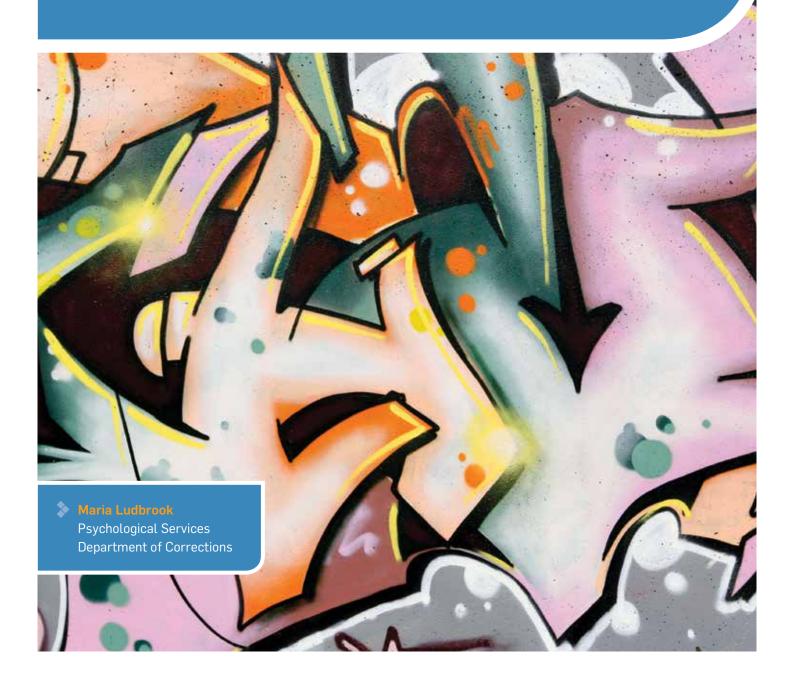


YOUTH THERAPEUTIC PROGRAMMES

A Literature Review // 2012



Youth Therapeutic Programmes

A Literature Review - 2012

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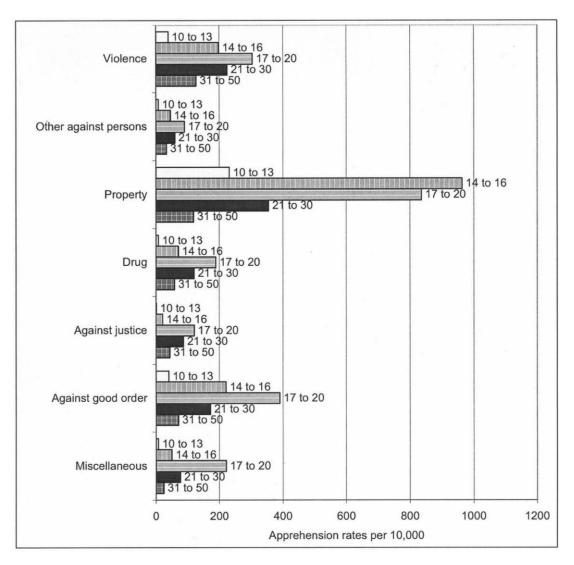
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1. Trends in youth offending in New Zealand

1.1 Apprehension rates

According to the Ministry of Justice (MOJ 2010), apprehension rates for youth aged 14 to 16 declined between 1995 and 2008, especially in the last three years. There was a slight upward trend in apprehensions for 17 to 19 year-olds (Statistics NZ 2011). Adult apprehension rates were relatively stable over the same period (MOJ 2010). Figure 1 shows police apprehension rates per 10,000 population by offence category and age group in 2008 (MOJ 2010: 31). That year, the 17 to 20 age group had the highest apprehension rate (2,153 per 10,000 population) for all offence categories other than property, followed by 14 to 16 year olds (1,572 per 10,000 population). Apprehension rates for Māori youth were more than three times those for Pacific or NZ European youth.

Figure 1: Police apprehension rates for non-traffic offences by offence category and age group, 2008 (Source: MOJ 2010:31)



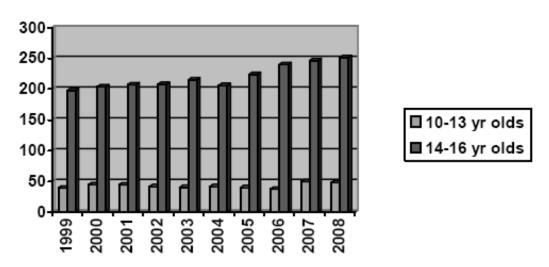
In 2008, the 17 to 20 age group had the highest apprehension rates for violent offences (305 per 10,000 population), followed by 21 to 30 year olds (225 per 10,000) and 14 to

16 year olds (198 per 10,000). The rate for 10 to 13 year olds was considerably lower at 39 per 10,000 population (MOJ 2010) (Figure 1). The rates of violent offending increased among 14 to 16 year-olds between 1999 and 2008 (Figure 2).

