls. The comparable reduction for offenders who completed the programme in an institution was 11%.

Guerra & Slaby (1990) designed another study which also found that institution-based cognitive treatment was not effective. The authors developed a programme designed to address cognitive factors related to aggression. The programme was administered in 12 sessions to 120 high-risk male and female adolescents (15-18 years) incarcerated in a maximum security state juvenile correctional facility in Chicago. Subjects were randomly assigned to one of three experimental groups: cognitive mediation training, attention control or a no-treatment control. No group differences were detected for the number of parole violations up to 24 months post-release. The researchers conclude that cognitive mediation can be expected to endure best in social environments that support the use of the new skills and beliefs. They suggest that the level of social support in the post-release environment for maintaining the new patterns of cognitive mediation may be crucial in determining whether the young offender eventually reverts to his/her old patterns.

It is difficult, given the lack of age breakdown in many of these studies, to be sure of their effects on younger offenders. However, it is apparent that they can be effective for high-risk offenders. Although not specifically targeting violence, they have been shown to reduce the seriousness of subsequent offending as well as its frequency. They appear to be more effective if they are community-based and pay adequate attention to the maintenance and generalisation of treatment effects. Replications of these studies with young offenders would be welcome.

Arnold Goldstein is the primary proponent of the **Behaviour/Skills Deficit** approach. He has developed the Aggression Replacement Training (ART) programme (Goldstein, 1986). This approach is based on earlier anger control and stress inoculation research by Novaco (1975) and Meichenbaum (see Meichenbaum & Turk, 1976). It takes the view that chronically aggressive or delinquent youth frequently lack the skills to deal with provocative, challenging or problematic situations. ART is a multi-modal intervention addressing psychological and educational needs. Its curriculum has three parts:

- (1) skill-streaming - which teaches chronically aggressive adolescents pro-social behaviour by modelling, role playing and performance. It also attends to issues related to transfer of training
- (2) anger control - based on teaching adolescents to control their anger and emotional arousal
- (3) moral education - which is a set of procedures designed to raise the young person's sense of fairness, justice and concern with the needs and rights of others.

The researchers have carried out three evaluations of this programme to date (Goldstein & Glick, 1996). The first was conducted at Annsville Youth Centre, a residential facility for youth in central New York State. Sixty-six high-risk youth at Annsville were treated: 24 received the full 10-week ART programme; 24 were assigned to a no-ART brief instruction control and 12 to a no-treatment control. In a one-year post-release follow-up, the ART-treated youth were significantly superior to controls in four of the six areas assessed - home, family, peer, legal and overall functioning. They were not different to controls in school or work functioning. The second evaluation replicated the procedures of the Annsville project at MacCormick Youth Centre, a maximum secure facility for male juvenile delinquents aged 13-21. It also extended them to youth incarcerated for more serious felonies (e.g. murder, manslaughter, rape, sodomy and assault). This study only assessed institutional functioning and there was no post-release community follow-up. In contrast to Annsville, the MacCormick youths receiving ART did not differ from controls in

either the number or intensity of acting-out behaviours. However, they used more constructive pro-social behaviour and their impulsive behaviour decreased significantly.

In the third evaluation, ART was provided to youth on a post-release, community basis. The researchers evaluated a three-way comparison of:

- ART provided directly to youth (condition 1)
- ART provided to youths' parents or other family members (condition 2)
- a no-ART control group.

The study took place over several sites in five cities. The measure of recidivism was re-arrest within the first six months (three months while completing the programme and three months afterwards). Both condition 1 (30% re-arrested) and condition 2 youths (15% re-arrested) were re-arrested significantly less than controls (44% re-arrested). The re-arrest rate was lowest when the youths' families participated simultaneously in their own ART groups.

A fourth evaluation of ART, and the second community-based one, was called the 'Gang Intervention Project.' Two New York youth care agencies each conducted three four-month sequences of the ART programme. Within each sequence, all subjects were members of the same gang. The control group members, who all belonged to a different gang, received no ART treatment. Arrest data were available for the youths participating in the first two ART sequences and their respective control groups. Five of the 38 ART subjects (13%) and 14 of the 27 (52%) control group members were re-arrested during the eight-month tracking period.

The favourable re-arrest outcomes in the two community-based evaluations of ART suggest that including family and peers in treatment may create a more prosocial environment for the young offenders. This element may be crucial to treatment success.

The independent findings of other researchers investigating the efficacy of ART have yielded mixed results. Coleman, Pfeiffer, & Oakland (cited in Goldstein & Glick, 1996) evaluated the effectiveness of a 10-week ART programme used with behaviourally-disordered adolescents in a Texas residential treatment centre. The study showed no improvement in their behaviour. Jones (ibid) compared ART to a group receiving moral education and a no-treatment control. He used a sample of highly aggressive male students in an Australian high school. Students completing the ART programme showed a significant decrease in aggressive incidents, a significant increase in coping incidents and acquired more social skills. Students receiving ART also increased their self-control and reduced their impulsive behaviour.

Leeman, Gibbs & Fuller (1993) combined the Positive Peer Culture Approach with ART to create a treatment called EQUIP, designed to address motivational issues plus skill deficits in young offenders. The authors evaluated EQUIP at a medium security institution for 57 juvenile felony offenders aged 15-18 years in Ohio. They set up three conditions: EQUIP; a motivational control group and no-treatment group. The evaluation produced significant results which supported the EQUIP intervention on both close and distant criteria. At both six and 12-months following release, the recidivism rate of EQUIP subjects was low (15%) whereas the control groups' worsened. The recidivism rate for the motivational control increased from 25% to 35% between six and 12 months after release. For the no-treatment control it increased from 30% to 40%. Thus the effects of the EQUIP programme were maintained over time.

Multi-systemic therapy (MST) is a **family and home-based treatment** that is consistent with models that attribute delinquent behaviour to multiple causes (Henggeler & Borduin, 1990). MST uses treatment strategies derived from strategic/structural family and

behaviour therapy to address intrapersonal (e.g. cognitive), familial, and extrafamilial (e.g. peer, school and neighbourhood) factors that are known to be associated with adolescent antisocial behaviour. To promote cooperation and enhance generalisation, treatment sessions are usually held at a convenient time in the young offender's family home and in community locations (e.g. school, recreation centre). Services are provided for a limited time and aim to empower parents with the skills that they need to manage adolescents adequately. Henggeler, Melton & Smith, 1992) followed a sample of violent and chronic young offenders at imminent risk of incarceration. They found that two years after receiving treatment delivered through a family preservation model, the survival rate (i.e. percentage of youths not re-arrested) doubled.

The effectiveness of MST in treating serious violent young offenders (aged 12-17 years) has been established in a series of studies. Borduin et al. (1995) measured re-arrests, self-reported offending, and time incarcerated at 59-week, two-year and four-year follow-ups. This study contained a relatively large sample of 176 youths and their families randomly assigned to MST or a control condition. By the end of four years, 71% of the youths in the control group had been arrested at least once, compared with 26% of the youth in the MST group. Thus, at four years of follow-up, the overall recidivism rate for those who completed MST was less than one-third the overall rate for controls. Recidivists in the MST group were also arrested for less serious crimes during follow-up than their control counterparts and were less likely to have been arrested for a violent crime. The effectiveness of MST was not related to demographic characteristics such as race, gender, age, social class or pretreatment arrests, suggesting that it is equally effective with youths and families from different backgrounds. The authors conclude that MST's effectiveness is due to two crucial aspects - its comprehensive nature and the fact that it is delivered in an appropriate way in the youths' real world environment.

The fourth contribution to the treatment literature comes from the **institutional treatment** of violent offenders. Vicki Agee, the leading authority in the field and the designer of some of the prototype institutional programmes, has summarised the clinical and programming principles necessary to treat violent youth effectively in these settings (Agee, 1986). She suggests that to be successful, it is essential that therapeutic communities and team management concepts emphasise these factors:

- structured treatment and discipline
- peer-culture reinforcement systems
- fostering pro-social relationships
- awareness of victims.

Agee's Closed Adolescent Treatment Unit in Denver reported recidivism rates of about 33% for its very high-risk violent young offenders, but the recidivism follow-up was limited in scope and appeared to lack a control group. The Paint Creek Youth Centre in Ohio, also designed by Agee, has reported a decrease of 15% in re-arrest rates and 35% in incarceration rates compared to controls. Other institutional programmes treating violent young offenders have reported little evaluative data.

Fagan (1990, 1996) has reported on the Violent Juvenile Offender (VJO) programme, which was an American experiment to test correctional interventions for chronically violent young offenders. Programmes in four sites tested an intervention model with four central elements: reintegration, case management, social learning processes, and a phased programme of re-entry from secure facilities to intensive supervision in the community. The 227 male high-risk young offenders in the experimental group had a median age of sixteen and a half. The intervention model emphasised:

- the development of social bonds
- unlearning antisocial behaviours
- developing social competence and skills applicable to the youths' natural neighbourhood settings.



Social networking was considered crucial to the programme along with providing opportunities for youths through successful participation and achievement in school, workplace and family activities. Strategies included rewards and sanctions for attaining goals or for appropriate behaviour. Specific treatments such as substance abuse treatment or psychotherapy, were linked to each client's needs and abilities. The evaluation compared participants' recidivism and social outcomes with those of youths randomly assigned to mainstream juvenile correctional programmes. Follow-up data was obtained for over two years post-release.

Implementation of the experimental intervention varied by site. In the weaker programmes, the results suggest that inadequate care and supervision following release increased the probability of recidivism. This was in comparison to results achieved by reintegration services with intensive treatment provided in a transition residence and by close supervision in the community. In the two sites with strong implementation, the VJO youths had failure rates and arrest rates for violent and other offences between 20% - 33% lower than control youth. The effects of the experimental intervention were maintained in the second year. The small sample size limited any conclusions about intervention effects for the third year.

The stability of the findings across at least two years of follow-up led Fagan to conclude that the reintegration strategy could help prevent violent young offenders making an abrupt return to crime after release from the programme, as was the case with earlier experiments in institutional treatments. He suggested that correctional policies should focus on reintegration and transition strategies rather than lengthy confinement in state training schools with minimal supervision upon release. In his view, the implications of the reintegration concept for corrections' policy include:

- planning the youths' return and constructing interventions to support those plans
- a transitional re-entry that provides a bridge between the structured institutional world and the unpredictable contingencies of the streets
- continuing the control, advocacy, and treatment functions of the programme into the community living phase.

Hare (1992) has outlined a similar programme to that described above. His "Model Treatment Programme for Psychopaths and Other Offenders at High Risk for Violence". Hare's model, designed for male offenders aged 18-35, is based on modified relapse prevention theory. It involves widening the definition of relapse to include multiple violent and aggressive acts both inside and outside institutions, as opposed to a sole focus on the incident that led to incarceration. Hare also suggests extending the definition of the chain of events to include actions that increase the risk of new forms of relapse (for example, shoving another inmate, yelling at custody staff, using alcohol or drugs while incarcerated). The treatment model is designed to be implemented within both an institutional or community-based setting. Hare estimates that institutional treatment would take about six months and community-based treatment around four months. He recommends that both settings should isolate the violent offender from others, which means that the community-based model would need to be residential. He also suggests that some offenders may require both programmes. The programme incorporates community supervision. The model requires skilled staff and a high staff-offender ratio. Treatment activities include:

- creating a pro-social treatment environment
- neutralizing pro-criminal attitudes
- involving offenders as 'co-therapists'
- interpersonal skills training
- emotion management skills
- increasing acceptance of personal responsibility

- dissociation from criminal peers and lifestyle
- substance abuse treatment.

Hare's model is experimental and has not yet been tested but appears to contain a number of excellent strategies for treating high-risk violent offenders and to be applicable to different age groups.

Table One: Recidivism Reductions Achieved by Treatment Programmes by Setting

Programme Type	Setting	Subjects	Reduction in Recidivism	Follow-Up
ART	Community	Young Offenders	14%	3 months
		Young Offenders + Family	30%	3 months
		Young Offenders + Gang Cohort	39%	8 months
EQUIP (ART + Peer Culture)	Institution	Young Offenders	15-25%	1 year
Paint Creek Youth Centre	Institution	Young Offenders	15%	1 year
Violent Juvenile Offender Programme	Institution + Community after-care	Young Offenders	20-33%	2 years
Multi-Systemic Family Therapy	Community and Home Based	Young Offenders	44%	4 years
Cognitive Skills	Institution	Age Unspecified	11%	1 year
	Community	Age Unspecified	22.4%	1 year
	Community	Adults	30-50%	9 months
	Institution	Young Offenders	No Decrease	2 years

High-risk violent young offenders seem to respond most effectively to treatment that pays attention to the transfer of training to their natural environment (See Table One above).

Community-based programmes have an advantage over institutional ones in this regard and seem particularly successful when significant others in the youths' social sphere are treated e.g. family, peers, fellow gang members. Some of the most successful treatments (e.g. multisystemic therapy) are implemented solely in the youths' natural environment and treatment providers work intensively with their family and community systems. However, these treatments are probably most applicable to the juvenile justice area where family-based treatment models already predominate and where youths are less dislocated from family. Evidence is accumulating that institution-based treatments can be effective provided they adhere to certain principles i.e. they:

- are cognitive-behavioural in origin
- attend to relapse prevention issues
- create therapeutic communities with positive peer cultures and environments
- have highly skilled staff
- provide intensive community-based supervision and reintegration services post-release.

## Substance Abuse Treatment For Young Offenders

In a review of recent epidemiological studies, Greenwood (1992) finds evidence that substance abuse overlaps with other behaviour problems in high-risk populations. A consistent finding is that the best predictors of future drug use are:

- prior use
- the presence of other antisocial behaviours
- association with antisocial peers.

Other predictors include:

- parent and sibling drug use or criminal behaviour
- poor and inconsistent family management practices
- low commitment to education
- alienation from the dominant values of society.

In other words, predictors of substance abuse and predictors that a youth is at high risk of offending are the same. Gendreau (1996) reports that, with few exceptions, evaluators of drug use have been oblivious to the corrections literature which is unfortunate given that the criminal justice and drug abuse systems serve virtually the same clientele.

There is a dearth of literature on the treatment of substance abuse among offending populations. Even less addresses substance abuse among young offenders. Research that has been carried out on adolescents tends to use school or college populations and examines treatment programmes set in those environments (Greenwood, 1992). Garrett's (1985) meta-analysis of the effects of residential treatment on youths who have been through the court process concludes that the small number of studies of drug/alcohol programmes makes it impossible to draw any definitive conclusions about their effectiveness. Braukmann et al's (1985) review suggests that general programmes aimed at reducing offending do not change substance use behaviour. Treatment programmes may need to specifically target substance abuse.

Although there are very few studies of young offenders, the general literature on substance abuse treatment suggests treatment approaches that may be effective. Ross & Lightfoot (1985) reviewed the literature on alcohol treatment of offenders. They conclude that very few well-controlled evaluations with at least several months' follow-up show that alcohol programmes have been effective with offenders. On the other hand, recent breakthroughs in treatment have enhanced the prospects for successful intervention. The breakthroughs centre on theories of relapse prevention and self-efficacy. According to relapse prevention theory, intervention should focus on the reasons why individuals fail to maintain changes after they have shown success during treatment. Relapse prevention is, therefore, viewed as crucial to the maintenance of the long-term effects of substance abuse treatments. Self-efficacy refers to judgements people have of their capacity to make changes and behave in certain ways. The goal of enhancing self-efficacy in a substance-abusing client would be to instill a sense of personal capacity and confidence to help him/her cope with situations that may promote a relapse.

Annis & Davis (1987) were among the first to demonstrate the usefulness of relapse prevention and self-efficacy concepts in treating alcoholics. After a six-month follow-up period, they reported dramatic reductions in drinking rates per week. In addition 29 of their 45 clients reported total abstinence. Researchers generally agree that covert sensitisation, behavioural self-control, and broad-spectrum interventions which include social skills training, stress management and marital and family therapy have demonstrated success with some alcoholics. Controlled drinking strategies are also effective and may be a suitable treatment for young offenders who are heavy drinkers but have not yet become dependent. Controlled drinking may appeal to offender populations in that it may help them reintegrate into their home setting, where peers may not tolerate

absolute abstinence (Gendreau & Ross, 1987). There is some evidence to suggest that brief interventions can be particularly effective for some substance abusers, particularly those with less severe problems (Bien, Miller & Tonigan, 1993).

Studies that do not use randomised designs or matched control groups have compromised the evaluation of drug abuse treatments. Methadone and therapeutic community treatment studies have also suffered from high dropout rates. Treatment completion rates for youth in therapeutic communities range from 10% to 18%, and approximately one-third leave within the first month (Henggeler, Pickrel et al, 1996). Evidence suggests that addicts who complete treatment or re-enrol after initial failure can decrease their drug intake and reduce criminal offences. To counter high dropout rates, Henggeler, Pickrel et al (1996) developed a home-based treatment for substance-abusing or dependent young offenders. Under the programme, 118 young offenders were randomly assigned to receive either home-based multi-systemic therapy (MST) or treatment provided by the usual community services. Ninety-eight per cent of the families in the MST treatment group completed a full course of treatment lasting an average of 130 days. In contrast, 78% of the families assigned to treatment through the usual community services received no mental health or substance abuse treatment in the five months after referral. The authors conclude that having more accessible services and making service providers more responsible for engaging clients will reduce the problem of high dropout rates.

The pertinent question may not be whether drug abuse programmes work but what types of programmes work for which type of substance abuser at different points in their abuse careers. Annis & Chan (1983) compared alcohol and drug abusers on an intensive group treatment programme with abusers who received the regular institutional programme. They found that those with a negative (low) self-image and low interpersonal warmth had higher recidivism rates after the group treatment programme than similar individuals on the regular programme. In contrast, individuals with a high self-image and low interpersonal trust had lower rates following the group programme than abusers on the institutional programme. Thus offender type had a significant treatment effect on recidivism.

DeLeon (1985) reviewed the therapeutic community literature and found that in several studies, the immediate and long-term status for addicts improved significantly after treatment. Some of the follow-up periods were as long as five years. Drug use and criminality declined, while measures of pro-social behaviour increased. The studies reported at least moderately favourable outcomes for 50% of the clients. Even programme dropouts achieved positive outcomes, depending on how long they stayed in treatment.

The acclaimed "Stay'n Out" substance abuse treatment programme has been operating in two New York State Prisons for the last 12 years. It is designed on the therapeutic community model. Wexler, Falkin et al (1990) describe the programme structure and report its outcomes. Three factors appear to be critical to the programme's success:

- the maintenance of a high standard of therapeutic integrity in the prison setting
- extensive treatment lasting at least six months
- the establishment of a post-prison therapeutic community aftercare network.