Youth offending statistics show increases since 2004 in the number of both most and least serious violent offences (wounding with intent and injuring with intent, and common assault and male assaults female), even though the youth population is decreasing (Judge Becroft 2009). Between 2002 and 2009 14 youth (under 18) were convicted for murder and 27 were convicted of manslaughter and imprisoned. Of the 10 youngest offenders, one was 12 and nine were 14 at the time of their offending) (MOJ 2009a).

The 2007 NZ Youth Secondary Schools National Survey¹ suggests that some youth condone the use of violence, with 40% of male students and 27% of female students saying that they had hit or physically harmed another person within the past 12 months (Clark, Robinson, Crengle, Grant, Galbreath & Sykora, 2009).

Figure 2: Violence apprehension rates per 10,000 population by age group 1999-2008 (Source: Judge Becroft 2009:1)



In NZ, approximately 22% of apprehended offenders are young people. Most offending by young people is minor and short-term. For example, about 80% of youth who are apprehended come to the attention of police only once or twice, and about half of all known offences committed by youth are rated as being of minimum seriousness. However, a fifth (20%) of youth offenders commit serious and/or repeat offences and account for 80% of all youth offences. These are the young people who require most of our attention (Judge Becroft 2009).

1.2 Trends in prosecutions, orders and sentences

Trends in prosecutions, orders and sentences for youth aged 14 to16 show that between 1992 and 2008:

 Section 282 discharges, where the Youth Court discharges a charge as if it had never been laid, were the most common Youth Court outcome. The rate of young people discharged increased markedly between 1995 and 2008.

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¹ Covering 96 secondary schools with 9,107 respondents and 13 to 18 years.

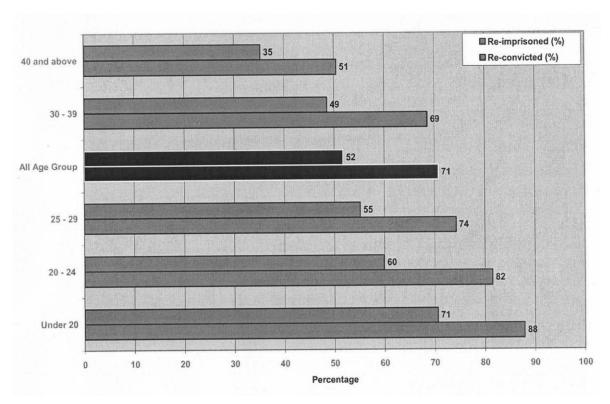
- The rate of young people with proved outcomes in the Youth Court generally increased over the 1992 to 2008 period, from a low of 14 per 10,000 population in 1992 to 65 in 2008.
- The rate of young people convicted through the District or High Court decreased from a high of 23 per 10, 000 population in 1997 to a low of 8 in 2008 (158 young people) (MOJ 2010).

1.3 Trends in reconviction and reimprisonment

Studies have established a strong relationship between age and reconviction and reimprisonment rates. Nadesu (2009a) looked at reconviction patterns for a cohort of NZ offenders managed on community sentences over a 60 month follow-up period. Compared to adult offenders, offenders under the age of 20 had a high rate of reconviction - 70% within 60 months, with 20% of these being imprisoned. Under 20 year-olds on home detention also had a high reconviction rate (68%), with 31% being imprisoned. Over half of the entire sample had been reconvicted within 12 months.

Nadesu (2009b) also looked at reconviction rates for a NZ cohort of released prisoners and found that those under 20 had the highest reconviction (88%) and reimprisonment (71%) rates within a 60-month period (see Figure 3). Released prisoners in the under 20 age-group were twice as likely to return to prison (71%) as those over 40 (35%).

Figure 3: Reconviction and reimprisonment rates by age at release (Source: Nadesu 2009b:7)



In Nadesu's (2009b) analysis of 463 offenders under 20 at the time of release, almost a quarter (107) reoffended within three months of release and subsequently returned to prison, and almost half had returned to prison within 12 months (see Figure 4). The first year after release is clearly a high risk period for youth to relapse into old patterns of behaviour. Of the 136 offenders who were not re-imprisoned for a new offence during the 60 month follow-up period, 80 were reconvicted and began a community sentence over the same period. Of the original 463 youth offenders, only 56 were not convicted of a new offence.

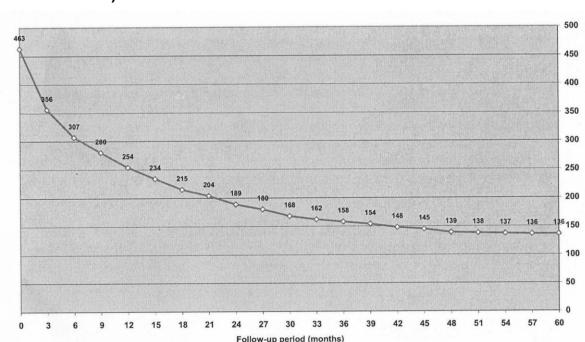


Figure 4: Survival curve for youth under 20 in terms of reimprisonment (Source: Nadesu 2009b:8)

Two-thirds (64%) of offenders aged under 20 at release who were reimprisoned for a new offence, returned to prison at least twice over the 60 month follow-up. The study found that for youth as well as adults, the more often someone had been to prison in the past, the more likely they were to return to prison after any given release Sixty-two percent of first timers to prison aged under 20 were likely to be reimprisoned within the 60 month follow-up period, compared with 88% of recidivist youth who had previously been incarcerated (Nadesu 2009b).

Nadesu concluded that offenders who begin offending during their teenage years are more likely to become persistent offenders, particularly if their initial offending results in a prison sentence. Hence, "intervening with young offenders in prisons is a priority for the Department, and if effective would have significant downstream benefits" (2009b:26).

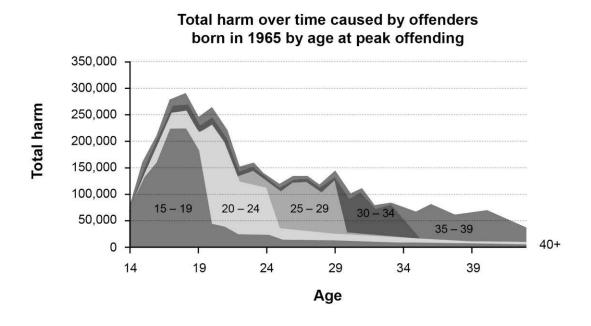
1.4 Longitudinal analysis

Hughes (2010) analysed offending patterns from a NZ cohort born in 1965. Consistent with international research, the aggregate age-crime curve had the expected offending early peak followed by a decline in seriousness and frequency over time. Approximately 50% of the cohort's total lifetime harm was committed by the age of 23 (see Figure 5).

The offending peak was most likely to occur before the age of 25, relatively soon after the first offence, and earliest for property offenders, early for violent offenders, and later for sexual offenders. The most harm caused in any given year was caused by offenders at, or near, their peak offending age. Under this conception, the offender's peak offending year becomes more important than their age of onset or desistance. From a policy (and service perspective), Hughes concluded that "rather than trying to prospectively identity and intervene with the most persistent offenders, the best approach would be to intervene before offenders reach their peak" as "waiting until an

offender is in their late 20s or older before intervening is likely to waste most of the opportunity we have to prevent harm" (2010:37).

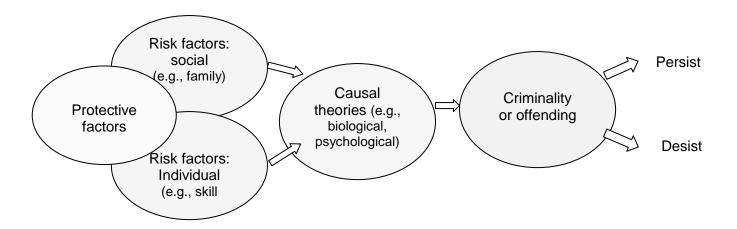
Figure 5: Total harm over time caused by offenders born in 1965 by age at peak offending (Source: Hughes 2010:4)



2. Developmental considerations

Developmental considerations in relation to youth offending can be conceptualised under causal theories, risk factors, and protective factors (see Figure 6 adapted from MOJ 2009b:1).

Figure 6: Risk and protective factors and causal theories for offending



2.1 Causal theories or mechanisms

The most influential theories in the development of conduct disorder (CD) and juvenile delinquency include biological theories, cognitive theories, social learning and behavioural theories, and systems theories.

a) Biological theories

Biological risk factors are complex and their relationship to offending is still being understood. Biological theories tend to highlight the roles of gene-environment interaction, arousal levels, and neuropsychological deficits in the development of conduct problems and delinquent behaviour.

Gene-environment interaction

The Dunedin Longitudinal Study found that conduct problems in young people aged 10 to 18, adult antisocial behaviour, and aggression in males can be predicted by an interaction between childhood maltreatment and a variation in the gene that produces the enzyme monoamine oxidase. Badly treated boys with this gene variation were more likely to become violent adults than boys who were badly treated but did not have the gene variation (Caspi, McClay & Moffitt 2002; Pulton 2008). For this group, intervention would focus on targeting dysfunctional family environments and parenting skills.