The authors obtained parole outcome data for 1626 males and 398 females who completed the programme. They compared outcome results for the therapeutic community group with results for two groups of inmates who participated in counselling programmes, a group enrolled in a non-therapeutic community milieu programme and a group of inmates who volunteered initially but either changed their minds or did not meet admission criteria. Follow-up periods varied from six months to three years after release from prison. Both male and female participants in the "Stay'n Out" programme

showed significantly lower arrest rates than those in the no-treatment and counselling groups. The differences ranged from 6-27% depending on the comparisons. The milieu programme which was ranked second in therapeutic intensity also produced good outcome results, although not as good as those for the Stay'n Out treatment group.

The authors report an optimal treatment period of 12 months. Offenders' prognoses deteriorated if they were not paroled after this time. The authors attribute this deterioration to the fact that, after 12 months, participants have reached the highest status levels in the therapeutic community programme. If the appropriate time for community re-entry is missed they gradually become disillusioned and reduce their involvement. Programme staff believe that these clients are less likely to benefit from further prison-based treatment and less likely to enter community treatment programmes after release.

The principles used in the Stay'n Out programme have been identified as essential components for successful institutional treatment programmes. They are:

- the programme is based on social learning theory
- it has authority structures with clear rules and sanctions
- it uses anti-criminal modelling and reinforces pro-social behaviour
- it trains clients in practical problem-solving
- it uses community resources
- it encourages empathic relationships between staff and clients that are characterised by open communication and trust
- it uses ex-offender and ex-addict counsellors to serve as credible role models of successful rehabilitation.

Lipton (1996) has evaluated other therapeutic community prison-based treatment programmes including Cornerstone in Oregon, California's Amity Prison Therapeutic Community and Delaware's Key-Crest therapeutic communities. He reports that all these programmes show substantial reductions in drug abuse and re-arrest for treatment participants. According to Lipton these studies have also shown that chronic heroin and cocaine users, who commit a large percentage of drug-related crime, respond to therapeutic community treatment provided it lasts long enough. Lipton recommends 9-12 months as the optimum time for treatment.

Peters, Kearns & Murrin et al (1993) reviewed findings from an evaluation of 535 inmates admitted to a prison-based six-week substance abuse treatment programme in Florida. The findings indicate that over a one-year period following release from custody, inmates participating in the programme remained longer in the community until re-arrest, experienced fewer arrests, and served less time in jail (an indication of decreased seriousness of re-offending) than a comparison group of untreated inmates. The programme used a cognitive-behavioural, skills-based approach that included a focus on relapse prevention. These findings, along with those from other follow-ups, identified the need for continuing supervision and treatment in the community post-release. The authors conclude that offenders involved in substance abuse treatment generally have a high rate of relapse and re-arrest. This means specialised efforts are required to ensure that they continue in treatment, seek and maintain employment and are involved in other activities such as vocational training and support groups.

Little is known about the effects of community-based treatments on offenders. Johnson & Hunter (cited in Antonowicz & Ross, 1994) describe a 70% reduction in recidivism rates for drug-abusing offenders in an intensive probation programme compared with a probation control group. The programme used cognitive skills training.

Baldwin et al (1991) evaluated alcohol education courses for young offenders diverted from the criminal justice system. Those who completed a skills-based course which included self-monitoring, goal-setting and assertiveness training, showed greater reduction in alcohol consumption and self-reported life problems than those in a talk-based course using non-directive counselling. However, both groups showed a similar reduction in recidivism.

Stein, Garrett & Christiansen (1990) describe a model treatment programme for young offender substance abusers. It is based in the community but also has a residential phase. Known as the Colorado Office of Substance Abuse Project (OSAP) this programme is designed to serve youths with extensive problems in both substance abuse and delinquency who are at high risk for continuing these behaviours. The OSAP project aims to tie programme elements to current research and theory on the causes and correlates of offending and drug use. It also incorporates a thorough process and outcome evaluation. The treatment has four phases:

- assessment, where 16-18 year old male youths are tested to measure how well they function and for antisocial behaviour
- a wilderness experience in which a small group of youths go on a 15-day venture into the wilderness to develop positive relationships, self-esteem, leadership and group cohesiveness in a drug-free environment
- an alternative lifestyle component which is a residential programme with a substance abuse prevention and intervention curriculum. The programme places a heavy emphasis on developing an adult sense of responsibility and appropriate education and vocational training
- a community transition component which seeks to reinforce the skills obtained in the alternative lifestyle phase by providing support after the youths leave the residence.

Many service providers are involved in:

- helping youths identify community resources and job placements
- matching youths with a case manager who facilitates the transition
- overseeing the youths' progress in maintaining pro-social behaviour.

The evaluation, which has not yet been reported, will include these outcome measures:

- reduction in alcohol and drug involvement
- reduction in offending
- increases in vocational/educational skills
- reintegration into the community.

The evaluation is planned to take place over a three-year period with a matched comparison group for control purposes.

In summary then, substance abuse treatments that use cognitive-behavioural techniques and are based on relapse prevention theory show promise. More work in developing and evaluating these interventions with young offenders is needed. Therapeutic communities have proved to be very effective with adult offenders in prison provided they receive adequate community based follow-up and treatment on release. Much less is known about the effect of community-based treatment on young offenders or on offenders who have not been in prison.

## Wilderness Programmes For Young Offenders

In the 1960s many practitioners working with high-risk youth considered that improving their self-concept and self-esteem would help them tackle problems successfully and adopt more socially acceptable behaviour. Wilderness programmes were designed to promote personal growth and identity through learning by experience. Participants were urged to complete a series of problem-solving tasks in a natural environment in a struggle for survival. Mastering challenge was supposed to enhance individuals' self-esteem and their sense of being able to make changes or act in certain ways and make them more likely to succeed in managing difficult situations on their return home. Mason & Wilson (1988) summarise explanations for the effectiveness of wilderness programmes:

- the survival approach increases self-esteem by teaching youths how to act in different ways and to cope with problems by seeing them differently
- as participants achieve success within the programme they begin to believe in their own potential and grow in self-esteem
- the programme emphasises accomplishments rather than failures
- participants set goals for themselves and try to achieve them. Success means that they increase their self-efficacy and begin to develop a sense of control over their lives
- working within a group develops interpersonal skills and respect for other participants and staff
- conditions of stress and challenge push participants beyond their usual performance, which offers them new insight into their own potential
- achieving success in a wilderness environment enables participants to consider the possibility of succeeding at home
- if their self-concept is improved through the wilderness experience young offenders may be less likely to engage in delinquent behaviour.

Anecdotal evidence suggests that wilderness programmes have had a positive effect on participants but only a handful of published follow-up studies describe their effectiveness in reducing re-offending. Most of the data comes from studies conducted up to twenty years ago.

A one-year follow-up study conducted by Kelly and Baer (1971) is one of the most widely cited studies. The authors studied 120 boys aged 15-17 years who had come into contact with the Massachusetts Division of Youth Services (DYS). The boys were sent to one of four Outward Bound schools and matched with two control groups of 60 boys each who were routinely processed by the DHS. The subjects and controls had no history of violent behaviour or sexual assaults. The authors defined recidivism as a return to a juvenile institution or commitment to an adult institution for a new offence. A one-year follow-up revealed a 20% recidivism rate for the experimental group and a 42% recidivism rate for the controls. While the overall differences in recidivism were notable, the programme effects appeared to vary widely across the four wilderness programmes and by type of participant. For example, the Outward Bound programmes seemed to have less positive impact on 'chronic runaways', children who were relatively young at their initial court appearance and children from single parent families. Subsequent follow-ups showed that the effects of the programme continued after 19-24 months (Willman & Chun, 1973) but the differences in recidivism between the Outward Bound group and the controls narrowed each year. After five years there was no significant difference.

Outward Bound programme participants who did not complete course requirements during the programme had a much higher recidivism rate than those who did (90% versus 30%). (Baer, Jacobs, & Carr, 1975). Performance was therefore a much stronger predictor of recidivism than simple participation. The group who appeared to benefit least included youths who:

- were less likely to complete the programme

- were more likely to be 'chronic truants'
- had a younger age at first arrest
- were without intact families.

This group may have been at higher risk.

According to Winterdyk & Roesch (1982), hundreds of wilderness programmes treated young offenders in North America in the early 1980s but few were thoroughly evaluated. Their evaluation is one of the few methodologically sound evaluation studies since Kelly et al's (1971) and reports quite different results. The programme they examined assigned juvenile offenders aged 13-16 years randomly to either a 21-day Outward Bound-type programme or to juvenile probation. Participants in the wilderness programme reported improvements in self-confidence and in relations with peers, authority figures and parents. However, the changes observed immediately after the end of the programme appeared to have "worn off" at the four to six-month follow-up. By the end of the six-month follow-up there were no differences in reconviction rates for the experimental and control groups.

There were some gains in the direction of crime-reduction, although these were not statistically significant. The experimental group committed less severe offences and had proportionately fewer charges completed than the control group. These mixed findings contradict similar studies using similar measures, suggesting that evaluation designs and procedures need to be improved before any firm decisions can be made about the status of wilderness programmes.

In 1978, Behar & Stephens (1978) conducted an evaluation of a wilderness camping programme for emotionally disturbed young people, many of whom had also offended. Using a number of measures of personal adjustment, the boys considered "adequate" rose from 27% to 72%. However, offending behaviour was the one area where there was no improvement.

Other studies have reported positive results. The Alabama Department of Youth Services (DYS) conducted a follow-up study on 65 boys who had participated in a wilderness programme between 1982 and 1983 (cited in Roberts, 1988). Of the 40 boys for whom data were obtained, only 17% had been re-arrested during the first nine months after discharge from DHS. Slightly more than half of the youths were sent to an aftercare programme following the wilderness experience while the rest were discharged. The research reported that none of the boys who participated in aftercare were re-arrested. Although the re-arrest rate is quite low, 25 boys could not be followed-up and it is quite probable that some of them did have further trouble with the law.

Castellano & Soderstrom (1992) evaluated how participating in an Outward Bound-type programme (Spectrum) affected the re-offending behaviour of a sample of 'at risk' probationers aged 13-17. Both high and low rate offenders who successfully completed the programme showed a reduction in delinquency one year later. However, this effect was not apparent at the two-year follow-up. Those who completed the Spectrum programme also re-offended at a less serious level. They had fewer arrests for violent crime and the average seriousness of arrests was less than for their matched counterparts. This was a short-term intervention for a relatively high rate delinquent population but produced discernible reductions in arrest rates. The authors concluded that the treatment effect might have been sustained longer if follow-up services were provided to programme participants once they returned to their natural environment.

VisionQuest in Arizona is often quoted as a successful example of a wilderness training programme. VisionQuest, along with its prototype programmes, Associated Marine Institutes, the Eckerd Foundation, and Homeward Bound, began in the United States in 1973. Participants generally stay at the co-educational programme for 12-18 months,



considerably longer than in most other wilderness programmes. The high-risk youths make a commitment to abstain from drugs, alcohol and sex, to complete at least two "high impact" programmes during a one-year stay and to remain with the programme until discharge. Mulvey, Arthur & Reppucci (1993) reported on follow-up research of VisionQuest's programme conducted by Behavioural Research Associates in 1979. That study found a re-arrest rate of 43% for youths who had been released from the programme for at least 13 months prior to the study. However, they do not mention a control group. The 'success' of the VisionQuest programme has been attributed to certain elements which include:

- exceptional staff members who are willing to work long hours for low pay at jobs that are extremely demanding both physically and mentally
- staff who are usually young, idealistic and committed
- programmes which have a high staff-to-participant ratio
- programmes which feature a combination of increasingly demanding physical challenges, individual treatment, specific skill development, teamwork and co-operation
- charismatic leaders who are considered to be mavericks in the profession and who are ready to experiment and to be constantly on the lookout for new formulas and formats
- continuity of programming and accountability in each programme consistent with the overall cognitive-behavioural approach (Finckenauer & McArdle, 1990).

Studies of wilderness programmes in New Zealand also give a mixed picture. In 1982 Fred Bauer, a psychologist with the Justice Department in Auckland, completed the first comprehensive study of an outdoor programme. The study evaluated two outdoor pursuits courses run in 1980 with 12 participants aged from 16-25 years. He compared participants with two non-equivalent control groups on a normal probation sentence. During the six months immediately following the outdoor programme, re-offending rates were 30% for participants compared with 51% for controls (Bauer, 1982). However, the re-offending rates for the groups were similar after the first year and Bauer concluded that outdoor programmes must be supported by other efforts such as follow-up counselling or employment if they are to be effective over an extended term.

The second major study was carried out in Christchurch by staff of the Psychological Service and Community Corrections branches of the Department of Justice (Campbell, Riley & Easthope, 1982). This study compared members of five expeditionary projects organised by the Christchurch Probation Office with a selected control group. The study showed an 87% improvement in re-offending rates for the experimental group compared with 31% for the control group. This trend continued for the full 12-month follow-up period. In contrast to the Auckland courses examined by Bauer (1982), these expeditions were led by probation staff members and consisted of a week in mountainous bush country plus preparatory orientation weekends.

Davie's (1992) evaluation of the same outdoor experiential programme conducted during 1989-1990 gave mixed results. A gross measure of re-offending showed that a similar percentage of both groups returned to crime. Frequency of re-offending revealed a trend in the expected direction but the difference was not significant. However, on average, outdoor participants offended fewer times in relation to their previous crime rate than the control group, which did not change significantly. Clients from the expeditions reported significant increases in feelings of wellbeing and self-efficacy. Davie concluded that the Christchurch Justice Department programme was successful in promoting intermediate changes but only marginally effective in reducing crime. She argued that the one-week intervention on its own was not sufficient to alter criminal behaviour.

Harper (1987) carried out a descriptive rather than experimental evaluation, assessing 100 subjects who had participated in various outdoor programmes throughout New Zealand between 1982 and 1986. He reported that the average recidivism rate (as measured by court appearances) reduced from 1.56 before the course to .96 afterwards. However, without a control group, it was not possible to draw reliable conclusions on the effects of the programme. Another New Zealand evaluation included delinquent youth in its sample of participants in a 10-day expedition set up in 1985 by Presbyterian Support Services for 'at risk youth'. The youths were aged between 14 - 22 years with an average age of 16. Over 200 young people participated in the programme and some components of the evaluation. O'Brien (1990) reported that at a two-year follow-up, 70% of course participants had remained out of trouble. As with the Harper evaluation, the absence of a control group and any direct measures of re-offending makes it difficult to draw reliable conclusions about the effect of the programme.

The inconsistent way in which authors define the term "recidivism" is a major stumbling block in comparing wilderness programme follow-up studies. Some researchers have equated recidivism with re-arrest; others use the term to mean a new commitment to a correctional facility, while others speak of the recidivism rate without defining it at all. Thus the 43% recidivism rate at VisionQuest cannot be compared with the 20% recidivism rate in Kelly & Baer's Outward Bound research because the basis for determining recidivism was not the same. The selection of participants also hampers attempts to evaluate wilderness programmes. Some programmes select only first-time offenders while others, such as VisionQuest, recruit chronic juvenile offenders. Others have heterogeneous populations with mixed risk profiles, which makes it difficult to interpret results. The wide range of methodologies evaluators use and variations in their levels of analysis, also make it difficult to draw conclusive statements. One important finding, however, is that most of the evaluations which make comparisons with control groups report that the effects of the intervention 'fade' over time. While this is to be expected, it highlights the need for follow-up intervention so that the effects of treatment are transferred to and maintained in the youths' natural environment. If the main point of wilderness programmes is to "impel" delinquents into reconstructing their self-image, it is essential to provide some form of follow-up to help sustain that change. It is widely known that even the most well-intentioned alcoholics or smokers cannot change their behaviour or quit after a single spiritually uplifting experience. They need continued support.

In his review of wilderness programmes, Hollin (1996) suggests that the available evaluations are both sparse and unencouraging. Palmer (1994) notes that evaluations have been mixed. In some reviews the studies collectively show little if any impact on recidivism while others show conflicting outcomes. He concludes that across all analyses/reviews the same programmes are often discussed. Winterdyk & Griffiths (1984) suggest that one of the primary limitations of wilderness programmes has been their failure to specify a conceptual or theoretical basis. Adherents of wilderness education have adopted perspectives attributing antisocial behaviour to a wide range of causes, including:

- social factors
- youths' emotional problems
- attitudinal differences in relating to people in positions of authority
- low self-esteem and self-concept.

As discussed earlier, psychological measures such as self-esteem cannot predict changes in adolescents' delinquent behaviour. The authors suggest that wilderness programmes need to detail more explicitly how programme activities relate to dealing with delinquency. For example, how do mountain climbing or backpacking change attitudes and delinquent behaviour while participants are in the programme and once they are released? Lipsey's (1992) meta-analysis appears to support a relationship between teaching skills and positive outcomes for wilderness programmes. He reported that those

wilderness programmes that had positive outcomes often came into the broader category of "skill-oriented."

There is some evidence, then, that the more successful wilderness programmes teach skills related to behaviour and attitudes that correlate with offending behaviour (e.g. they have an explicit focus on challenging criminogenic attitudes or teach interpersonal skills). Although the experience of increased confidence and capacity to cope is a potent motivator for change, it is not, by itself, enough to produce change. For change to occur, youths must be taught concrete skills which they can use in the 'real world'.

The treatment evaluations carried out to date suggest two uses for wilderness programmes. They may be useful for moderate-risk youth provided they are skill-oriented and provide adequate follow-up. They may be used at the beginning of a more intensive treatment programme for high-risk youth to make them more receptive to treatment. They will enhance motivation by increasing young people's confidence and sense of personal capacity, and by promoting group cohesiveness and bonding. Davie (1992, p.90) suggests that "self-efficacy and well-being enhancement on their own may not combat propensity toward criminal activity but could make an individual more amenable to resocialisation. These programmes may, therefore, operate as a catalyst for coping with other change requirements such as finding employment, changing violent behaviour patterns or dealing with drug and alcohol problems." If viewed as a means to enhance motivation, wilderness programmes may be a valuable component within a wider spectrum of treatment services.