Arousal theory

Arousal theory suggests that children with CD have lower arousal levels than normal children, and respond less to positive reinforcement and punishment. Hence they are less able to learn prosocial behaviour or how to avoid antisocial behaviour. Intervention would focus on highly structured and intensive behavioural treatment where immediate consequences follow rule-following or breaking (Carr 2006).

Neuropsychological deficits theory

Children and teenagers with conduct problems and delinquency often have difficulty with verbal reasoning, learning and reading, and self-regulation. Remedial interventions have focused on development of language and academic skills (Carr 2006; Rucklidge, Mclean & Bateup 2009).

b) Cognitive theories

Cognitive theories have focused on problems with social information processing and social skills deficits (Carr 2006).

Social information processing theory

Research has shown that in ambiguous situations, children with CD attribute hostile intentions to others and respond aggressively. The reactions of peers confirm their perceptions. Intervention may involve correcting this attribution bias and teaching social problem-solving skills.

Social skills deficits theory

Research has highlighted the inability of children with CD to generate and implement solutions to social problems. Cognitive behaviour therapy-based interventions aim to train adolescents in various skills including social problem-solving by accurately assessing problematic social situations, generating a range of solutions, considering the short and long-term consequences of these solutions, implementing the most appropriate solution, and learning from feedback.

c) Social learning and behavioural theories

Modelling theory

According to this theory (by Bandura), modelling of aggression or neglectful hostility can promote intra-familial transmission of aggressive behaviour. Treatment should aim to help parents model appropriate behaviour, provide alternative pro-social role models in residential or foster care, and minimise association with delinquent peers while promoting opportunities for modelling from prosocial peers (Carr 2006).

Coercive family process theory

This theory is most clearly articulated and supported by Patterson and colleagues (Dishion & Patterson 2006; Reid, Patterson & Snyder 2002). Coercive parents use three types of coercive interaction: 1) they engage in few positive interactions with their children; 2) they punish children frequently, inconsistently and ineffectively; and 3) they negatively reinforce conduct problems by confronting and punishing the child briefly then inadvertently withdrawing the confrontation or punishment (backing down) when the child escalates their antisocial behaviour. The child learns that escalating their behaviour results in parental withdrawal. The more parents use coercive strategies, and the more often there is conflict within the family, the more likely it is that young people will be aggressive in later life and at risk of criminal behaviour.

Over time children exposed to this parenting style develop a coercive relational style which may lead to rejection by prosocial peers, and resistance and conflictual relationships with teachers. By adolescence, academic underachievement and rejection by prosocial peers may lead young people to socialise with antisocial peers. Antisocial boys mutually reinforce one another's "rule-breaking talk", which predicts later delinquency and substance abuse. Antisocial peers also model, reinforce and maintain aggressive and delinquent behaviours. While the parents and families of these children have fewer non-coercive parenting strategies, their supervisory practices are lax, which creates further opportunities for exposure and influence by delinquent peers.

Families of at-risk/high-risk youth are challenging to work with, and are often involved with several agencies. While parenting-based interventions show some success, a better result can be gained by using a foster family as primary caregivers and a case-management approach for each youth across agencies. When therapy includes adolescence skills groups, substance abuse can increase, and when youth are placed in group homes (rather than individualised placements) this can lead to more delinquency and higher arrest rates.

d) Systems theories

Structured family systems theory

This model argues that conduct problems develop in disorganised families which lack clear rules and boundaries, roles and hierarchy, routines, communication and problem-solving skills, and flexibility in managing lifecycle transitions (Carr 2006). Treatment aims to help families become better organised by:

- developing explicit rules, roles and routines
- developing clear and direct communication styles
- developing systemic family problem-solving skills
- clarifying hierarchies and intergenerational boundaries, and
- helping family members negotiate life cycle transitions (e.g. leaving home).

Multi-systemic ecological theory

This model suggests that multiple systems (including individual, family, school, and community) are involved in developing and maintaining conduct problems. Systemic

factors include family factors (such as attachment and discipline), school factors (such as academic attainment), and community factors (such as association with delinquent peers, and access to drugs). Treatment packages such as multi-systemic therapy target relevant systemic factors with some promising outcomes (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham 1998).

Adolescent- limited versus life-course persistent delinquency

Delinquency can have two trajectories, each with its own natural history. A longitudinal study followed the development and treatment of delinquency over almost 50 years (Reid, Patterson & Snyder 2002). The authors distinguish between preschool antisocial behaviour followed by early arrest, followed by chronic and violent juvenile offending, which progresses to chronic adult criminality, and late-adolescent, transient, primarily peer-related offending, which is likely to stop in adulthood.