## **Educational/Employment Programmes For Young Offenders**

In their review of the treatment and prevention literature for juvenile delinquency, Mulvey, Arthur & Reppucci (1993) report that there has been a lack of systematic evaluation of the impact of educational/vocational programmes on delinquency rates. Several notable exceptions, however, show that such programmes can have a profound impact on the lives of adolescents. Walters & Mills (1980) completed a classic study in the field. This showed that a programme using a broadly based behavioural intervention that insists on therapeutic integrity can effect a marked reduction in frequency of arrest. At the one-year follow-up, participants had a 70% reduction in frequency of arrest compared to controls. This study involved:

- actual jobs being available to the youths
- experimenters and employers praising pro-employment behaviour
- educating employers on the value of praising job-appropriate behaviour
- contracting for contingencies.

Shore & Massimo (1980) report an extended follow-up of a programme for very high-risk adolescent boys who had left school. The youths were randomly selected for the programme which was based in the suburbs. The programme was comprehensive, vocationally-oriented and used psychotherapeutic techniques. It had an outreach focus, including:

- seeing boys in the community, either at their homes, on street corners or in coffee houses
- having flexible hours and settings with the therapist being available to the youth outside normal "office" hours
- field trips to explore job opportunities and practise writing applications
- intensive individualised learning with each youth participating in a detailed programme to improve their academic skills
- tailoring jobs chosen for the youth specifically to their needs.

At two, five, ten and 15-year follow-ups, the results showed that the intervention had helped almost all the youths adjust well in terms of employment, schooling, and legal and marital status. In comparison, nearly all the youths in the control group were still experiencing severe legal, vocational, and personal difficulties. However, the project compared only 10 participants with 10 control youths, so the ability to generalise from the findings is limited. Shore & Massimo (1980) report that there have been few attempts to replicate their work. Some of the attempts have used inadequately trained personnel and have eliminated or reduced one element - most often the job focus (for example, where jobs have been meaningless or dead-end) or the quality and amount of outreach. The authors consider that eliminating elements compromises the principles on which the programme was built and is likely to reduce its efficacy.

On a broader scale, Gottfredson (1985) cited evidence from evaluations of United States Department of Labour work programmes and the National Institute of Education's Experience-Based Career Education Programme. The evidence shows that vocational training could reduce school dropout and increase learning and attendance among high-risk adolescents. To do this, work experiences need to be:

- carefully integrated with classroom experience
- perceived as relevant to the students' interests
- closely monitored.

Unfortunately, the impact of these programmes on delinquency has not been assessed.

The CASE (Contingencies Available to Special Education) project conducted in Washington has been carefully investigated (Cohen & Filipczak, 1971). This programme was set in an institutional environment and incorporated specified academic performances with reinforcement for individual success. The 41 young offenders, all school failures, were rewarded with points for academic competence which they could trade for money and desirable goods. The 32 boys who had participated for at least 90 days showed an average increase of two grade levels. During the first year, these boys also had a recidivism rate two-thirds less than a similar control group. The differences in recidivism had disappeared by the third year. Other alternative programmes, such as City Lights in Washington, DC and the Phoenix Programme, also appear to be successful at:

- involving failing students with behaviour problems in academic and vocational training programmes
- remedying their educational problems
- reducing participants' recidivism rates (Tolmach, 1985; Kratcoski & Kratcoski, 1982).

In contrast, other studies, in particular meta-analyses, have found that employment/educational programmes have had mixed results. Hawkins & Lishner (1987) suggest that reductions in school crime and dropout rates were often related to smaller individualised learning environments with low student/teacher ratios, peer counselling, token economies, and strong administrative support. Reductions in community-wide delinquency were less common.

Johnson & Goldberg (1983) evaluated the effectiveness of providing male young offenders with state vocational counselling and services. This was a carefully designed study in which youths were randomly assigned to treatment or to a matched probation-as-usual control group. It yielded disappointing results with no significant differences between the two groups in the number and severity of new offences committed in a two-year follow-up period. The authors conclude that the results were most likely due to poor implementation of the treatment. The counsellor turnover rate was high, and the number of contact hours extremely low, ranging from three per month to two per year.

Hollin & Howells (1996) report on the Birmingham Action for Youth (BAY) employment scheme. This used a range of behavioural methods, including a reinforcement programme and social skills training, to prepare young offenders for employment. While the youths' level of actual employment was low after leaving the scheme, a six-month follow-up did indicate some reduction in official measures of offending. Agee & Lombardo (1996) described the Student Transition Education Employment Programme (STEEP) run in Ohio. The STEEP programme was built on a seamless institution-to-community transition. It was designed to give young offenders an opportunity to begin learning a trade (carpentry) while still in a correctional facility and to continue learning in a community carpentry project when released. The youths were paid for their work at the community-based carpentry project and those who successfully completed the programme received their savings account plus a \$500 bonus. Youths in the programme were on average 17 years old and most were convicted of felony offences. The dropout rate was high with less than one-third completing the programme. However, the likelihood of recidivism for those that did complete was extremely low at around 8%. No control group is mentioned.

Paimer (1994) reported on meta-analyses and other reviews of vocational/employment training. He found that these interventions had positive outcomes in between one and two-thirds of every set of studies discussed. Lipsey (1992) found a sizeable negative impact on recidivism ( $ES = -.18$ ) when programmes were operated within the justice system but no net impact for programmes run outside the justice system. (For

programmes outside the justice system he analysed vocational and employment studies together.)

Genevie, Margoles and Muhlin (1986) describe their results as "inconsistent" for vocational training alone but consider the combination of work-study programmes among the few promising or successful approaches.

Overall, then the outcomes of educational/employment programmes are somewhat equivocal. There are indications, however, that strongly implemented and well-run programmes may have a significant impact on offending behaviour. Such programmes deserve more controlled, long-term evaluations of their impact on participants, with particular attention to the ways in which young offenders respond to different styles and modes of service. Gendreau & Ross (1987) conclude that if work programmes are to be successful they should:

- be targeted to higher-risk offenders who do not have job skills
- develop practical and interpersonal skills
- minimise institutionalisation (if run in correctional institutions)
- ensure that work is not punishment alone
- be based on behaviour modification schemes so that inmates are motivated to succeed
- provide work that is socially reinforcing, personally meaningful and well supervised.

Fagan & Forst (1996) conclude that the provision of job opportunities may be important in promoting pro-social identification and helping young offenders reintegrate into the community. They suggest that the development of job opportunities must be part of the social contract between youths and society. The denial of opportunities for jobs and of the social or material rewards of law-abiding behaviour violates this contract.

## General Findings

While the literature reviewed suggests promising approaches and treatments, no one specific programme or category offers a "magic bullet" to those wishing to reduce recidivism among young offenders (Palmer, 1994; Lipsey, 1992; Losel, 1996). The absence of even a few powerful yet widely applicable types of programme probably reflects several factors. The heterogeneity of participants hampers positive outcomes in many cases. Programmes may not be powerful or flexible enough to produce major reductions for all offenders combined. They may need to address issues relating to the ways in which offenders respond to treatment before further reductions in recidivism rates will be achieved. More also needs to be known about the interaction of treatments with offender types and settings.

Many programmes which are grouped together in reviews and meta-analyses and considered "a type" are not, in fact, very similar once they are closely examined. Furthermore, even potentially powerful programmes are often inadequately implemented. Finally, there are simply not enough well-replicated, methodologically sound studies with adequate follow-ups to be able to make sound judgements about the effectiveness of different programme types. Losel (1996) reports that the results were positive in all meta-analyses of treatment effectiveness for young offenders that computed effect size. However, when various types of treatment were included, the size of the mean effect was small. In the majority of cases, the overall effects were about 0.10. This means that, given dichotomous outcome measures such as re-arrest, reconviction or re-incarceration, the treated group performs on average 10 percentage points better than the control group.

Nonetheless, despite the absence of panaceas, there is still a relatively consistent trend: forms of treatment that are oriented towards empirically sound and clinically relevant theories of criminality, are structured, cognitive-behavioural and multi-modal produce the best effects with younger offenders as they do with adults (Gottschalk et al, 1987; Whitehead & Lab, 1989; Andrews, Zinger et al, 1990; Izzo & Ross, 1990; Lipsey, 1992; Basta & Davidson, 1988). This is no doubt why certain programmes within widely different categories (e.g. employment, wilderness) have been shown to be equally effective in some cases. If these programmes are well-structured, skill-oriented, have a cognitive-behavioural format and address problems which predict re-offending i.e. criminogenic needs, they are likely to have some impact on recidivism, despite apparent differences in orientation.

Lipsey (1992) demonstrated in a convincing way that treatment variables increase variations in estimates of effect size. The major treatment variables associated with reduced offending include:

- longer duration of treatment and more meaningful contact (except for the continuous contact provided by institutional care)
- services provided outside formal corrections settings and institutions i.e. in the community
- services under the influence of the evaluator
- behaviourally-oriented, skill-oriented, and multi-modal treatment
- services for higher risk cases
- treatment that attends to extra-personal circumstances (e.g. family, peers).

The best treatments are structured and focused, and according to Lipsey, reduce offending rates by about 30% on average. Thus the effects of successful programmes are around three times as high as the average overall effects (10%) and are similar to the effects found in analyses of the adult offender treatment literature (Andrews, Zinger et al, 1990). The literature reviewed in this report indicates that, in general, most programmes treating young offenders achieve reductions in recidivism compared to controls of between 14% and 40%. Reductions in re-offending appear to increase as programmes

pay more attention to the transfer of training to the youths' real world setting and to the creation of an environment that reinforces pro-social behaviour. Currently, there is little research on the establishment and maintenance of a pro-social treatment environment although this is beginning to change (Battistich, Watson et al, 1991). Certain strategies, such as treating family and peer group members, providing treatment in home and community settings, using positive peer cultures, therapeutic communities and the involvement of offenders as co-therapists, have all proved useful in increasing the effectiveness of standard cognitive-behavioural treatments.

The literature suggests that, in general, high-risk groups need more intensive, multi-modal, comprehensive programmes than lower risk groups. Outcomes are better for this group when treatments are community-based, particularly when they are carried out within their social/ecological milieu. The breadth of intervention seems especially relevant to high-risk offenders whose deficits and difficulties are broad and intertwined. Borduin (1994) suggests that a major limitation of existing treatments and service programmes for young offenders is that they fail to address the multiple causes of antisocial behaviour in adolescents. Programmes also need to be delivered in an appropriate environment. Hollin (1994) echoes these sentiments in his review of recent meta-analyses and concludes that structured, focused and multi-modal treatments seem to be more effective. The failure of programmes using a single approach to treat young offenders (e.g. 'social skills' and 'moral reasoning') reinforces this view (Hollin & Henderson, 1984; Gibbs, 1991). Multi-modal programmes usually incorporate a variety of methods, for example, a combination of social skills training, behaviour therapy and self-management, and target a range of related skill deficits/problem areas. Arousal control, social skills and socio-moral competence are all treatment foci in Goldstein's (1986) Aggression-Replacement Training programme.

Palmer (1995) reports, however, that only some combinations of programme components reduce recidivism. In his view, it is not clear whether certain combinations are reliably effective, that is, whether they are associated with recidivism reduction in most of the studies in which they appear. Palmer reminds us that non-programme factors such as staff characteristics contribute significantly to outcomes, often independently of the particular generic category or programme approach. In order to establish which combinations of approaches are reliably effective, Palmer (1994,1995) has developed a strategy for treatment programming called the "global approach." This involves researchers setting out effective combinations of programme components and generating studies in which a number of them are systematically examined to determine which are reliably effective. This research strategy would take a holistic approach to programme evaluation. It would consider such aspects as operational goals, strategies and specific techniques along with staff, setting and offender characteristics. The goal would be to combine features found across particularly successful programmes to provide the basis for establishing new programmes. Palmer considers that improved information regarding the nature of effective combinations would reduce the chances of making premature and overstated conclusions about various approaches, and decrease the likelihood of prematurely dismissing and overlooking others.

Recent reviews and meta-analyses have generally found stronger effects for treatment of young offenders in community as opposed to institutional settings (Palmer, 1994; Hollin, 1994). Andrews, Zinger et al's (1990) meta-analyses concentrated on 80 studies of juvenile and adult correctional treatment that yielded 154 treatment-control comparisons. There was a mild but detectable tendency for the effects of inappropriate service to be particularly negative within custody settings, and for the effects of clinically relevant service to be particularly positive in community settings. The latter finding, in combination with the negative effect of criminal sanctions, led the researchers to conclude that they had under-estimated the negative effect of custody. They are now much more willing to say that research findings affirm a widely-shared belief that custody is best viewed as the



last resort. Losel (1996) stated that avoiding custodial settings is plausible from various perspectives:

- processes of deprivation and institutionalisation that can have a negative impact on treatment are circumvented in the community
- massing antisocial youngsters in institutions increases the risk of unfavourable peer-group influences
- it is easier to involve the family and other important reference persons in community settings
- cognitive and behavioural skills acquired through treatment cannot be tested directly against reality in institutions but have to be transferred at a later time.

In general, institutional treatment settings have to work a lot harder to produce treatment effects. However, the use of certain strategies within institutional programmes can help to offset their difficulties. The distance from the young offender's real-life situation can be ameliorated in part by using approaches such as relapse prevention and attending to the incorporation of material from the lives of the youth into the programme itself. Institutional treatment programmes must also be backed up with high-quality after-care and support in the community. Many researchers recommend a second dose of treatment once the youth is released in order to ensure transfer of training to his/her natural environment. Finally, institutions must break the anti-social bonding with peers which occurs in these settings and provide a pro-social environment for their clients if any change is to occur.

Interestingly, a study of age-mixing carried out in New Zealand prisons in 1996 (Gray Matter Research Ltd, 1996) suggested that custody staff, young offenders and older inmates all viewed youth units as being as less desirable than age-mixed facilities. Staff and inmates considered that youth units were generally more violent than others. While 26% of the young offenders in this study reported having been assaulted, 68% of these assaults had occurred in youth units. The young offenders expressed a strong preference for residing in age-mixed units and regarded older inmates as helpful in settling them by befriending them and explaining routines, teaching them work and craft skills, discouraging them from fighting, and encouraging them to look at other options in their lives. Custody staff considered youth units were only useful if:

- they were specially-designed and purpose-built
- they were run as rehabilitation and not punishment units
- they offered many treatment options
- family and community were involved
- specially trained staff were selected to work in them.

Those experienced in running programmes for high-risk youth in institutional settings note that this is no easy task. Such treatments are complex, requiring a high degree of structure and the dedication of a cohesive body of especially trained staff. The staff should be skilled in behaviour therapy and able to model pro-social behaviours and values. Agee (1986), an acknowledged expert in the field of the institutional care of high-risk youth, states that therapeutic communities are extraordinarily difficult to create and maintain, particularly with a population skilled in creating a negative peer culture. She reports that those developing institutional treatment programmes for this group should design an intricate, highly-structured, written treatment programme. This will address the manipulation/ intimidation of staff characteristic of this group and their avoidance of treatment in uni-dimensional programmes. She suggests that every facet of the programme must have a system that backs it up in such a way that it is very difficult for youths to avoid the pressure of critically examining their behaviour. Incorporating the following treatments can intensify these programmes:

- family therapy
- recreational and occupational therapy programmes
- life and educational skills

- substance abuse treatment
- community re-entry programmes.

Hagan & King (1992) describe an intensive treatment programme conducted in a correctional facility for young offenders. This programme combined a range of interventions, including individual cognitive and psychotherapy, a residential management programme, education, family therapy and an independent living programme. At a two-year follow-up, the success of the programme in reducing rates of return to correctional placements was encouraging.

Leschied & Thomas (1985) report on the Craigwood-Bridgeway programme developed in Canada in response to the need to address high recidivism rates among graduates from training schools. The programme targeted high-risk young offenders at Craigwood, a semi-secure community-based residential treatment centre consisting of two units of ten beds each. The first unit offered a highly structured behaviourally-oriented programme tailored for immature, impulsive youth. The second offered a less structured programme with emphasis on peer-to-peer responsibility and working through personal feelings with a focus on future planning. A community programme was also provided. It offered an extension of the residential programme and focused on supporting youth in their post-release living situations. Relevant one-year follow-up data were encouraging. Young offenders' rate of re-involvement with additional criminal offenses and the average number of offences per juvenile were considerably reduced. A high percentage of youth were involved in either school or work and the authors viewed this as a critical factor in the success of their programme. At follow-up, Craigwood appeared to be able to support almost two-thirds of its residents in community or independent living. However, the absence of a control group in this evaluation leaves some questions unanswered and further controlled study is needed. This programme included many of the aspects of successful institutional programmes recommended by the treatment literature. It provided for a continuum of care and treatment with the cooperation and support of other community-based agencies and each adolescent was helped through both residential and community-based programmes.

Altschuler & Armstrong (1995) report on a serious effort by the Office of Juvenile Justice and Delinquency Prevention in the United States to develop high-quality aftercare services for young offenders released from institutional care. The OJJDP's initiative was designed to assess, test and disseminate information on intensive after-care programmes and models for serious, chronic young offenders who initially required secure confinement. The first three stages of assessment, programme development and training have been completed and pilot programmes are currently being implemented in eight States. The Intensive Aftercare Programme, as it is known, has developed a model which is an integration of social learning, strain and control theory to address problems posed by the particularly difficult, high-risk youth offender population. Its stated goal is to demonstrate the value of the model for reducing rates of recidivism among chronic young offenders making the transition from institutional to community care. The model is based on the notion that continuing service provision, social control and support in the community are essential to maximise the potential for long-term positive change and normalisation. The authors envisage a strong role for community corrections' workers in developing community links and supports for their clients. They recognise the need for ongoing advocacy in the community to ensure that young offenders will be given the opportunity to access appropriate agencies, organisations and programmes. It is in the community that success or failure will ultimately be measured. The OJJDP after-care model is "state-of-the-art" in its field and seems likely to contribute significantly to reducing recidivism in its study population of high-risk youth offenders.

The "Massachusetts Experiment" is often quoted as a prime example of how the move to community-based care may affect rehabilitative efforts and public safety. In the early 1970s the state of Massachusetts responded to the abusive and ineffective programmes of its state training schools by closing them and providing community-based treatment for young offenders. However, secure care remains a viable option for some youths. The secure institutions are small, located closer to the youths' home environment and typically provide a range of treatment options. These beds are reserved for youths who have committed violent offenses or have a long history with other programmes within the correctional system. Most of the youths in secure care, even those who have committed serious offences, have been worked with first in less restrictive programmes. The range and richness of other programme settings is the key to making the secure facilities work without overwhelming the system. These include outreach, day treatment programmes, wilderness programmes, foster care, group homes and tracking programmes. The evaluation of the Massachusetts model compares recidivism rates for all youth released by the Massachusetts Dept of Youth Services in 1985 to those reported for several other states. The Massachusetts rates were among the lowest, using several indicators of post-release failure (Milan, 1996).