The Dunedin longitudinal study (which followed a birth cohort of 457 males from age 3 to 18) distinguished between "life-course persistent" and "adolescent-limited" offenders (Moffit, Caspi, Dickson, Silva & Stanton 1996; Moffit 1993). The relatively small life-course persistent group engaged in antisocial behaviour from an early age progressing well into adulthood. With this group, neuropsychological problems disrupt the normal development of language, memory, and self-control producing a toddler with cognitive delay and a difficult under-controlled temperament. These differences increase the child's vulnerability and interact cumulatively with their criminogenic environment (e.g. inadequate parenting and disrupted family bonds) across their development. The environmental risk domain extends beyond the family as the child ages to include poor relations with teachers and peers, with fewer opportunities to acquire prosocial skills. Transactions between the individual and the environment culminate in the construction of antisocial personality, with antisocial behaviour infiltrating adult life domains (Moffit 1993:674).

In contrast, the larger adolescent limited group tended to be antisocial during adolescence but did not maintain their delinquent behaviour into adulthood. The theory suggests that a "temporary maturity gap encourages the tendency to mimic antisocial behaviour in ways that are normative and adjustive". This group stops offending as they mature and become able to respond to changes in their environment (i.e. when they attain privileges coveted by teenagers such as employment, and when their perceptions of crime shift from rewarding to punishing) (Moffit 1993:674).

From the age of three, the life-course group displayed a difficult temperament, but the differences between the two groups were less obvious differences during adolescence. The main differences were that the life-course group accrued more violent convictions, exhibited more psychopathic traits (on personality profiles), were more likely to drop out of school, and were less bonded to family (Moffit et al 1996). Other studies have reported on findings consonant with predictors about each type's differential childhood risks (Moffit 2006).

When looking at the relative risk of each trajectory, Khron, Thronberry, Rivera and Le Blanc (2001) found that the early onset group were 40 times more likely to become chronic offenders than the late onset group and they committed between 40 and 700 percent more criminal acts. Hughs (2010) examined offending patterns of the NZ 1965 birth cohort and found that a relatively small proportion of the cohort (10%) was responsible for most of the harm (50%). Most of this group started offending earlier and finished later than other offenders (which supported Moffit's life-course persistent theory). However, contrary to Moffit's theory, over time, most of the life-course persistent group, offended less often and less seriously. The study also found that:

- Most serious offenders peaked in offending by age 24, at which time they had completed most of their lifecycle harm
- Most serious offenders' lifecycle harm was concentrated in fewer than five, often no more than one or two, individual offending years.
- The concentration of harm at the age of peak offending meant that most of the harm caused each year was caused by offenders at, or near, their peak.
- Most serious offenders had an extensive, but relatively minor, ongoing career after their peak before they completely desisted (Hughs 2010:4).

Moffit (2006) identified two sub-groups of the "life-course" group, including the "low-level chronics" who offended at a low but stable rate across a long period of time and the "recoveries", who appeared to be on the life-course path but then desisted. Similarly, Piquero, Sullivan and Farrington (2010) found that not all chronic offenders displayed similar criminal career patterns, suggesting that a simple two-group typology may not fully capture the range and nature of career patterns. They distinguished between short-term high rate (STHR) and long-term low rate (LTLR) groups. The STHR group incurred offences at a higher rate (with a higher level of theft-oriented offences) but tended to stop sooner The LTLR accrued offences at a lower rate (with more violent-orientated crime) but offended for longer. For both groups the average yearly offending rates declined after a few years.

With regard to violent offending, longitudinal research (Bandura et al 2001; Carprara et al 2002) shows links between low self-regulation and patterns of violent conduct in young people between the ages of 11 and 19. Research relating to recidivist violent adult offenders also showed poor self-regulation, misdirected attempts at problem-solving, and failure to manage negative emotions (cited in McGuire 2008).

McGuire (2008) acknowledged that given the number of factors that influence violent behaviour, and the variety of interventions with some supportive evidence of effectiveness, establishing a viable model of causation for violent behaviour remains an elusive goal. Various integrative frameworks have been articulated including the biopsychosocial model (Dodge & Pettit 2003), control theory and the interaction between personal and social controls (LeBlanc 2006), and the hot/cold system analysis (Metcalfe & Mischel 1999). Kinderman (2005) argues that the biopsychosocial model gives equal status to biological, psychological and social factors in causation, but pays insufficient attention to proximal psychological processes as the final common pathway (cited in McGuire 2008). Chambers, Ward, Eccleston and Brown (2009) outlined a model for violent offending based on a multivariate qualitative analysis of 35 adult assault offenders' transcripts. Their model incorporates the development of violent behavior, types of anger, violence motivation, and the assault offense. They identify five main functional pathways (including objectives of reputation, defence, or catharsis) in the commission of violent offences. They suggest that offenders would gain maximum benefits from programmes which tailored interventions to their differing needs and offending functions.

2.2. Risk factors or intervention targets

Andrews and Bonta (2010) distinguish between predictor variables, causal or functional variables, and moderator variables:

Predictor variables are risk factors that predict criminal behaviour. In longitudinal studies, researchers examine predictor variables in relation to ensuing criminal activity. They differentiate between static predictor variables (risk factors which are historical and cannot be changed e.g criminal history), and dynamic predictor variables (dynamic

risk factors or criminogenic needs) which can be changed and hence can act as treatment targets. Dynamic variables can be further broken down into *stable dynamic risks* and *acute dynamic risks*.

Causal or functional variables are behaviours that can be changed through targeted interventions. Where the conditions of intervention match experimental ideals (e.g. controls, random assignment, sample size) confidence in the status of targeted variables increases.

Moderator variables are factors that may influence change but not be directly responsible for it.

Risk factors fall into four groups - individual characteristics, family factors, school/work factors, and associations with peers (see Table 1).

Table 1: Risk factors for youth offending

Individual factors	Family factors	Peer factors	School/ vocational and recreation
 Pro-crime attitudes Externalising behaviours (e.g. CD, ADHD, aggression) Internalising behaviours (e.g depression, withdrawal, anxiety) Substance abuse or dependence 	 Family structural variables (e.g, child-welfare involvement, parental separation, marital status, role model) Parent management (e.g. coercive, inconsistent, lack of supervision) Adverse family environment (e.g. witness violent, maltreatment) Parental affection and bonding 	 Delinquent peers Gang affiliation Substance abusing peers 	Lack of educational or vocational achievement Lack of involvement in prosocial recreational and community pursuits

Research suggests that presence of multiple risk factors increases the likelihood of a young person becoming delinquent. For example, the Christchurch longitudinal study found that children from families with 19 or more risk factors were 100 times more likely to end up with multiple problems as teenagers (including offending), than the 50% of the sample who had six or fewer risk factors (Fergusson & Lunskey, 1996).

Similarly, as part of a Cambridge study in delinquent development Piquero, Farrington, Nagin and Moffit (2010) identified 12 individual factors and 15 environmental factors as early life risk factors. The authors found that combined individual risk factors as a child (aged 8 to 10) showed a positive and significant effect on negative life outcomes at age 48 (e.g. convictions, drug use, fights, and poor employment, cohabitation and accommodation histories). Very low-rate chronic and high-rate chronic offenders had higher individual risk scores at ages 8 to 10, and the highest rate of life failure at 48.

Table 2: Early life (age 8 to 10) risk factors for offending

Risk factor				
Individual	Environmental			
 Daring (risk taking) disposition Psychomotor impulsivity Lacks concentration/restless Troublesome High extraversion boy High neuroticism boy Nervous/withdrawn boy Dishonest Low junior school attainment Low non-verbal IQ Unpopular Small height 	 Teen mother at birth of first child Harsh attitude/discipline of parents Poor supervision Behaviour problems of siblings Criminal record of parent Delinquent older sibling Large family size Parental disharmony Separated parents Neurotic/depressed mother or father Low family income Low socio-economic static Poor housing High-delinquency rate school 			

Leschied, Chiodo, Nowicki and Rodger (2008) completed a meta-analysis of 38 longitudinal and prospective studies. The 66,647 participants were from various countries, including New Zealand and Australia. The findings are summarised in Tables 3 and 4, and explained below (Note: Effect sizes 0.2=small, 0.5=medium, 0.8=large).

- The older the child at the time the predictor was measured, the stronger the
 relationship to adult offending. Thus, risk factors present in adolescence were
 stronger and more reliable predictors of adult criminality than those present in
 younger children. However, child factors in general had a modest effect in
 predicting adult correctional outcomes.
- The overall effect size of static predictors (race, gender, age of first offence) was not significant regardless of age. Criminal history factors (such as prior incarceration, type of crime, number of victims) were measured in adolescence with significant results (effect size 0.38).
- A variety of externalising behavioural concerns (attention problems, hyperactivity, aggression and conduct disorder) had the strongest associations with adult criminality. This finding was true across age groups. For externalising problems in childhood the effect size was 0.20, in mid-childhood 0.31, and in adolescence 0.52.
- Internalising behaviours or emotional concerns (e.g. depressive symptoms, withdrawal, anxiety, self-depreciation and social anxiety) had a small but significant predictor effect (0.22).
- No significant outcomes were associated with social and interpersonal problems, developmental disorders or school-related problems.