Intensive supervision programming (ISP) is another option that has been tried in various places to reduce the pressure on correctional institutions and provide a community-based treatment alternative. The guiding belief of intensive supervision programmes is that closer scrutiny of offenders through reduced probation caseloads creates conditions in which higher levels of accountability reduce criminality. As well as providing opportunities for intense probation involvement, ISP has included family interventions, community/service, restitution programmes and more intrusive surveillance such as electronics. In some instances, intensive supervision has been provided to clients following placement in custody as part of an early release programme. Evidence to date (Pearson, 1988) has tended to address lower risk offenders who may not have been candidates for custody in the first place. Nevertheless, well-designed experiments by Barton & Butts (1990); Gruenewald, Laurence & West (1985); Fagan, Forst & Viviona (1988) suggest, that multi-component probation and aftercare services which are carefully thought through and relatively intensive may be at least as effective as standard approaches with high-risk youth. The 1985 and 1988 Barton & Butts experiments involved high-risk, violence-prone, or violent youths who were bound for institutions or who were sentenced but had not actually been sent to an institution. Barton & Butts (1990) found that the mean seriousness of the offences subsequently committed by participants on the programme was less than that of custodial cases.

Other reviews (Andrews et al, 1990) indicate that sanctions without programming do not significantly lower re-offending rates. Evaluative studies of ISP, such as the New Jersey Programme (Pearson, 1988), have extended the importance of programme content to the probation field by concluding that simply seeing clients more frequently (surveillance) does not reduce criminality. Byrne & Pattavina (1992) report that available evidence points towards a renewed awareness of the importance of offender treatment as a strategy to reduce recidivism. They also highlight the futility of simply increasing the level of offender surveillance and/or control. A systematic large-scale evaluation of intensive supervision by Petersilia & Turner (1993) found that the costs of these programmes were sometimes surprisingly high. They found no evidence that the programmes had any impact on recidivism. Only programmes that contained a significant treatment component, especially drugs-related counselling services, showed any positive effects. Andrews, Leschied & Hoge (1992) report that intensive supervision/probation programmes seem to be effective only when the content of the interaction is focused in a rehabilitative way. In other words, it is not the amount of contact between persons in authority and antisocial youth but rather the nature of the interaction that leads to reduced offending.

Andrews & Kiessling (1980) describe the quality and type of therapeutic process in a probation setting. Differences in probationers' recidivism rates were as high as 80%, depending on the supervisor's match with clients' characteristics. Trotter (1995) found that where supervisors were trained to use a pro-social approach to supervision (i.e. the use of pro-social modelling and reinforcement, problem-solving and empathy) recidivism rates, measured by breach and re-offending one year and four years after the start of supervision, were 25-50% lower than controls. A breakdown of the relative impact of the three factors found that the pro-social approach seemed to have more impact than the use of problem-solving or empathy. The treatment group were offenders over the age of 16 on community-based orders or parole. Remington & Remington (1987) suggest that there is enormous scope for the use of behavioural methods in probation work. Evidence suggests that training programmes can be successful in equipping probation officers with skills to be effective behaviour therapists.

Robert Lee's CREST (Clinical Regional Support Teams) programme has been exemplary in its attention and adherence to the details of an intensive, eclectic treatment-oriented probation service (Lee & Haynes, 1980) for moderate to high-risk young offenders. This programme contains components of reality, rational-emotive, client-centred therapies and role-playing. Lee & Olejnik (1981) report on a randomised evaluation of The CREST programme with a two-year follow-up. This study is one of the rare evaluations to include a sizeable proportion of female offenders. CREST subjects performed significantly better than regular probationers, particularly after the probation period ended for both groups. There were no sex differences in response to treatment. Just 30% of the CREST group offended when probation was terminated, whereas the similar figure for the controls was 70%.

Brownlee & Joanes (1993) report on the outcomes of intensive probation in England and Wales and outline the establishment of one such project in Leeds. The British government sought to reduce the use of immediate custody by the courts, without adversely affecting the level of public protection afforded by incapacitating offenders. It proposed targeting young adult offenders aged 17-20 as a group with whom intensive probation schemes could work to achieve this. As a consequence, the Leeds Young Adult Offenders Project (known as 'The Edge') was established in 1989. Treatment is oriented to addressing offending behaviour and other criminogenic needs such as employment. Initial data suggest the programme is successful in reducing recidivism rates for its participants when compared to controls. A systematic reconviction study is currently being undertaken.

In summary then, recent evaluations of Intensive Supervision Programmes suggest they may be at least as effective as institutional care at a proportion of the cost (Barton & Butts, 1990). If increased community corrections contact with high-risk young offenders includes treatment targeting appropriate criminogenic need, intensive supervision may be able to limit the increasing pressure on custody while making inroads on re-offending. Borduin (1994) sounds a cautionary note. He found that while Intensive Supervision Programmes report an average recidivism rate of only 16%, more controlled evaluations with long-term follow-ups are needed before programme effectiveness can be judged.

Institutions are normally the preferred option for the most persistent or dangerous offenders. In these cases, they fulfil not only a protective role for society but also for the young people themselves (e.g. in the risk of very severe offences, drug use, infections etc). Treatments in custody will remain important, despite processes that hinder success. Combining them with community-oriented approaches can, in some cases, reduce their disadvantages. Losel (1996) notes that from a scientific and practical perspective, the issue of "community versus institution" is more of a dimension than a dichotomy. There are various possibilities in both settings, as well as transitions between the two such as community residential centres, halfway houses, day treatment centres and intensive treatment focused supervision.

## Exemplary Treatment Programmes

### Paint Creek Youth Centre: Secure Treatment for Violent Young Offenders

In addressing the treatment needs of violent high-risk young offenders, Dr Vicki Agee (1979) draws upon programme components that have been shown to be effective in reducing re-offending. Agee adopts four general areas of effective intervention:

- differential classification
- cognitive restructuring
- peer support
- community reintegration.

Agee uses the I-Level classification system to divide youth into two groups – ‘instrumentals’ and ‘expressives’. ‘Instrumentals’ are youths of lower conceptual level who are concrete, inflexible thinkers and depend on others for direction. ‘Expressives’ are more integrative thinkers, tend to assume leadership roles and are better problem-solvers and planners. Yochelson & Samenow's (1976) discussion of thinking errors as contributors to criminogenic attitudes and behaviours has strongly influenced Agee's orientation to cognitive treatment. The cognitive restructuring component of the programme emphasises:

- accepting responsibility
- victim awareness
- identifying and challenging minimization, intimidation, lying, denial and manipulation.

The programme emphasises a positive peer community to create a pro-social environment. The role of staff is to support and guide participants and steer the peer group in a positive direction. The treatment programme also includes:

- a clear and consistent structure
- family support
- life skills programmes
- substance abuse treatment
- fitness/recreational therapy.

Peter Greenwood of the Rand Corporation (cited in Mulvey, Arthur & Reppucci, 1993) has undertaken an evaluation of the Ohio Programme. He revealed that youths from PCYC were less likely than controls to have been re-arrested (55% versus 71%) or incarcerated (15% versus 50%) one year after their release from the programme. Despite these initially encouraging results, it is worth noting that approximately a quarter of the experimental group did not complete treatment at PCYC due to behavioural problems. These youths were removed and placed in the control institutions, perhaps indicating that the programme may not work with particularly difficult youths. Longer follow-up data are needed to assess community reintegration further.

### The Aggression Replacement Training of Goldstein and Glick

This programme takes the view that chronically aggressive or delinquent youth lack constructive, pro-social behaviours for dealing with provocative, challenging or problematic situations. ART has been developed over the last ten years and is one of the most replicated and evaluated treatments. It involves three main approaches to changing behaviour:

- skill-streaming in which a 50-skill curriculum of pro-social and problem-solving behaviours is taught
- anger control training in which anger management and arousal control skills are taught
- moral education which is a set of procedures designed to raise the young persons' level of awareness of fairness, justice and perspective taking.

Initial investigations of ART showed that it was useful in improving the institutional functioning of incarcerated delinquents, but was less successful with more serious young offenders. The studies did not investigate post-release recidivism rates. Later community - based trials of the ART programmes have proved effective in reducing recidivism rates of high-risk youths by about 14%. Where the youths' family and/or peer group were also treated the reduction climbed to about 30%-40% over controls. Follow-up periods have ranged from three to eight months.

The EQUIP programme of Leeman, Gibbs & Fuller (1993) combines a positive peer culture format with ART. It appears to be particularly effective within institutions. The authors evaluated this programme with 57 young felony offenders in a medium security institution. The recidivism rate of EQUIP subjects was 15% compared with 30-40% for the no treatment control at six and 12 months follow-up. Clearly this treatment needs further replication but its initial results are impressive given that it appears to be able to produce substantial change via an institution-based programme and sustain that change through to 12 months community follow-up.

### **The Multi-Systemic Therapy of Henggeler & Borduin**

MST (Henggeler & Borduin, 1990) is a family and home-based treatment approach that adopts a family preservation model of service delivery. MST interventions are designed to address intrapersonal, familial, and extrafamilial (peer, school and neighbourhood) factors that are known to be associated with adolescent antisocial behaviour. It uses treatment strategies derived from strategic/structural family therapy and behavioural therapy. Because different combinations of these factors are relevant for different adolescents, MST interventions are individualised and flexible. Rigorous evaluation has been a cornerstone of the development of MST. In a study of adolescent sexual offenders (Borduin, Henggeler et al, 1990) MST was relatively effective in reducing recidivism for both sexual and non-sexual crimes. Likewise, Henggeler et al (1986) found that young offenders who participated in MST had a lower recidivism for drug-related crimes.

A subsequent series of studies (Henggeler, Melton et al, 1992; Borduin, Mann, Cone et al, 1995) established the effectiveness of MST in treating serious and chronic juvenile offenders. Outcome measures included re-arrests, self-reported delinquency, and time incarcerated at 59-week, two-year and four-year follow-ups. The programme also achieved cost savings. MST adheres to several treatment principles:

- assessment aims to understand the fit between the young offenders' identified problems and their broader systemic context
- interventions focus on the present, are action-oriented and target specific, well-defined problems
- interventions are developmentally appropriate and are designed to require daily or weekly effort by family members
- intervention efficacy is continuously evaluated
- interventions are designed to promote the wider applicability of treatment effects and to maintain therapeutic change in the longer term
- therapeutic contacts emphasise the positive and use system strengths as levers for change
- interventions are designed to promote responsible behaviour and decrease irresponsible behaviour by family members.

The results from these outcome studies support the long-term efficacy of MST in the treatment of serious antisocial behaviour in adolescents. The success of MST is probably attributable to the match between MST intervention foci and actual correlates of antisocial behaviour (e.g. family discipline, family affective relations, peer associations and school

performance) and the flexible use of well-validated intervention strategies in the natural environment.

### **The Cognitive Model of Ross and Fabiano**

Earlier portions of this report identified the importance of cognitive variables as appropriate targets for effective intervention. Robert Ross and Elizabeth Fabiano of the University of Ottawa have now developed a sophisticated intervention and cognitive skills training package. This model is based on findings that criminal behaviour is associated with developmental delays which interfere with the acquisition of cognitive skills essential to social adaptation (Ross & Fabiano, 1985). These deficits affect offenders' reasoning abilities and their ability to take a social perspective and solve interpersonal problems. The programme seeks to train or shape responses. It aims to teach offenders to consider the consequences of their behaviour. It also gives them strategies for identifying and analysing problems and generating alternatives to criminogenic thinking. In 1983, Ross & Fabiano suggested that the cognitive model has much to offer offenders although it is not a panacea. Subsequent meta-analyses have confirmed this contention. To date this programme has been tried mainly with adult offenders. Those who complete the programme have shown significant reductions in recidivism rates (about 25%-50% over controls). The programme appears to be most powerful in a community-based setting and for high-risk offenders.

### **Project CREST - an Intensive Supervision Model**

Lee & Olejnik (1981) examined the long-term effectiveness of CREST (Clinical Regional Support Teams), a programme that delivers an intensive eclectic service via probation. The programme was evaluated systematically over several years. Many, but not all, CREST cases are considered high-risk and evaluation studies have shown that at the time of referral, the average CREST client was committing acts of misconduct at a higher rate than probationers in general (Lee & Haynes, 1980). Each client is assigned a counsellor, usually a university student enrolled in a professional counselling programme. Although the clients may receive more than one kind of service, the basic mode of treatment is one-to-one counselling. CREST counselling is oriented toward changing attitudinal and thought processes and uses various approaches, including:

- reality therapy to help the client confront the problems of the present rather than dwelling on the past or in prolonged fantasy
- rational-emotive therapy in which the counsellor attempts to identify and challenge the young offender's irrational thinking
- client-centred therapy which focuses on the client learning to identify and express feelings
- behaviour modification through positive reinforcement.

All the evaluation studies report a minimum of 10 counselling sessions but give no more precise measure of time in treatment. Lee & Haynes report that regardless of differences in counsellors, subjects and modes of measurement, the CREST-treated groups in four separate studies (including a two-year follow-up) committed at least 50% fewer criminal acts than the controls. Seventy percent of the CREST treatment subjects were found to have clear re-arrest records at the two-year follow-up compared to 48% of the controls. The recidivism data was obtained from adult and juvenile arrest records. The CREST programme appears to be capable of producing significant reductions in recidivism. However, one qualification is that CREST treats primarily juvenile offenders (usually under 17 years) who may represent a somewhat less "hardened" group that is more amenable to treatment than older high-risk adolescents.

Evaluations of the following three programmes are not yet available but they have been included because they adhere to the principles of effective treatment, are relevant to the 17-20 year age group and use innovative treatment delivery models.

### **City Lights - a Day Treatment Centre for High Risk Youth**

City Lights is a day treatment centre in Washington, DC that enrolls very high-risk (primarily black) adolescents aged between 12 and 22. The youths present with an array of psychological, educational, social, economic and behavioural problems that frequently defy traditional treatment. Tolmach (1985) writes that City Lights, which is housed in a converted warehouse, enrolls youths for whom the treatment of choice has been "residential treatment in a pastoral setting remote from the confusion and temptation of city life and equally remote from the realities to which such youth return. All too frequently, such youths return to families who have lost interest in them, and to a community that has no programmes - educational, vocational, or residential - to bridge the gap between institution and independence " (p. 214-215).

The community-based treatment at City Lights aims at cohesive, multidisciplinary comprehensive care within the context of a therapeutic community. Those running the programme believe that late adolescence is an opportunity for promoting behavioural change that is too often missed. They provide an eclectic combination of strategies to fill this void. The centre uses:

- individual counselling and one-to-one contacts between staff and students to build a trusting relationship with its clients
- group therapy
- family therapy
- individual treatment plans to remedy individuals' specific deficits.

The programme uses a self-paced computer-assisted education programme to increase academic competence, which is seen as an essential criminogenic need. If they can not read and compute, offenders are unlikely to adapt successfully to adulthood. The programme also promotes recreational and productive leisure pursuits and develops community links. Students who make academic and behavioural gains are offered part-time employment as a potent motivator for change. Tolmach states that until the programme is evaluated only modest claims can be made for its success. These include:

- the programme's ability to keep behaviourally-disturbed chronic truants in school
- markedly improved literacy and academic competence
- increased stability of the young offenders within natural and foster families which has dramatically reduced additional institutional placements
- an attendance rate of 90% despite the population of chronic truants
- in its first three years of operation only 10% of its students were returned to jails
- only 7% of students dropped out of their own accord.

### **'The Edge' - A British Intensive Probation Service for High-Risk 17-20 year olds:**

The Leeds Young Adult Offenders Project was established in 1989 (Brownlee & Joanes, 1993). Known as 'The Edge' , it was set up to target young adult offenders aged 17-20 with intensive probation services. It is aimed exclusively at offenders who would otherwise receive custodial sentences. A preliminary screening takes place pre-sentence on the basis of the offenders' risk of custody score. This is assessed using a risk prediction instrument. Probation staff decide whether the offender is sufficiently at risk of custody to warrant further contact with The Edge. If they decide s/he is, then provided sufficient time is available before sentencing (the willingness or otherwise of courts to grant adjournments for this purpose is one of the limitations on the projects effectiveness), one of the project workers assesses the offender's suitability for the project. This assessment is based on at least two face-to-face interviews during which motivation, attitudes to offending and specific needs are addressed. If an offender is thought suitable



and sufficiently motivated, a detailed programme of activities is drawn up and submitted in a report annexed to the pre-sentence report at the sentencing adjournment. If the court accepts the recommendation, the offender attends the project for sessions with his or her project worker while remaining under the general supervision of the probation officer assigned to the case.

Programmes are individually tailored to the perceived needs of the particular young offender, but characteristically involve one-to-one counselling sessions centred on offending behaviour and social skills training, stretching over eight weeks. Problems such as homelessness, unemployment, and financial need are addressed along with offending behaviour. The project explicitly rejects the suggestion that its programmes have to be punitive in nature. The punitive element of the project order is contained in the deprivation of free time involved in attending. Attendances are frequent at the beginning of the order, less frequent toward the end of the sixty-day requirement. Initial evaluation results suggest that The Edge is successful in attracting referrals of serious high-risk offenders who are in its target age group. A systematic reconviction study involving three sample groups is being undertaken but its results are not yet known. In the interim, information gathered from the project and probation sources suggests that those attending the project breach their probation orders by re-offending less often than those on "straight" probation nationally. The same data also suggest that those receiving a project order are not re-offending at the same rate as those in the 17-20 year age group released nationally from custody.

### **The Intensive Community Based Aftercare Model**

Developed by the Office of Juvenile Justice and Delinquency Prevention (OJJDP) in the United States (Altschuler & Armstrong, 1995) this model aims to reduce recidivism among serious, chronic young offenders being released from secure confinement. It does this by providing high quality transition and reintegration services. The model has developed five principles for action:

- to prepare juveniles for progressively increased responsibility and freedom in the community
- to facilitate juvenile-community interaction and involvement
- to work with both the offender and targeted community support systems (e.g. families, peers, schools and employers) on qualities needed for constructive interaction and the youth's successful adjustment to the community
- to develop new resources and supports where needed
- to monitor and test offenders and the community on their ability to deal with each other productively.

The authors report that youths who are at highest risk of re-offending are likely to benefit most from being involved in intensive aftercare. They recommend that the surveillance and monitoring aspects of the programme are structured to impose greater restriction on movement initially, but substantially reduce this as offenders show positive adjustment. If problems arise, the degree of structure and level of social control can be increased. Altschuler & Armstrong (1995) note that while there is an important place for punishment and sanction, they should always be tempered by responding positively to pro-social conduct.

The Intensive Aftercare Programme model was based on the idea that the institution-community link component would determine the success of the approach. A number of specific approaches ensure that institutions and community agencies enter into an active working partnership. These include:

- the increased presence of an aftercare worker in the institution on a regular basis throughout the period of the client's confinement

- adopting a collaborative approach to pre-release planning that involves relevant individuals from both the institution and the community so that information is gathered more effectively and shared to ensure better decision-making
- using transitional or staged placements outside the institution to facilitate a more gradual step-down into the community
- including service providers who can prepare juveniles to access resources in a more systematic fashion once they have returned to the community
- the gradual testing and probing of the young offenders' readiness for community re-entry through the use of weekend passes and day visits to potential educational sites for placements and employment.

The intensive aftercare model is currently being tried in eight states in America and evaluation results should be known in due course.

## **An Intervention Strategy For Young Offenders**

**1. Develop a risk/needs assessment and classification system relevant to the New Zealand context and validate it on a large sample of young offenders.**

**2. Design programmes to enhance motivation and reduce attrition rates**

Options include:

- using wilderness programmes prior to the main intervention
- incorporating concrete, visual and active learning methods
- providing a high ratio of positive to negative reinforcement
- evaluating offender conceptual level and tailor programmes to suit this
- using positive peer cultures and "seed" programmes with higher functioning youths
- using motivational interviewing techniques
- having some flexibility built into official sanctions and conditions so these can be used as leverage e.g. reduced sentence length, changes in conditions, reduced reporting or attendance
- providing extrinsic and intrinsic rewards for programme participation and behavioural change, ensuring that these are relevant to, and desired by, the youths themselves.

**3. Design multi-modal treatments with a cognitive-behavioural orientation.**

Treatments should focus on addressing factors which are known correlates of antisocial /offending behaviour e.g. criminogenic thinking, antisocial associates, family factors, aggression, impulsiveness, and on promoting pro-social bonding. Goldstein's Aggression Replacement Training is probably the best example of such a treatment currently available. Programmes should use a range of tools and methods to produce change.

**4. Develop comprehensive, broad-based treatment services for high-risk young offenders.**

Services need to address a range of criminogenic needs since any one treatment is likely to be insufficient. The more problems predictive of re-offending interventions target, the more effective they are.

**5. Provide intensive services.**

Most reviews have found that effectiveness increases as hours increase. Meta-analyses associate a larger effect size with more hours of contact or treatment for high-risk youth. However, effectiveness decreases once treatment is continuous, as in institutional or residential settings. Estimates of the optimum "dose" of treatment vary widely from three months - two years for high-risk cases. Gendreau recommends offenders spending 40-70% of their time on programme activities for three to nine months. However, some researchers have found maximum effectiveness is around one year where treatments are institution-based. A combination of individual and group treatments can help to increase intensity.

**6. Provide community-based ecologically valid treatment services.**

One of the strongest conclusions to be drawn from this review is that community-based treatments are more effective for high-risk young offenders. There are two models which may be used:

(i) Day Treatment Centres

(ii) Intensive Treatment Focused Supervision

(see overleaf for further discussion of how these models might work)

## **7. Reform institutional services.**

If institutional services continue to be used (perhaps because of public pressure to "punish" or for those very high-risk violent young offenders who need secure care) they will need to be redesigned if they are to be effective in reducing young offender recidivism rates. The redesign should be according to the principles discussed in earlier sections of this report. High quality community based after-care services are also required.

## **8. Don't oversell treatment.**

While it is important to make the public aware that there is now strong research support for the effectiveness of rehabilitative programming in reducing re-offending, it is important to remember that there is no cure for crime. Despite recent advances in treatment, high-risk young offenders are still a difficult group to treat effectively.

## **Community-Based Treatments - Suggested Models**

### **Day Treatment Centres**

Day treatment centres (a little like periodic detention centres) could be established in city areas where young offenders are most likely to live. This would make service delivery more relevant. The centres would provide assessment and treatment services for young offenders of different risk levels, varying the breadth and intensity of treatment according to risk/needs levels. They could also be used to provide after-care services for the small percentage of youths who may still need to be incarcerated. They would provide intensive supervision and offer a range of treatments according to assessed needs (e.g. substance abuse, anger management, education/vocational training, cognitive skills). Either community agencies and/or specialist services of the Department of Corrections could provide treatments. The treatment centres would also provide a pro-social environment for their clients with staff specially trained and skilled in working with young offenders. Offenders would be able to return to the community when not at the centre. Such centres would have a number of advantages. They would:

- be youth focused
- encourage family and community involvement more easily
- provide integrated services to reduce fragmentation and discontinuity
- have a pool of specialised staff available
- be better able to maintain treatment standards and integrity
- be more cost effective than current corrective training
- be most effective in reducing youth offending.

### **Intensive treatment focused supervision**

Research suggests that the intensive supervision model can work for high-risk youth if it provides them with treatment services. Community Corrections offices could develop intensive supervision teams to work with young offenders and use a brokerage model to provide them with treatment services. This model lacks the cohesiveness of that described above and the opportunities for coordinated, integrated service with a high degree of programme integrity and oversight are not as great.

Obviously these options would require the abolition of corrective training and its replacement with a new sentence. The intensive supervision literature suggests that high-risk youth such as those represented by the corrective training population can be maintained in the community with no greater recidivism rate than if they were released from an institution. The provision of treatment services may significantly lower this re-offending rate. However, there may still be some very high-risk violent young offenders who would need to be incarcerated. They would probably be no worse off in personal terms in prison than on corrective training, given that the recent New Zealand survey on age-mixing suggests the dangers of housing younger and older inmates together have been over-stated. Their likelihood of re-offending after a prison sentence would be about the same as if they had been sentenced to the current corrective training regime. However, if prison reform goes ahead, such youths would presumably be assessed on admission and sent to the prison treatment unit which best meets their criminogenic need(s). If Day Treatment Centres (as in option (i)) were in operation and provided after-care services to these youths, and they had received treatment while in prison, this combination would be likely to significantly reduce their rates of re-offending.

Operating secure "Youth Treatment Units" is also an option and some institutional programmes are beginning to show some success. However, these units are likely to be costly to run and require highly trained and well-qualified staff, skilled in creating a pro-social environment and in consistently applying behaviour management techniques to difficult behaviours. They also require excellent transitional services and community after-care. Without this combination of factors "youth units" are unlikely to be effective.

## References

- Agee, V. (1979) *Treatment of the Violent Incurable Adolescent*. Lexington/ Massachusetts: Lexington Books.
- Agee, V. (1986) Institutional Treatment Programmes for the Violent Juvenile. In S.J. Apter & A.P. Goldstein (Eds) *Youth Violence: Programmes & Prospects*. New York: Pergamon Press (pp. 75-88).
- Agee, V. & Lombardo, M. (1996) Cancelled STEEP Programme Reduced Juvenile Recidivism. *Corrections Today*, August '96, 104-106.
- Albrecht, L. (1995) Facility Programming for Female Delinquents, In A.P. Goldstein & B. Glick (Eds) *Managing Delinquency Programmes that Work*. Laurel, MD: American Correctional Association.
- Altschuler, D. M. & Armstrong, T. L. (1995) Managing Aftercare Services for Delinquents. In A.P. Goldstein & B. Glick (Eds) *Managing Delinquency Programmes that Work*. Laurel, MD, Maryland: American Correctional Association.
- Andrews, D.A. (1980) Some experimental investigations of the principles of differential association through deliberate manipulations of the structure of service systems. *American Sociological Review*, 45, 448-462.
- Andrews, D.A. & Bonta, J. (1994) *The Psychology of Criminal Conduct*. Cincinnati, Ohio: Anderson Publishing Co.
- Andrews, D.A., Bonta, J., & Hoge, R.D. (1990) Classification for Effective Rehabilitation: Rediscovering Psychology. *Criminal Justice and Behaviour*, 17, 19-52.
- Andrews, D.A. & Kiessling, J.J. (1980) Programme Structure and Effective Correctional Practices: A Summary of the CAVIC Research. In R.R. Ross & P. Gendreau (Eds) *Effective Correctional Treatment*. Toronto Butterworths.
- Andrews, D.A., Leschied, A., & Hoge, R.D. (1992) *Review of the Profile, Classification and Treatment Literature with Young Offenders: A Social-Psychological Approach*. Ontario: Ministry of Community and Social Services.
- Andrews, D.A., Zinger, I., & Hoge, R.D. et al (1990) Does Correctional Treatment Work? A Clinically Relevant and Psychologically Informed Meta-Analysis. *Criminology*, 28, 369-404.
- Annis, H. & Chan, D. (1983) The Differential Treatment Model: Empirical Evidence from a Personality Typology of Adult Offenders. *Criminal Justice and Behaviour*, 19, 159-173.
- Annis, H. & Davis, C.S. (1987) Self-Efficacy and the Treatment Trial. In T.B. Baker and D. Cannon (Eds) *Addictive Disorder: Psychological Research in Assessment and Treatment*. New York: Praeger.
- Antonowicz, D.H. & Ross, R.R. (1994) Essential Components of Successful Rehabilitation Programmes for Offenders. *International Journal of Offender Therapy and comparative Criminology*, 38, 97-104.
- Baer, D.J., Jacobs, P.T. & Carr, F.E. (1975) Instructors' Ratings of Delinquents after Outward Bound Survival Training and their subsequent Recidivism. *Psychological Reports*, 36, 547-553.
- Bakker, L. & Riley, D. (1996). Remission or Cure? The Reconviction Study Five Years On, pp. 28-42. *Proceedings of the Psychological Service Annual Conference*. Wellington, New Zealand: Department of Corrections.
- Baldwin, S., Heather, N., & Lawson, A. (1991) Comparison of Effectiveness: Behavioural and talk-based courses for court-referred young offenders. *Behavioural Psychotherapy*, 19, 157-172.

Barton, W. & Butts, J. (1990) Viable Options: Intensive Supervision Programmes for Juvenile Delinquents. *Crime & Delinquency*, 36, 238-256.

Basinger, K.S., Gibbs, J.C. & Fuller, D. (1995). Context and the measurement of moral judgement. *International Journal of Behavioural Development*, 18, 537-556.

Basta, J.M. & Davidson, W.S. (1988) Treatment of Juvenile Offenders: Study Outcomes since 1980. *Behavioural Sciences and the Law*, 6, 355-384.

Battistich, V., Watson, M., Solomon, D., Schaps, E. & Solomon, J. (1991) The child Development Project: A Comprehensive Programme for the Development of Pro-social Character. In: W.M. Kurtines & J.L. Gerwitz (Eds) *Handbook of Moral Behaviour and Development*, Volume Three: Application, pp. 1 - 34.

Bauer, F. (1982) Papakura Probation Outdoor Pursuits Courses: One year Follow-Up. Auckland: New Zealand Department of Justice.

Beautrais, A., Joyce, P.R., & Mulder, R.T. (1994) The Canterbury Suicide Project. *Community Mental Health in New Zealand*, 8, 32-57.

Behar, L. & Stephens, D. (1978) Wilderness camping: An Evaluation of a Residential Training Programme for Emotionally Disturbed Children. *American Journal of Orthopsychiatry*, 48, 644-653.

Bien, T.H., Miller, W.R. & Tonigan, J.S. (1993) Brief Interventions for Alcohol Problems: A Review. *Addiction*, 88, 315-36.

Blaske, L. E., Borduin, C.M., Henggeler, S.W. & Mann, B.J. (1989). Individual, family, and peer characteristics of adolescent sex offenders and assaultive offenders. *Developmental Psychology*, 25, 846-855.

Bliesner, T. & Losel, F. (1992) Resilience in Juveniles with High Risk of Delinquency. In F. Losel., D. Bender & T. Bliesner (Eds) *Psychology and the Law: International Perspectives*. Berlin/New York: Walter de Gruyter, 63-75.

Blumstein, A. & Cohen, J. (1987). Characterising criminal careers. *Science*, 237, 985-991.

Blumstein, A., Farrington, D.P. & Moitra, S. (1985) Delinquency Careers: Innocents, Desisters, and Persisters. In M. Tonry & N. Morris (Eds) *Crime and Justice: An Annual Review of Research*, 6, 187-219.

Borduin, C.M. (1994) Innovative Models of Treatment and Service Delivery in the Juvenile Justice System. *Journal of clinical Child Psychology*, 23, 19-25.

Borduin, C.M. & Henggeler, S.W. (1990) A multisystemic Approach to the Treatment of Serious Delinquent Behaviour. In R.J. McMahon & R.DeV. Peters, (Eds) *Behaviour Disorders of Adolescence*. New York: Plenum Press.

Borduin, C.M., Henggeler, S.W., Blakse, D.M. & Stein, R. (1990) Multisystemic Treatment of Adolescent Sexual Offenders. *International Journal of Offender Therapy and Comparative Criminology*, 34, 105-113.

Borduin, C.M., Mann. B.J., Cone, L.T., & Henggeler, S.W. et al (1995) Multisystemic Treatment of Serious Juvenile Offenders: Long-Term Prevention of Criminality and Violence. *Journal of Consulting and Clinical Psychology*, 63, 569-578.

Braukmann, C.J., Bedlington, M.M., & Belden, B.D. et al (1985) Effects of Community-Based Group Home Treatment Programmes on Male Juvenile Offenders' Use and Abuse of Drugs and Alcohol. *American Journal of Drug and Alcohol Abuse*, 11, 249-78.

Brinded, P., Fairly, N., Malcolm, F., & Siegert, R. (1996). Psychiatric Morbidity in Prisons: An Investigation of the Prevalence of Psychiatric Disorders Amongst New Zealand Prisoners: A Pilot Study. Department of Justice & Ministry of Health: Unpublished Report.

Brownlee, I.D. & Joanes, D. (1993) Intensive Probation for Young Adult Offenders: Evaluating the Impact of a Non-Custodial Sentence. *British Journal of Criminology*, 33, 216-230.

Byrne, J.M. & Pattavina, A. (1992) The Effectiveness Issue: Assessing what works in the Adult Community Corrections System. In M. Byrne, A.J. Lurigio & J. Petersilia (Eds) *Smart Sentencing: The Emergence of Intermediate Sanctions*. Newbury Park: Sage.

Campbell, W., Riley, D., & Easthope, T. (1982) Recidivism following Involvement in an Outdoor Expeditionary Project. Christchurch, New Zealand: Justice Department.

Capaldi, D.M. & Patterson, G.R. (1996) Can Violent Offenders be Distinguished from Frequent Offenders: Prediction from Childhood to Adolescence. *Journal of Research in Crime and Delinquency*, 33, 206-231.

Castellano, T.C. & Soderstrom, I.R. (1992) Therapeutic Wilderness Programmes and Juvenile Recidivism: A Programme Evaluation. *Journal of Offender Rehabilitation*, 17, 19-46.

Cheer, M. (1995) Youth Recidivist Offending: A Project Report. Wellington, New Zealand: Policing Development Group.

Chesney-Lind, M. & Shelden, R.G (1992). *Girls: Delinquency and Juvenile Justice*. California: Brooks/Cole Publishing Co.

Cochran, M. & Bo, I. (1989) The social networks, family involvement, and antisocial behaviour of adolescent males in Norway. *Journal of Youth and Adolescence*, 18, 377-398.

Cohen, H.L. & Filipczak, J. (1971). *A New Learning Environment*. San Francisco: Jossey-Bass.

Davie, C.A. (1992) Wilderness Rehabilitation for Offenders: An Evaluation of Christchurch Community Corrections Outdoor Experience Programme. Unpublished Masters Thesis. Christchurch: University of Canterbury.

DeLeon, G. (1985) The Therapeutic Community: Status and Evolution. *International Journal of Addictions*, 20, 823-844.

Dembo, R., Turner, B.A., Schmeidler, J., Sue, C., Border, B.A. & Manning D. (1996) Development and Evaluation of a Classification of High Risk Youths Entering a Juvenile Assessment Center. *Substance Use & Misuse*, 31, 303-322.

Department of Statistics (1996) *New Zealand Now: Crime Tables*. Wellington, New Zealand: Statistics New Zealand.

Elliott, D.S., Huizinga, D., & Ageton, S.S. (1985) *Explaining Delinquency and Drug Use*. Beverly Hills, CA: Sage.

Elliott, D.S., Huizinga, D., & Morse, B. (1986) Self Reported Violent Offending; A descriptive Analysis of Juvenile Violent Offenders and Their Offending Careers. *Journal of Interpersonal Violence*, 4, 472-514.



Eron, L.D. & Huesmann, L.R. (1984) The Relation of Pro-social Behaviour to the Development of Aggression and Psychopathology. *Aggressive Behaviour*, 10, 201-211.

Fagan, J. (1990). Treatment and Reintegration of Violent Juvenile Offenders: Experimental Results. *Justice Quarterly*, 7, 233-263.

Fagan, J. (1991). Community-Based Treatment for Mentally Disordered Juvenile Offenders. *Journal of Clinical Child Psychology*, 20, 42-50.

Fagan, J. & Forst, M. (1996) Risks, Fixers, and Zeal: Implementing Experimental Treatments for Violent Juvenile Offenders. *The Prison Journal*, 76, 22-59.

Fagan, J., Forst, M., & Vivona, T. (1988) Treatment and Reintegration of Violent Juvenile Offenders. San Francisco: URSA Institute.

Fagan, J & Wexler, S. (1987) Crime at Home and in the Street: The relationship between family and stranger violence. *Violence and Victims*, 2, 5-23.

Farrington, D.P. (1986). Age and Crime. In M. Tonry & N. Morris (Eds), *Crime and Justice: An Annual Review of Research*, 7, 189-250.

Farrington, D.P. (1991) Childhood Aggression & Adult violence: Early Precursors and Later Life Outcomes (pp. 5-29) In D.J. Pepler & K.H. Rubin (Eds) *The Development and Treatment of Childhood Aggression*. Hillsdale, NJ: Lawrence Erlbaum.

Farrington, D.P. (1992) Psychological Contributions to the Explanation, Prevention and Treatment of Offending. In F. Losel, D. Bender & T. Bliesner (Eds) *Psychology and the Law: International Perspectives*. Berlin/New York: Walter de Gruyter

Farrington, D.P. (1995). The Development of Offending and Antisocial Behaviour from Childhood: Key Findings from the Cambridge Study in Delinquent Development. *Journal of Child Psychology and Psychiatry*, 36, 929-964.