Table 3: Child and adolescent predictors of adult criminality for all outcomes across time-points and overall (adapted from Leschied et al 2008:454)

Variable	Time point	Effect size (ES)	Total ES
Behavioural concerns	Early childhood	0.20	0.39
	Mid-childhood	0.31	
	Adolescence	0.52	
Internalising or emotional	Early childhood	-	0.22
concerns	Mid-childhood	0.10	
	Adolescence	0.29	
Social and interpersonal	Early childhood	0.02	0.08
concerns	Mid-childhood	0.15	
	Adolescence	-	
Static - criminal history	Early childhood	-	
factors	Mid-childhood	-	
	Adolescence	0.38	
Overall (all risk factors	Early childhood	0.11	0.29
combined)	Mid-childhood	0.18	
	Adolescence	0.40	

Leschied et al (2008) looked at family factors which predicted adult criminality (see Table 4). They concluded that these factors were modest but significant predictors.

- Family structure was important across age groups (ES 0.48). Family structure variables e.g. child welfare involvement, parental separation, marital status) measured in adolescence were particularly important (ES 0.67). Parent management that was coercive, inconsistent, or lacking in supervision during midchildhood emerged as a particularly strong predictor (ES 0.41).
- Adverse family environment factors (e.g. witnessing family violence, child maltreatment) were modest predictors across age groups (ES 0.23).
- Static family risk predictors (e.g. parental criminal history, mother's age at birth, birth complications) had an overall effect size of 0.15.

Table 4: Family predictors of adult criminality for all outcomes across timepoints and overall (adapted from Leschied et al 2008:454)

Variable	Time-point	Effect size (ES)	Total ES	
Family structure	Early childhood Mid-childhood	0.16 0.26	0.48	
	Adolescence	0.67		
Parent management	Early childhood	-	0.24	
	Mid-childhood	0.41	0.24	
	Adolescence	0.12		
Adverse family environment	Early childhood	0.16	0.23	
Adverse family environment	Mid-childhood	0.17	0.23	
	Adolescence	0.38		
Static – family variables	Early childhood	0.19	0.15	
Static – farrilly variables	Mid-childhood	0.24	0.15	
	Adolescence	0.11		
Overall (all rick factors	Early childhood	0.13	0.25	
Overall (all risk factors combined)	Mid-childhood	0.39	0.25	
Combined)	Adolescence	0.31		

In a meta-analysis of 134 studies Andrews and Dowden (1999) looked at risk factors specific to young offenders (under 18 years) and ranked the mean effect sizes for each need when targeted by intervention (see Table 5). Targeting criminogenic needs produced the greatest effect size, while targeting non-criminogenic needs (such as self-esteem, vague emotional problems, physical activity) was associated with increased recidivism. Family factors also ranked highly, compared to the lower ranking these factors achieved on the "big eight" list for adults (see Table 6 below). Thirdly, reducing antisocial peers did not result in statistically significant findings, although few studies examined this variable. Given its high ranking in the 'big four' and 'big eight' list, this variable is still considered important in any treatment package.

Table 5: Criminogenic and non-criminogenic needs targeted: ordered by frequency and their correlation with effect size (Andrews and Dowden 1999)

Criminogenic need / risk	Frequency	Effect size
Other criminogenic needs	47	0.36***
Family: supervision	17	0.35***
Family: parental affection	24	0.33***
Barriers to treatment	12	0.30***
Self control	40	0.29***
Anger/antisocial feelings	41	0.28***
Academic	51	0.23***
Vocational skills + job	9	0.26***
Prosocial model	19	0.19**
Antisocial attitudes	17	0.13*
Reduce antisocial peers	8	0.11
Vocational skills	17	0.09
Relapse prevention	7	0.07
Substance abuse treatment	11	0.04
Vague emotional problems	59	-0.06
Self-esteem	14	-0.09
Physical activity	36	-0.03

The adult literature is also relevant when considering dynamic risk factors for older adolescent and young adults. Andrews and Bonta (2010) summarise eight reviews in their discussion about the big four and big eight risk factors (see Table 6).

Table 6: The correlations (r) between criminal behaviour and the central eight and minor risk factors (adapted from Andrews and Bonta 2010:65)

Cluster	Risk factor	Grand mean correlation- 8 reviews	Grand total mean for each cluster	
Big four risk factors	History of antisocial behaviour	0.25	0.26	
	Antisocial personality pattern	0.25	(95% CI=0.22-0.30, k=24)	
	Antisocial attitudes	0.27		
	Antisocial associates	0.28		
Moderate four risk factors	Family/marital	0.18	0.17	
	Education/employment	0.18	(CI=0.13-0.20,	
	Substance abuse	0.13	k=23)	
	Leisure/recreation	0.21	,	
Minor risk	Lower-class origins	0.05	0.04	
factors	Deterrence (fear of punishment)	-0.25		
	Personal distress or psychopathology	0.03		
	Verbal intelligence	0.06		

Andrews and Bonta (2010) concluded that the big eight risk factors did not appear to differ substantially by age or gender. For this reason, measures such as the Youth Level of Service/Case Management Inventory (YLS/CM (Hoge & Andrews 2003) have been based on their adult counterparts, and organised into items based around the central eight risk/needs factors. Olver, Stockdale and Wormith (2009) reviewed three risk instruments used with youth (YLS/CMI; PCLYV and SAVRY). All three instruments predicted general and violent recidivism with no one scale outperforming the other. For the YLS/CMI, the average effect sizes were 0.32 (k=19) for general recidivism and 0.26 (k=0.26) for violent recidivism.