Finckenauer, J.O. & McArdle, T.P. (1990) Institutional Treatment Possibilities for Young Offenders. In: *International Review of Criminal Policy*, No's 39 & 40. New York: United Nations.

Forth, A.E., Hart, S.D. & Hare, R.D. (1990) Assessment of psychopathy in male young offenders. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 2, 342-344.

Freedman, B.J., Rosenthal, L., Donahoe, C.P., Schlundt, D.G. & McFall, R.M. (1978) A Social-Behavioural Analysis of Skill Deficits in Delinquent and Nondelinquent Adolescent Boys. *Journal of Consulting and Clinical Psychology*, 46, 1448-1462.

Freeman, K. (1996) Young People and Crime. *Contemporary Issues in Crime and Justice*, 32, 1-8.

Gaffney, L.R. & McFall, R.M. (1981) A Comparison of Social Skills in Delinquent and Nondelinquent Adolescent Girls Using a Behavioural Role-Playing Inventory. *Journal of Consulting and Clinical Psychology*, 49, 959-967.

Garrett, C.J. (1985) Effect of Residential Treatment on Adjudicated Delinquents: A Meta-Analysis. *Journal of Research in Crime & Delinquency*, 22, 287-308.

Gendreau, P. (1996) Offender Rehabilitation: What We Know and What Needs to Be Done. *Criminal Justice and Behaviour*, 23, 144-161.

- Gendreau, P., Little, T., & Goggin, C. (1996) A Meta-Analysis of the Predictors of Adult Offender Recidivism: What Works. *Criminology*, 34, 575-607.
- Gendreau, P. & Ross, R.R. (1987) Revivification of Rehabilitation: Evidence from the 1980s. *Justice Quarterly*, 4, 349-407.
- Genevie, L., Margolies, L.E. & Muhlin, G. (1986) How Effective is Correctional Intervention? *Social Policy*, 17, 52-57.
- Gibbs, J.C. (1991) Sociomoral Developmental Delay and Cognitive Distortion: Implications for the Treatment of Antisocial Youth. In W.M. Kurtines & J.C. Gewirtz (Eds) *Handbook of Moral Behaviour and Development*, Vol. 3: Application. New Jersey: Lawrence Erlbaum, pp. 95-110.
- Gibbs, J.C. (1996) Sociomoral Group Treatment for Young Offenders, 129-149. In C.R. Hollin & Howells, K (Eds) *Clinical Approaches to Working with Young Offenders*. Chichester/New York: Wiley & Sons.
- Glueck, S. & Glueck, I. (1950) *Unravelling Juvenile Delinquency*. New York: Commonwealth Fund.
- Goldsmith, R.W., Throfast, G., & Nilsson, P. (1989) Situational effects on the decisions of adolescent offenders to carry out delinquent acts: Relations to moral reasoning, moral goals, and personal constructs. In H. Wegner, F. Lojel, & J. Haisch (Eds) *criminal Behaviour and the Justice System: Psychological Perspectives* (pp. 81-107). New York: Springer-Verlag.
- Goldstein, A.P. (1986) Psychological Skill Training and the Aggressive Adolescent. In S.Apter & A. Goldstein (Eds) *Youth Violence: Programmes & Prospects*. New York: Pergamon Press (pp. 89-120.)
- Goldstein, A.P. & Glick, B. (1995) Artful Research Management: Problems, Process and Product. In A.P. Goldstein & B. Glick (Eds). *Managing Delinquency Programmes That Work*. Laurel, MD, Maryland: American Correctional Association.
- Goldstein, A.P. & Glick, B. (1996) Aggression Replacement Training: Methods and Outcomes. In C.R. Hollin & K. Howells (Eds) *Clinical Approaches to Working with Young Offenders* (pp. 151-164). New York: John Wiley & Sons Ltd.
- Gottfredson, D.C. (1985) Youth Employment, Crime and Schooling: A Longitudinal Study of a National Sample. *Developmental Psychology*, 21, 419-432.
- Gottschalk, R., Davidson, W., Gensheimer, L. & Mayer, J. (1987) Community Based Interventions. In H. Quay (Ed) *Handbook of Juvenile Delinquency*. New York: Wiley.
- Gray Matter Research Ltd (1992) *Age-Mixing in New Zealand Prisons*. Wellington, New Zealand: Ministry of Justice.
- Greenwood, P.W. (1992) Substance Abuse Problems Among High-Risk Youth and Potential Interventions. *Crime & Delinquency*, 38, 444-458.
- Griffen, B.S. & Griffen, C.T. (1978) *Juvenile Delinquency in Perspective*. New York: Harper & Row.
- Gruenewald, P., Laurence, S. & West, B. (1985) *National Evaluation of the New Pride Replication Programme: Executive Summary*. Walnut Creek, CA: Pacific Institute for Research and Evaluation.
- Guerra, N.G. (1989) Consequential Thinking and Self-Reported Delinquency in High-School youth. *Criminal Justice and Behaviour*, 16, 440-454.
- Guerra, N.G. & Slaby, R.G. (1990). Cognitive Mediators of Aggression in Adolescent Offenders: 2. Intervention. *Developmental Psychology*, 26, 269-277.

Hagan, M. & King, R.P. (1992) Recidivism rates of youth completing an intensive treatment programme in a juvenile correctional facility. *International Journal of Offender Therapy & Comparative Criminology*, 36, 349-358.

Hanson, C.L., Henggeler, S.W., Haefele, W.F. & Rodick, J.D. (1984). Demographic, individual, and family relationship correlates of serious and repeated crime among adolescents and their siblings. *Journal of Consulting and Clinical Psychology*, 52, 528-538.

Hare, R.D. (1992) A Model Treatment Programme For Psychopaths and Other Offenders at High Risk for Violence. Unpublished Report. Vancouver, Canada: Correctional Service of Canada.

Hare, R.D. & McPherson, L.M. (1984) Violent and aggressive behaviour by criminal psychopaths. *International Journal of Law and Psychiatry*, 7, 35-50/

Harper, K.B. (1987) Outdoor Education for Probationers: Research Report. New Zealand: Unpublished manuscript.

Harris, G.A (Ed) (1991) Tough Customers: Counselling Unwilling Clients. Laurel, MD: American Correctional Association.

Harris, G.A. (1995) Overcoming Resistance: Success in Counselling Men. Lanham, MD: American Correctional Association.

Harris, G.T., Rice, M.E., & Cormier, C.A. (1991) Psychopathy and Violent Recidivism. *Law and Human Behaviour*, 15, 625-637.

Hawkins, J.D. & Lishner, D.M. (1987) Schooling and Delinquency. In E.H. Johnson (Ed) *Handbook on Crime and Delinquency Prevention*. Westpoint, CT: Greenwood.

Henggeler, S.W. & Borduin, C.M. (1990) *Family Therapy and Beyond: A Multisystemic Approach to Treating the Behaviour Problems of Children and Adolescents*. Pacific Grove, CA: Brooks/Cole.

Henggeler, S.W., Hanson, C.L., & Borduin, C.M. et al (1985). Mother-son relationships of juvenile felons. *Journal of Consulting and Clinical Psychology*, 53, 942-943.

Henggeler, S.W., Melton, G.B. & Smith, L.A (1992) Family preservation using multisystemic treatment: Long-term follow-up to a clinical trial with serious juvenile offenders. *Journal of Clinical and Consulting Psychology*, 60, 953-961.

Henggeler, S.W., Pickrel, S.G., Brondino, M.J. & Crouch, J.L. (1996) Eliminating (Almost) Treatment Dropout of Substance Abusing or Dependent Delinquents Through Home-Based Multisystemic Therapy. *American Journal of Psychiatry*, 153, 427-428.

Henggeler, S.W., Rodick, J., Borduin, C.M. et al (1986) Multisystemic Treatment of Juvenile Offenders: Effects on Adolescent Behaviour and Family Interaction. *Developmental Psychology*, 22, 132-141.

Hoberman, H.M. & Garfinkel. B.D. (1988) Completed suicides in adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 27, 689-695.

Hodgins, S. & Cote, G. (1993). The Criminality of Mentally Disordered Offenders. *Criminal Justice and Behaviour*, 20, 115-129.

Hoge, R.D., Andrews, D.A. & Leschied, A.W. (1994). Tests of Three Hypotheses Regarding the Predictors of Delinquency. *Journal of Abnormal Child Psychology*, 22, 547-559.

- Hollin, C.R. (1994) Designing Effective Rehabilitation Programmes for Young Offenders. *Psychology, Crime and Law*, 1, 193-199.
- Hollin, C.R. (1996) (Ed) *Working with Offenders: Psychological Practice in Offender Rehabilitation*. New York: John Wiley & Sons.
- Hollin, C.R. & Henderson, M. (1984) Social Skills Training with Young Offenders: False Expectations and the Failure of Treatment. *Behavioural Psychotherapy*, 12, 331-341.
- Hollin, C.R & Howells, K. (Eds) (1996) *Clinical Approaches to Working with Young Offenders*. New York: John Wiley & Sons Ltd.
- Izzo, R.L. & Ross, R.R. (1990) Meta-Analysis of Rehabilitation Programmes for Juvenile Delinquents. *Criminal Justice and Behaviour*, 17, 134-142.
- Jaffe, P.G., Wolfe, D.A. & Wilson, S.K. (1990) *Children of Battered Women*. Newburg Park, Ca: Sage Publications
- Jesness, C.F. (1971) The Preston Typology Study: An Experiment with Differential Treatment in an Institution. *Journal of Research in Crime & Delinquency*, 7-8, 38-52.
- Johnson, B.D. & Goldberg, R.T. (1983). Vocational and Social Rehabilitation of Delinquents: A Study of Experimentals and Controls. *Journal of Offender Counselling, Services and Rehabilitation*, 6, 43-60.
- Kandel, D., Simcha-Fagan, O., & Davies, M. (1986) Risk Factors for Delinquency and Illicit Drug Use from Adolescence to Young Adulthood. *The Journal of Drug Issues*, 16, 67-90.
- Kelly, F.J. & Baer, D.J. (1971) Physical Challenge as a Treatment for Delinquency. *Crime & Delinquency*, 17, 437-445.
- Klein, M.W. (1984) Offence Specialisation and Versatility Among Juveniles. *British Journal of Criminology*, 24, 185-194.
- Kohlberg, L (1969) Stage and Sequency: The Cognitive Developmental approach to socialisation. In D.A. Goslin (Ed) *Handbook of Socialisation*. Chicago: Rand McNally.
- Kratcoski, P.C. & Kratcoski, L.D. (1982) The Phoenix Programme: An Educational Alternative for Delinquent Youths. *Juvenile & Family Court Journal*, 17-23.
- Lash, B. (1996) *Census of Prison Inmates 1995*. Wellington, New Zealand: Ministry of Justice.
- Lee, R. & Haynes, N. (1980) Project Crest and the Dual-Treatment Approach to Delinquency: Methods and Research Summarised. In R.R. Ross & P. Gendreau (Eds) *Effective Correctional Treatment*. Toronto: Butterworths.
- Lee, R. & Olejnik, S. (1981) Professional Outreach Counselling can help the Juvenile Probationer: A Two-Year Follow-up Study. *The Personnel and Guidance Journal*, 60, 445-449.
- Leeman, L.W., Gibbs, J.C. & Fuller, D. (1993) Evaluation of a Multi-Component Group Treatment Programme for Juvenile Delinquents. *Aggressive Behaviour*, 19, 281-292.
- Lempers, J.D., Clark-Lempers, D., & Simons, R.L. (1989) Economic Hardship, Parenting and Distress in Adolescence. *Child Development*, 60, 25-39.

Leschied, A.W., Andrews, D.A. & Hoge, R.D. (1993). *Youth at Risk: A Review of Ontario Young Offenders, Programmes and Literature that Supports Effective Intervention*. London, Ontario: London Family Court Clinic.

Leschied, A.W. & Thomas, K. E. (1985) Effective Residential Programming for "Hard-To-Serve" Delinquent Youth: A Description of the Craigwood Programme. *Canadian Journal of Criminology*, 27, 161-177.

Lewis, D.O., Mallough, C., & Webb, V. (1989) Child abuse, delinquency and violent criminality. In D. Cicchetti & V. Carlson (Eds) *Child Maltreatment: Theory and Research on the Causes and Consequences of Child Abuse and Neglect* (pp. 707-721). New York: Cambridge University Press.

Lipsey, M.W. (1992). The Effect of Treatment on Juvenile Delinquents: Results from Meta-Analysis. In: F. Losel, D. Bender & T. Bliesner (Eds) *Psychology and the Law: International Perspectives*. Berlin/New York: Walter de Gruyter.

Lipton, D.S. (1996) Prison-Based Therapeutic Communities: Their Success with Drug-Abusing Offenders. *National Institute of Justice Journal*, February, 12-20.

Loeber, R. & Stouthamer-Loeber, M. (1987) The Early Identification of Chronic Offenders, 345-373. In H. Quay (Ed) *Handbook of Juvenile Delinquency*. New York: Wiley & Sons.

Losel, F. (1994) Protective Effects of Social Resources in Adolescents at High Risk for Antisocial Behaviour. In: E.G.M. Weitekamp & H.J. Kerner (Eds) *Cross-National Longitudinal Research on Human Development and Criminal Behaviour*, 281-301. Netherlands: Kluwer Academic Publishers.

Losel, F. (1996) Effective Correctional Programming: What Empirical Research Tells Us and What it Doesn't. *Forum on Corrections Research*, September, 33-37.

Losel, F. (1996) Working with Young Offenders: The Impact of Meta-Analyses. In C.R. Hollin & K. Howells (Eds) *Clinical Approaches to Working with Young Offenders*. New York: Wiley & Sons Ltd.

Lovell, R. & Norris, M. (1990). *One in Four: Offending from Age 10-24 in a Cohort of New Zealand Males. Study of Social Adjustment: Research Report No. 8*. Wellington: Department of Social Welfare.

Malmquist, C.P. (1971) Depressions in childhood and adolescence. *The New England Journal of Medicine*, 284, 16.

Malmquist, C.P. (1990) Depression in homicidal adolescents. *Bulletin of the American Academy of Psychiatry and the Law*, 18, 23-36.

Mason, G. & Wilson, P. (1988) *Sport, Recreation and Juvenile Crime*. Canberra: Australian Institute of Criminology.

Maxwell, G. & Morris, G. (1997) What Do We Know About Juvenile Crime? In: A. Morris & G. Maxwell (Eds) *Youth Justice: The Vision - Te Rangatahi Me Te Ture He Ara Whakamua*. Proceedings of a National Conference. Wellington, New Zealand: Institute of Criminology, pp. 11-23.

McLaren, K. L. (1992) *Reducing Re-offending: What Works Now*. Wellington, New Zealand: Department of Justice.

McManus, M., Alessi, M.E. & Grapentine, W. (1984) Psychiatric Disturbance in Serious Delinquents. *Journal of the American Academy of Child Psychiatry*, 23, 612-615.

Meichenbaum, D. & Turk, D. (1976) *The Cognitive-Behavioural Management of*

Anxiety, Anger and Pain. In P. Davidson (Ed) *The Behavioural Management of Anxiety, Depression and Pain*. New York: Brunner/Mazel.

Milan, M.A. (1996) *Working In Institutions*. In C.R. Hollin & K. Howells (Eds) *Clinical Approaches to Working with Young Offenders*. New York: Wiley & Sons Ltd, pp. 85-108.

Moffitt, T.E. (1990) Juvenile delinquency and attention-deficit disorder: Developmental trajectories from age 3 to 15. *Child Development*, 61, 893-910.

Moffitt, T.E. (1993) Adolescence-Limited and Life-Course-Persistent Antisocial Behaviour: A Developmental Taxonomy. *Psychological Review*, 100, 674-701.

Moffitt, T.E. (1994). *Natural Histories of Delinquency*. In E.G.M. Weitekamp & H.J. Kerner (Eds). *Cross-National Longitudinal Research on Human Development and Criminal Behaviour*, 3-61. Netherlands: Kluwer Academic Publishers

Moffitt, T.E., Mednick, S.A. & Gabrielli, W.F. (1989) Predicting Criminal violence: Descriptive data and predispositional factors. In D. Brizer & M. Crowner (Eds) *Current Approaches to the Prediction of Violence* (pp. 13-24). Washington, DC: American Psychiatric Association.

Morash, M. (1986) Gender, peer group experiences and seriousness of delinquency. *Journal of Research in Crime and Delinquency*, 23, 43-67.

Mulvey, E.P., Arthur, M.W. & Reppucci, N.D. (1993) The Prevention and Treatment of Juvenile Delinquency: A Review of the Research. *Clinical Psychology Review*, 13, 133-167.

Mulvey, E.P., & LaRosa, J.F. (1986) Delinquency Cessation and Adolescent Development: Preliminary Data, *American Orthopsychiatry*, 56, 212-224.

Novaco, R.N. (1975) *Anger Control: The Development and Evaluation of an Experimental Treatment*. Lexington: Lexington Books.

O'Brien, M (1990) *The Northland Wilderness Experience; A Report on an Experiential Programme for the Youth of Taitokerau*. Auckland, New Zealand: Department of Education, University of Auckland.

Palmer, T. (1994) *A Profile of Correctional Effectiveness and New Directions for Research*. Albany: State University of New York Press.

Palmer, T. (1995) Programmatic and Nonprogrammatic Aspects of Successful Intervention: New Directions for research. *Crime & Delinquency*, 41, 100-131.

Patterson, G.R. & Dishion, T.J. (1985) Contributions of families and peers to delinquency. *Criminology*, 23, 63-79.

Patterson, G.R. & Stouthamer-Loeber, M (1984) The correlation of family management practices and delinquency. *Child Development*, 55, 1299-1307.

Pearson, F.S. (1988) Evaluation of New Jersey's Intensive Supervision Programme. *Crime and Delinquency*, 34, 437-448.

Peters, R.H., Kearns, W.D., Murrin, M.R. et al (1993) Examining the Effectiveness of In-Jail Substance Abuse Treatment. *Journal of Offender Rehabilitation*, 19, 1-39.

Petersilia, J. & Turner, S. (1993) Intensive Probation and Parole. *Crime & Justice*, 17, 281-235.

- Quay, H. C. (1987) Patterns of Delinquent Behaviour. In H.C.Quay (Ed) Handbook of Juvenile Delinquency, 244-265, New York: Wiley.
- Raynor, P. & Vanstone, M. (1996) Reasoning and Rehabilitation in Britain: The Results of the Straight Thinking on Probation (STOP) Programme. International Journal of Offender therapy and Comparative Criminology, 40, 272-284.
- Reitsma-Street, M. & Leschied, A.W. (1988) The Conceptual-Level Matching Model in Corrections. Criminal Justice and Behaviour, 15, 92-108.
- Remington, B. & Remington, M. (1987) Behaviour Modification in Probation Work: A Review and Evaluation. Criminal Justice and Behaviour, 14, 156-174.
- Roberts, A.R. (1988) Wilderness Programmes for Juvenile Offenders: A Challenging Alternative. Juvenile & Family Court Journal, 39, 1-12.
- Roberts, A.R. (1989) Wilderness Experiences: Camps & Outdoor Programmes. In: A.R. Roberts (Ed) Juvenile Justice: Policies, Programmes and Services. Chicago: Dorsey Press.
- Robinson, D. (1996) Factors Influencing the Effectiveness of Cognitive Skills Training. Forum on Corrections Research, September, 6-9.
- Ross, R.R. & Fabiano, E.A. (1985) Time To Think:: A Cognitive Model of Delinquency Prevention and Offender Rehabilitation. Tennessee: Institute of Social Sciences and Arts, Inc.
- Ross, R.R., Fabiano, E.A. & Ewles, C.D. (1988) Reasoning and Rehabilitation. International Journal of Offender Therapy and Comparative Criminology, 32, 29-35.
- Ross, R.R & Lightfoot, L.V. (1985) Treatment of the Alcohol-Abusing Offender. Springfield: C.C. Thomas.
- Rutter, M. (1985) Resilience in the Face of Adversity; Protective Factors and Resistance to Psychiatric Disorder. British Journal of Psychiatry, 147, 598-611.
- Salmelainen, P. (1996) Child Neglect: Its Causes and its Role in Delinquency. Contemporary Issues in Crime and Justice, 33, 1-14.
- Sarason, I.G. (1978) A Cognitive Social Learning Approach to Juvenile Delinquency In R.D. Hare & D. Schalling (Eds) Psychopathic Behaviour: Approaches to Research. New York:
- Sarason, I.G. & Ganzer, V.J. (1973) Modelling and group discussions in the rehabilitation of juvenile delinquents. Journal of Counselling Psychology, 20, 442-449.
- Sarbin, T.R. (1952) A Preface to a Psychological Analysis of Self. Psychological Review, 59, 11-22.
- Sas, L. & Jaffe, P.G. (1986) Understanding depression in juvenile delinquency: Implications for institutional admission policies and treatment programmes. Juvenile and Family Court Journal, Winter, 49-58.
- Serin, R.C. (1991). Psychopathy and Violence in Criminals. Journal of Interpersonal Violence, 6, 423-431.
- Serin, R.C., Peters, R.D. & Barbaree, H.E. (1990) Predictors of psychopathy and release outcome in a criminal population. Psychological Assessment: A Journal of Consulting and Clinical Psychology, 2, 419-422.

Shields, I. (1993). The Use of the Young Offender-Level of Service Inventory (YO-LSI) with Adolescents. *IARCA Journal*, 5, 10,26.

Shields, I.W. & Simourd, D.J. (1991) Predicting predatory behaviour in a population of incarcerated young offenders. *Criminal Justice and Behaviour*, 18, 180-194.

Shields, I.W. & Whitehall, G.C. (1994) Neutralization and Delinquency Among Teenagers. *Criminal Justice and Behaviour*, 21, 223-235.

Shore, M.F. & Massimo, J.L. (1980) Fifteen Years After Treatment: A Follow-Up Study of Comprehensive Vocationally Oriented Psychotherapy. In R.R. Ross & P. Gendreau (Eds) *Effective Correctional Treatment*. Toronto: Butterworths.

Simonian, S.J., Tarnowski, K.J. & Gibbs, J.C. (1991) Social skills and antisocial conduct of delinquents. *Child Psychiatry and Human Development*, 22, 17-22.

Simourd, L & Andrews, D.A. (1994) Correlates of delinquency: A look at gender differences. *Forum on Corrections Research*, January, 26-31.

Simourd, D.J., Hoge, R.D., Andrews, D.A. & Leschied, A.W. (1994). An empirically-based typology of male young offenders. *Canadian Journal of Criminology*, October, 447-461.

Spivack, G., Platt, J.J. & Shure, M.B. (1976) *The Problem Solving Approach to Adjustment: A Guide to Research and Intervention*. San Francisco: Jossey-Bass.

Stein, S.L., Garrett, C.J. & Christiansen, D. (1990) Treatment Strategies for Juvenile Delinquents to Decrease Substance Abuse and Prevent Adult Drug and Alcohol Dependence. In: H.B. Milkman & L.I. Sederer (Eds) *Treatment Choices for Alcoholism and Substance Abuse*. Toronto/Massachusetts: Lexington Books, pp. 225-233.

Tolmach, J. (1985) "There ain't nobody on my side": A New Day Treatment Programme for Black Urban Youth. *Journal of Clinical Child Psychology*, 14, 214-219.

Trotter, C. (1996) The Impact of Different Supervision Practices in Community Corrections: Cause for Optimism. *Australian and New Zealand Journal of Criminology*, 29-46.

Tuatasi, N. (1997) Accessing the Community: What's Possible, What's Practical, What Works? In: A. Morris & G. Maxwell (Eds) *Youth Justice: The Vision Te Rangatahi Me Te Ture He Ara Whakamua*. Proceedings of a National Conference. Wellington, New Zealand: Institute of Criminology, pp.42-44.

Van Ness, S.R. (1984) Rape as Instrumental Violence: A Study of Youth Offenders. *Journal of Offender Counselling, Services and Rehabilitation*, 9, 161-170.

Van Voorhis, P. (1988) A Cross Classification of Five Offender Typologies: Issues of Construct and Predictive Validity. *Criminal Justice and Behaviour*, 15, 109-124.

Walter, T.L. & Mills, C.M. (1980) A Behavioural-Employment Intervention Programme for Reducing Juvenile Delinquency. In R.R. Ross & P. Gendreau (Eds) *Effective Correctional Treatment*. Toronto: Butterworths.

Walters, R. (1997) Punitive Responses: Do They Work?. In: A. Morris & G. Maxwell (Eds) *Youth Justice: The Vision - Te Rangatahi Me Te Ture He Ara Whakamua*. Proceedings of a National Conference. Wellington: New Zealand: Institute of Criminology.



- Welsh, R.S. (1976) Severe punishment and delinquency: A developmental theory. *Journal of Clinical Child Psychology*, 5, 17-21.
- West, D.J. & Farrington, D.P. (1973) *Who Becomes Delinquent*. London: Heinemann.
- Wexler, H.K., Falkin, G.P. & Lipton, D.S. (1990) Outcome Evaluation of a Prison Therapeutic Community for Substance Abuse Treatment. *Criminal Justice and Behaviour*, 17, 71-92.
- Whitehead, J.T. & Lab, S.P. (1989) A Meta-Analysis of Juvenile Correctional Treatment. *Journal of Research in Crime and Delinquency*, 26, 276-295.
- Whitney, L. (1992) *Substance Abuse: A Survey of the Treatment Needs of Prison Inmates*. Wellington: Department of Justice.
- Wierson, M., Forehand, R.L., & Frame, C.L. (1992). Epidemiology and Treatment of Mental Health Problems in Juvenile Delinquents. *Advanced Behavioural Research and Therapy*, 14, 93-120.
- Willman, J.R. & Chun, RYF (1973). Homeward Bound: An Alternative to the Institutionalisation of Adjudicated Juvenile Offenders. *Federal Probation*, September, 52-58.
- Winterdyk, J. & Griffiths, C. (1984) Wilderness Experience Programmes: Reforming Delinquents or Beating Around the Bush. *Juvenile & Family Court Journal*, 35, 35-44.
- Winterdyk, J.A. & Roesch, R. (1982) A Wilderness Experiential Programme as an Alternative for Probationers. *Canadian Journal of Criminology*, 24, 39-50.
- Wormith, J.S. (1995). The Youth Management Assessment: Assessment of Young Offenders at Risk of Serious Re-offending. *Forum on Corrections Research*, 7, 23-27.
- Yochelson, S. & Samenow, S.E. (1976) *The Criminal Personality: Volume 1: A Profile for Change*. New York: Jason Aronson

## Appendix One

Table One

### Age by Type of Offence

Percentages based on Row Totals

AGE		14	15	16	17	18	19	20	
All	Ser. Violence	8	39	48	79	64	77	31	346
	<i>Percent</i>	<i>2.312</i>	<i>11.3</i>	<i>13.9</i>	<i>22.8</i>	<i>18.5</i>	<i>22.3</i>	<i>8.96</i>	<i>100</i>
	Violence	7	30	60	258	308	343	133	1139
	<i>Percent</i>	<i>0.615</i>	<i>2.63</i>	<i>5.27</i>	<i>22.7</i>	<i>27</i>	<i>30.1</i>	<i>11.7</i>	<i>100</i>
	Sex <12	1	1	1	4	3	2	0	12
	<i>Percent</i>	<i>8.333</i>	<i>8.33</i>	<i>8.33</i>	<i>33.3</i>	<i>25</i>	<i>16.7</i>	<i>0</i>	<i>100</i>
	Sex 12-16	0	0	2	5	6	5	4	22
	<i>Percent</i>	<i>0</i>	<i>0</i>	<i>9.09</i>	<i>22.7</i>	<i>27.3</i>	<i>22.7</i>	<i>18.2</i>	<i>100</i>
	Sex >16	0	6	7	6	9	8	2	38
	<i>Percent</i>	<i>0</i>	<i>15.8</i>	<i>18.4</i>	<i>15.8</i>	<i>23.7</i>	<i>21.1</i>	<i>5.26</i>	<i>100</i>
	Sex Other	0	1	1	5	4	6	6	23
	<i>Percent</i>	<i>0</i>	<i>4.35</i>	<i>4.35</i>	<i>21.7</i>	<i>17.4</i>	<i>26.1</i>	<i>26.1</i>	<i>100</i>
	Drug/Alc	0	4	12	145	239	235	89	724
	<i>Percent</i>	<i>0</i>	<i>0.55</i>	<i>1.66</i>	<i>20</i>	<i>33</i>	<i>32.5</i>	<i>12.3</i>	<i>100</i>
	Dishonesty	58	147	233	1007	1076	905	315	3741
	<i>Percent</i>	<i>1.55</i>	<i>3.93</i>	<i>6.23</i>	<i>26.9</i>	<i>28.8</i>	<i>24.2</i>	<i>8.42</i>	<i>100</i>
	Property	2	13	12	98	121	121	47	412
	<i>Percent</i>	<i>0.485</i>	<i>3.16</i>	<i>2.91</i>	<i>23.8</i>	<i>29.4</i>	<i>29.4</i>	<i>11.4</i>	<i>100</i>
Justice	1	4	19	94	158	178	57	511	
<i>Percent</i>	<i>0.196</i>	<i>0.78</i>	<i>3.72</i>	<i>18.4</i>	<i>30.9</i>	<i>34.8</i>	<i>11.2</i>	<i>100</i>	
Driving	1	14	48	264	412	536	191	1466	
<i>Percent</i>	<i>0.068</i>	<i>0.95</i>	<i>3.27</i>	<i>18</i>	<i>28.1</i>	<i>36.6</i>	<i>13</i>	<i>100</i>	
Other	0	0	0	0	0	0	0	0	
<i>Percent</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	
Total	78	259	443	1965	2400	2416	875	8434	
<i>Percent</i>	<i>0.925</i>	<i>3.07</i>	<i>5.25</i>	<i>23.3</i>	<i>28.5</i>	<i>28.6</i>	<i>10.4</i>	<i>100</i>	

Table Two

### Age by Gender & Type of Offence

Percentages based on Row Totals

AGE		14	15	16	17	18	19	20	
Female	Ser.	2	8	6	10	3	3	2	34
	Violence	13.33	23.52941	10	3.484	0.896	0.98	1.28	2.85
	Violence	3	7	16	36	35	32	24	153
		20	20.58824	26.7	12.54	10.45	10.5	15.4	12.84
	Sex <12	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0.00
	Sex I2-16	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0.00
	Sex >16	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0.00
	Sex Other	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
	Drug/Ac	0	0	2	19	34	35	24	114
		0	0	3.33	6.62	10.15	11.5	15.4	9.56
Dishonesty	9	16	29	179	184	145	78	640	
	60	47.05882	48.3	62.37	54.93	47.5	50	53.69	
Property	0	2	2	11	16	11	5	47	
	0	5.882353	3.33	3.833	4.776	3.61	3.21	3.94	
Justice	1	0	1	14	33	30	8	87	
	6.667	0	1.67	4.878	9.851	9.84	5.13	11.48	
Driving	0	1	4	18	30	49	15	117	
	0	2.941176	6.67	6.272	8.955	16.1	9.62	9.82	
Other	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
Total	15	34	60	287	335	305	156	1192	
	19.23	13.12741	13.5	14.61	13.97	12.6	17.8	14.13	
Male	Ser.	6	31	42	69	61	74	26	309
	Violence	9.524	13.77778	11	4.112	2.955	3.51	3.62	4.27
	Violence	4	23	44	222	273	311	110	987
		6.349	10.22222	11.5	13.23	13.23	14.7	15.3	13.63
	Sex <12	1	1	1	4	3	2	0	12
		1.587	0.444444	0.26	0.238	0.145	0.09	0	0.17
	Sex I2-16	0	0	2	5	6	5	4	22
		0	0	0.52	0.298	0.291	0.24	0.56	0.30
	Sex >16	0	6	7	6	9	8	2	38
		0	2.666667	1.83	0.358	0.436	0.38	0.28	0.52
	Sex Other	0	1	1	5	4	6	6	23
		0	0.444444	0.26	0.298	0.194	0.28	0.84	0.32
	Drug/Ac	0	4	10	126	205	200	65	610
		0	1.777778	2.61	7.509	9.932	9.47	9.05	8.42
Dishonesty	49	131	204	828	892	760	237	3101	
	77.78	58.22222	53.3	49.34	43.22	36	33	42.82	
Property	2	11	10	87	105	110	42	367	
	3.175	4.888889	2.61	5.185	5.087	5.21	5.85	5.07	
Justice	0	4	18	78	124	146	49	419	
	0	1.777778	4.7	4.648	6.008	6.92	6.82	5.79	
Driving	1	13	44	248	382	489	177	1354	
	1.587	5.777778	11.5	14.78	18.51	23.2	24.7	18.70	
Other	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0.00	
Total	63	225	383	1678	2064	2111	718	7242	
% of Column Total	80.77	86.87259	86.5	85.39	86.07	87.4	82.1	85.87	

Table Three

### Reconviction by Age, Gender & Ethnicity

Race	Gender	Reconviction	14	15	16	17	18	19	20	
C	F	Non	4	3	6	47	67	68	41	236
C	F	Reconviction	3	7	12	77	96	72	37	304
		Total	7	10	18	124	163	140	78	540
		Percent Rec.	43	70	66.7	62.1	58.9	51.4	47.4	56.30
C	M	Non	0	7	12	107	193	215	86	620
C	M	Reconviction	18	76	166	791	974	1021	332	3378
		Total	18	83	178	898	1167	1236	418	3998
		Percent Rec.	100	91.57	93.3	88.1	83.5	82.6	79.4	84.49
M	F	Non	0	5	11	41	43	43	14	157
M	F	Reconviction	8	13	29	102	106	103	50	411
		Total	8	18	40	143	149	146	64	568
		Percent Rec.	100	72.22	72.5	71.3	71.1	70.5	78.1	72.36
M	M	Non	6	11	15	61	87	85	34	299
M	M	Reconviction	36	116	172	612	663	658	206	2463
		Total	42	127	187	673	750	743	240	2762
		Percent Rec.	86	91.34	92	90.9	88.4	88.6	85.8	89.17
o	F	Non	0	0	0	2	3	6	2	13
o	F	Reconviction	0	1	0	1	3	3	2	10
		Total	0	1	0	3	6	9	4	23
		Percent Rec.	0	100	0	33.3	50	33.3	50	43.48
o	M	Non	0	0	1	3	11	17	7	39
o	M	Reconviction	0	3	3	7	13	20	7	53
		Total	0	3	4	10	24	37	14	92
		Percent Rec.	0	100	75	70	54.2	54.1	50	57.61
p	F	Non	0	4	1	8	5	5	4	27
p	F	Reconviction	0	1	1	9	13	5	4	33
		Total	0	5	2	17	18	10	8	60
		Percent Rec.	0	20	50	52.9	72.2	50	50	55.00
p	M	Non	1	0	1	13	19	15	6	55
p	M	Reconviction	2	12	13	84	104	80	41	336
		Total	3	12	14	97	123	95	47	391
		Percent Rec.	67	100	92.9	86.6	84.6	84.2	87.2	85.93
Total		Non	11	30	47	282	428	454	194	1446
Total		Reconviction	67	229	396	1683	1972	1962	679	6988
Total		Total	78	259	443	1965	2400	2416	873	8434
Total	Percent	Percent Rec.	86	88.42	89.4	85.6	82.2	81.2	77.8	82.86

Table Four

### Reincarceration & Average Seriousness of Offender Groups by Age

		Total	<20	20,<25	25+
First Offenders	Reincarcerated	8	2	5	1
	Total	239	33	52	154
	Percent Reincarcerated	3.35	6.06	9.62	0.65
	Average Seriousness	47.4	26.8	65	10.3
Previous Offenders	Reincarcerated	2705	772	946	987
	Total	5101	1134	1613	2553
	Percent Reincarcerated	53.03	68.08	58.65	38.66
	Average Seriousness	42.1	45.1	43.7	38.5
First Incarcerates	Reincarcerated	977	526	287	167
	Total	2507	856	710	940
	Percent Reincarcerated	38.97	61.45	40.42	17.77
	Average Seriousness	45.1	43	52.7	46.7
Previous Impr	Reincarcerated	1736	248	664	824
	Total	2833	311	955	1567
	Percent Reincarcerated	61.28	79.74	69.53	52.58
	Average Seriousness	41.1	47.7	42.6	37.6

Average Seriousness refers to post convictions

Table Five

## Rates of Imprisonment & Reconviction by Sentence Type

Percentage based on Number Reconvicted

		Other	CT	License	PD	SW	Comm S	Progs	Imp	Probation	Total
Reimp	<20	0	265	1127	1546	203	319	71	312	640	4408
Base	<20	0	284	1380	1707	213	426	77	336	738	4810
<i>Percent</i>	<i>&lt;20</i>	<i>0.00</i>	<i>93.31</i>	<i>81.67</i>	<i>90.57</i>	<i>95.31</i>	<i>74.88</i>	<i>92.21</i>	<i>92.86</i>	<i>86.72</i>	<i>91.64</i>
Reimp	21-24	47	1	1487	1991	0	304	80	718	536	5151
Base	21-24	60	1	1908	2284	0	455	97	825	677	5511
<i>Percent</i>	<i>21-24</i>	<i>78.33</i>	<i>100.00</i>	<i>77.94</i>	<i>87.17</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>87.03</i>	<i>79.17</i>	<i>93.47</i>
Reimp	25-29	126	0	864	1182	0	201	53	417	330	3048
Base	25-29	156	0	1182	1417	0	320	67	489	424	3454
<i>Percent</i>	<i>25-29</i>	<i>80.77</i>	<i>0.00</i>	<i>73.10</i>	<i>83.42</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>85.28</i>	<i>77.83</i>	<i>88.25</i>
Reimp	30-34	97	0	475	634	0	122	23	260	200	1742
Base	30-34	134	0	666	808	0	205	29	343	277	2078
<i>Percent</i>	<i>30-34</i>	<i>72.39</i>	<i>0.00</i>	<i>71.32</i>	<i>78.47</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>75.80</i>	<i>72.20</i>	<i>83.83</i>
Reimp	35-39	56	0	246	280	0	70	17	127	124	881
Base	35-39	92	0	364	389	0	126	29	202	196	1199
<i>Percent</i>	<i>35-39</i>	<i>60.87</i>	<i>0.00</i>	<i>67.58</i>	<i>71.98</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>62.87</i>	<i>63.27</i>	<i>73.48</i>
Reimp	40+	56	0	236	223	0	57	11	110	89	764
Base	40+	115	0	457	362	0	139	29	284	202	1414
<i>Percent</i>	<i>40+</i>	<i>48.70</i>	<i>0.00</i>	<i>51.64</i>	<i>61.60</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>38.73</i>	<i>44.06</i>	<i>54.03</i>
Reimp	Total	382	266	4435	5856	203	1073	255	1944	1919	15994
Base	Total	557	285	5957	6967	213	1671	328	2479	2514	18466
<i>Percent</i>	<i>Total</i>	<i>68.58</i>	<i>0.00</i>	<i>74.45</i>	<i>84.05</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>78.42</i>	<i>76.33</i>	<i>86.61</i>

		Other	CT	License	PD	SW	Comm S	Progs	Imp	Probation	Total
Reimp	Male	315	252	4138	5276	186	776	203	1822	1522	14138
Base	Male	439	268	5418	6236	193	1087	259	2321	1952	15723
<i>Percent</i>	<i>Male</i>	<i>71.75</i>	<i>94.03</i>	<i>76.38</i>	<i>84.61</i>	<i>96.37</i>	<i>71.39</i>	<i>78.38</i>	<i>78.50</i>	<i>77.97</i>	<i>89.92</i>
Reimp	Female	67	14	297	580	17	297	52	122	397	1856
Base	Female	118	17	539	731	20	584	69	158	562	2743
<i>Percent</i>	<i>Female</i>	<i>56.78</i>	<i>82.35</i>	<i>55.10</i>	<i>79.34</i>	<i>85.00</i>	<i>50.86</i>	<i>75.36</i>	<i>77.22</i>	<i>70.64</i>	<i>67.66</i>
Reimp	Total	382	266	4435	5856	203	1073	255	1944	1919	15994
Base	Total	557	285	5957	6967	213	1671	328	2479	2514	18466
<i>Percent</i>	<i>Total</i>	<i>68.58</i>	<i>93.33</i>	<i>74.45</i>	<i>84.05</i>	<i>95.31</i>	<i>64.21</i>	<i>77.74</i>	<i>78.42</i>	<i>76.33</i>	<i>86.61</i>

Group		Other	CT	License	Pd	SW	Comm S	Progs	Imp	Probation	Total
Reimp	Caucasian	196	90	2310	2624	65	488	92	849	998	7544
Base	Caucasian	292	98	3312	3219	71	802	125	1147	1366	9288
<i>Percent</i>	<i>Caucasian</i>	<i>67.12</i>	<i>91.84</i>	<i>69.75</i>	<i>81.52</i>	<i>91.55</i>	<i>60.85</i>	<i>73.60</i>	<i>74.02</i>	<i>73.06</i>	<i>81.22</i>
Reimp	Maori	169	162	1898	2893	131	504	138	989	794	7492
Base	Maori	237	173	2328	3302	135	738	166	1155	986	7933
<i>Percent</i>	<i>Maori</i>	<i>71.31</i>	<i>93.64</i>	<i>81.53</i>	<i>87.61</i>	<i>97.04</i>	<i>68.29</i>	<i>83.13</i>	<i>85.63</i>	<i>80.53</i>	<i>94.44</i>
Reimp	Pacific People	17	14	227	339	7	81	25	106	127	958
Base	Pacific People	28	14	317	446	7	131	37	177	162	1245
<i>Percent</i>	<i>Pacific People</i>	<i>60.71</i>	<i>100.00</i>	<i>71.61</i>	<i>76.01</i>	<i>100.00</i>	<i>61.83</i>	<i>67.57</i>	<i>59.89</i>	<i>78.40</i>	<i>76.95</i>
Reimp		382	266	4435	5856	203	1073	255	1944	1919	15994
Base		557	285	5957	6967	213	1671	328	2479	2514	18466
<i>Percent</i>		<i>68.58</i>	<i>93.33</i>	<i>74.45</i>	<i>84.05</i>	<i>95.31</i>	<i>64.21</i>	<i>77.74</i>	<i>78.42</i>	<i>76.33</i>	<i>86.61</i>

Table Six

**Average Time to Reconviction by Age, Gender and Race**  
Time in Days

Race	Gender	Reconviction	Age Category						
			14	15	16	17	18	19	20
C	F	Non Recon	2144.75	2167.33	2068.83	2149.94	2179.82	2161.10	2106.07
C	F	Recon	1118.33	1212.71	729.58	786.40	697.48	717.56	701.30
C	M	Non Recon	0.00	2127.57	2169.25	2164.71	2182.79	2181.63	2106.45
C	M	Recon	981.17	942.89	807.28	791.34	801.10	760.65	726.04
M	F	Non Recon	0.00	2220.80	2142.09	2189.02	2175.07	2166.65	2164.71
M	F	Recon	847.63	1115.69	1149.86	742.17	855.61	847.10	915.32
M	M	Non Recon	2167.17	2150.55	2123.20	2161.90	2172.97	2132.40	2090.21
M	M	Recon	1087.81	891.56	960.67	864.60	807.84	813.82	771.12
O	F	Non Recon	0.00	0.00	0.00	2278.00	2204.33	2148.00	2106.00
O	F	Recon	0.00	68.00	0.00	366.00	709.67	60.00	1664.50
O	M	Non Recon	0.00	0.00	2230.00	2193.33	2163.64	2158.06	2111.14
O	M	Recon	0.00	984.00	792.33	880.57	579.69	753.05	1041.29
P	F	Non Recon	0.00	2211.75	2091.00	2205.00	2260.60	2194.40	2190.75
P	F	Recon	0.00	848.00	472.00	670.22	661.69	733.20	685.25
P	M	Non Recon	1996.00	0.00	2185.00	2163.38	2147.79	2108.73	2137.33
P	M	Recon	1365.00	1055.33	928.15	800.24	763.29	838.48	751.29

Table Seven

**Age of Offence by Most Serious Criterion Offence**

Percentages based on Column Totals

Age		14	15	16	17	18	19	20	
All	Not Specific (eg Fines)	26	75	103	187	197	170	53	811
	<i>Percent</i>	<i>37.7</i>	<i>30.7</i>	<i>21.3</i>	<i>7.55</i>	<i>6.75</i>	<i>5.69</i>	<i>5.72</i>	<i>8.02</i>
	CT	0	7	56	227	177	100	1	568
	<i>Percent</i>	<i>0</i>	<i>2.87</i>	<i>11.6</i>	<i>9.17</i>	<i>6.06</i>	<i>3.35</i>	<i>0.11</i>	<i>5.62</i>
	Drivers Licence	6	28	88	574	766	888	258	2608
	<i>Percent</i>	<i>8.7</i>	<i>11.5</i>	<i>18.2</i>	<i>23.2</i>	<i>26.2</i>	<i>29.7</i>	<i>27.8</i>	<i>25.80</i>
	PD	0	8	55	680	896	870	286	2795
	<i>Percent</i>	<i>0</i>	<i>3.28</i>	<i>11.4</i>	<i>27.5</i>	<i>30.7</i>	<i>29.1</i>	<i>30.9</i>	<i>27.65</i>
	DSW	37	104	104	18	0	0	1	264
	<i>Percent</i>	<i>53.6</i>	<i>42.6</i>	<i>21.5</i>	<i>0.73</i>	<i>0</i>	<i>0</i>	<i>0.11</i>	<i>2.61</i>
	Community Serv/Prg	0	7	22	235	220	232	73	789
	<i>Percent</i>	<i>0</i>	<i>2.87</i>	<i>4.55</i>	<i>9.49</i>	<i>7.53</i>	<i>7.76</i>	<i>7.87</i>	<i>7.81</i>
Imprisonment	0	3	17	131	228	323	109	811	
<i>Percent</i>	<i>0</i>	<i>1.23</i>	<i>3.52</i>	<i>5.29</i>	<i>7.81</i>	<i>10.8</i>	<i>11.8</i>	<i>8.02</i>	
Cumulative Imp	0	1	3	28	71	76	30	209	
<i>Percent</i>	<i>0</i>	<i>0.41</i>	<i>0.62</i>	<i>1.13</i>	<i>2.43</i>	<i>2.54</i>	<i>3.24</i>	<i>2.07</i>	
Supervision	0	11	35	395	364	328	111	1244	
<i>Percent</i>	<i>0</i>	<i>4.51</i>	<i>7.25</i>	<i>16</i>	<i>12.5</i>	<i>11</i>	<i>12</i>	<i>12.31</i>	
Life/PD	0	0	0	1	1	2	5	9	
<i>Percent</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0.04</i>	<i>0.03</i>	<i>0.07</i>	<i>0.54</i>	<i>0.09</i>	
Total	69	244	483	2476	2920	2989	927	10108	
<i>Percent</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	



Table Eight

### Criterion Offences Committed by Corrective Trainees for the 1989 Year

	%	Raw	Freq.
Homicide:			0.0
Kidnapping:			0.0
Robbery:	4.3		29.0
GBH:	2.8		19.0
Assaults etc:	13.2		89.0
Domestic Violence:	1.4		10.0
Child Violence:			0.0
Intimidation:	5.8		39.0
Disorder:	6.1		41.0
Drugs For supply:	1.4		10.0
Drugs Possession:	12.0		81.0
Alc Offenses:			0.0
Vagrancy:	0.14		1.0
Child Neglect/Abuse:			0.0
Domestic Affairs:			0.0
Other domestic offenses:			0.0
Burglary:	44.3		298.0
Vehicle Theft:	31.6		213.0
Theft:	29.7		200.0
Theft As Servant:	0.44		3.0
Receiving:	6.2		42.0
Fraud:	5.0		34.0
Prop Damage:	11.0		74.0
Prop Abuses:	4.6		31.0
Weapons:	1.0		7.0
Escape Breaches:	34.2		230.0
Off Ag Justice:	0.59		4.0
Driving:	19.0		128.0
Rape/s v Girl <12:	0.29		2.0
Attacks Girl >12 <16:	0.74		5.0
Attacks Girl >16:	0.44		3.0
Sex against male <16:			0.0
Sex Male >16:			0.0

	%	Raw	Freq
Incest Girl <12:			0.0
Incest Girl 12-16:			0.0
Incest Female >16:			0.0
Incest Other:			0.0
Indecent act Girl <12:	0.29	0.2	2.0
Indecent act Girl 12-16:			1.0
Indecent act Female >16:			0.0
Indecent act other:	4.4		3.0
Other sex Offenses:	0.14	1.0	
Other Offenses:	0.89	6.0	
Prn:		672.0	
Time of Offense:	Criterion		

Table Nine

**All Offences Committed Post Release from Corrective Training for the 1989 Year**

	%	Raw	Freq.
Homicide:	1.6		10.0
Kidnapping:	0.16		1.0
Robbery:	9.9		61.0
GBH:	8.6		53.0
Assaults etc:	35.9		221.0
Domestic Violence:	4.8		30.0
Child Violence:	1.3		8.0
Intimidation:	19.3		119.0
Disorder:	39.1		241.0
Drugs For supply:	4.3		27.0
Drugs Possession:	47.3		291.0
Alc Offenses:	1.7		11.0
Vagrancy:	1.7		11.0
Child Neglect/Abuse:	0.16		1.0
Domestic Affairs:	0.16		1.0
Other domestic offenses:			0.0
Burglary:	60		369.0
Vehicle Theft:	47.4		292.0
Theft:	60		369.0
Theft As Servant:	0.16		1.0
Receiving:	26.3		162.0
Fraud:	18.2		112.0
Prop Damage:	34.7		214.0
Prop Abuses:	23.4		144.0
Weapons:	6.6		41.0
Escape Breaches:	66.1		407.0
Off Ag Justice:	2.4		15.0
Driving:	49.4		304.0
Rape/s v Girl <12:	0.8		5.0
Attacks Girl >12 <16:	0.16		1.0
Attacks Girl >16:	2.43		15.0
Sex against male <16:			0.0
Sex Male >16:			0.0

	%	Raw	Freq.
Incest Girl <12:			0.0
Incest Girl 12-16:			0.0
Incest Female >16:			0.0
Incest Other:			0.0
Indecent act Girl <12:	0.16		1.0
Indecent act Girl 12-16:	0.16		1.0
Indecent act Female >16:			0.0
Indecent act other:	0.6		4.0
Other sex Offenses:	0.8	5.0	
Other Offenses:	4.2	26.0	
Prn:		615.0	
Time of Offense:	Post		

Table Ten

### Reconviction Offence Versus Criterion Offence

Percentages based on those with Reconvictions Only

VIOLENCE POST	SEXUAL POST	DISHONESTY POST	OTHER POST	TOTAL POST	CRITERION	GEN	RACE	AGE	<i>PRE OFFENCE</i>
804 <i>61.28</i>	25 <i>1.91</i>	680 <i>51.82</i>	963 <i>73.40</i>	1092 <i>83.23</i>	1312 <i>100.00</i>				VIOLENCE
26 <i>40.63</i>	10 <i>15.63</i>	34 <i>53.13</i>	44 <i>68.75</i>	50 <i>78.13</i>	64 <i>100.00</i>				SEXUAL
1675 <i>49.42</i>	68 <i>2.01</i>	2333 <i>68.84</i>	2596 <i>76.60</i>	2896 <i>85.45</i>	3389 <i>100.00</i>				DISHONESTY
1109 <i>41.09</i>	42 <i>1.56</i>	1118 <i>41.42</i>	2088 <i>77.36</i>	2217 <i>82.14</i>	2699 <i>100.00</i>				OTHER
3614 <i>57.78</i>	145 <i>1.94</i>	4165 <i>55.80</i>	5691 <i>76.25</i>	6255 <i>83.80</i>	7464 <i>100.00</i>				TOTAL

## Appendix Two

### ***Static and Dynamic Predictors of Risk in Young Offenders***

(adapted from Andrews, Leschied & Hoge, 1992)

Predictor	Assessment Foci	Treatment Foci
Behavioural history	Criminal history—juvenile and adult Early beginning (lying, stealing, aggression) Variety of different types of offenses Violations continuing even when under sentence Alcohol and drug abuse	Decrease aggression Treat substance abuse Teach pro-social behaviours
Antisocial associates	Association with antisocial/ drug using others Being a member of a gang Isolation from pro-social others	Decrease association with Negative peer group/gang Teach interpersonal skills Increase association with pro-social others
Antisocial attitudes/beliefs/values	High tolerance for deviance Rejection of the validity of law Uses rationalisations for a wide variety of illegal acts and antisocial behaviour Interprets a wide range of stimuli as reasons for anger Thinking style and content is antisocial	Change antisocial attitudes and beliefs Teach anger management/ conflict resolution skills
Problems with interpersonal relationships	Generalised indifference to the opinions of others Unstable relationship history Poor social skills Weak affective ties to pro-social others Rejection/isolation from others	Teach relationship skills Increase perspective-taking Ability and empathy Increase receptivity to Needs/rights of others Decrease social isolation Improve social and Communication skills
Problems at school / work/ leisure and low levels of achievement in these areas	School/Work: below average effort/lack of interest/boredom Not worrying about occupational future Conduct problems (e.g. truancy) Low levels of achieved education Long periods of unemployment Leisure: aimless use of leisure time No productive pastimes/ hobbies No links with pro-social groups/organisations	Increase educational/work Skills Increase desire for career/ job and provide job opportunities Increase productive use of Leisure time Develop hobbies Develop involvement with pro-social groups/ organisations

Early and Current Family Conditions	<p>Low levels of affection/ Cohesiveness</p> <p>Low levels of supervision and discipline within the home</p> <p>Neglect/Abuse</p> <p>Criminality in family of origin</p> <p>Multiple psychological handicaps e.g. low verbal IQ, alcoholism, emotional instability, parenting skill deficits</p>	<p>Increase familial Cohesiveness/ levels of affection within the home</p> <p>Increase familial supervision and Monitoring skills</p> <p>Treat issues arising from abuse/neglect</p> <p>Teach pro-social behaviours to family</p>
Difficult Temperament	<p>Impulsive, restlessly energetic, sensation-seeking</p> <p>Low frustration tolerance - reacts with anger and resentment</p> <p>Lack of conscientiousness</p> <p>Egocentrism – below age-based norms for perspective taking</p> <p>Poor problem-solving/ coping skills</p> <p>Below average verbal intelligence</p> <p>Neuropsychological deficits</p> <p>Moral Immaturity – below age-based norms</p> <p>If diagnosed as a child -more likely to be as externalising</p> <p>High scores on measures of antisocial personality, in particular, high scores on measures of psychopathy</p> <p>Many forms of behavioural/ emotional disturbance when combined with a history of antisocial behaviour (e.g. conduct problems plus shyness).</p>	<p>Teach cognitive skills</p> <p>Teach problem-solving/ goal directedness</p> <p>Teach sociomoral competence and empathy</p> <p>Improve frustration tolerance</p> <p>Improve anger management skills</p> <p>Teach skills for affect tolerance and regulation</p> <p>Teach stress management skills</p> <p>Tailor treatment to conceptual level</p>
Other Risk Factors	<p>Being male</p> <p>Being young (16-24 years)</p>	