Wilson and Rolleston (2004) completed a risk and needs analysis of young offenders in NZ Youth Offender Units (YOUs) using the YLS/CMI. Estimates of needs included: education/employment (78.5%); substance abuse (74%); peer relations (58%); personality/ behaviour (42%); attitudes/orientation (32%); leisure/recreation (33%); and family (20%). The introduction of Test of Best Interests (TBI) appears to have resulted in a younger but higher risk population within YOUs, and may have further elevated these percentage estimates. Of the 21 youth (aged 14 to 17) admitted to the Te Hurihanga Community Youth Offending Pilot (2007-2010) all scored high to very high risk for reoffending estimates, with much higher overall percentage estimates for various needs on the YLS/CMI.

Andrews and Bonta (2010:500) outline promising targets for intervention based on both risk and need factors (see Table 7 below).

Table 7: Major risk/need factors and promising intermediate targets for reduced recidivism

Risk/need factors	Dynamic need
History of antisocial behaviour: Early and continued involvement in a number and variety of antisocial acts in a range of settings.	Build up noncriminal alternative behaviour in risky situations.
Antisocial personality pattern: Adventurous pleasure-seeking, weak self-control, restlessly aggressive.	Build problem-solving and self- management skills, anger management and coping skills.
Antisocial cognition: Attitudes, values, beliefs and rationalisations support crime and cognitive emotional states of anger, resentment, and defiance. Criminal/reformed criminal/anti-criminal identity.	Reduce antisocial cognition, recognise risky thinking and feeling, build up alternative less risky thinking and feeling, adopt reform/anti-criminal identity.
Antisocial associates: Close association with criminal others and relative isolation from anti-criminal others, immediate social support for crime.	Reduce association with criminal others, enhance association with anticriminal others.
Family/marital: Two key elements are nurturance/caring and monitoring/ supervision.	Reduce conflict, build positive relationships, and enhance monitoring and supervision.
School/work: Low levels of performance and satisfaction in school and/or work	Enhance performance, rewards and satisfaction
Leisure/recreation: Low levels of involvement and satisfaction in anti-criminal leisure pursuits.	Enhance involvement, rewards and satisfaction.
Substance abuse: Abuse of alcohol and/or drugs.	Reduce substance abuse, reduce the personal and interpersonal supports for substance-oriented behaviour, and enhance alternatives to drug abuse.

Note: Minor risk/need factors (and less promising intermediate targets for reducing recidivism) include personal/emotional distress, major mental disorder, physical health issues, fear of official punishment, physical conditioning, low IQ, social class of origin, seriousness of current offence, other factors unrelated to offending.

2.3 Protective factors

Protective factors are personal and environmental factors that mitigate the effect of risk factors, and either prevent an individual from developing delinquent behaviour or reduce the likelihood of future delinquent behaviour (MOJ 2009). Protective factors can be grouped into psychological characteristics (e.g.positive attitude towards intervention, resilient personality, adequate social skills) and supportive social relationships.

Evidence supports the value of identifying an offender's strengths, with measurable improvements in dynamic factors (e.g.coping ability, formation of social supports) leading to a longer period before new criminal charges accrue or parole is revoked (Brown 2003 cited in Dept of Corrections 2009). Protective factors are now being incorporated into assessment tools (e.g. SAVRY, YLS/CMI). Other authors have discussed protective factors and resiliency in terms of desistance (Serin & Maillouz 2008; Ward, Mann & Gannon 2007).

Rennie and Dolan (2010) looked at the significance of protective factors in assessing risk using the Structured Assessment of Violence Risk in Youth (SAVRY). SAVRY was completed on 135 high risk male adolescents in custody who were followed up over 12 months. The authors found that youth released from custody were less likely to offend if they were older at first offence, and had more protective factors present at the time of release, including: strong attachments and bonds, strong social supports, prosocial involvement, strong commitment to school, positive attitude towards intervention and authority, and resilient personality traits. The total number of SAVRY protective factors significantly predicted desistance from offending at follow-up. The study showed that having just one protective factor helped buffer reoffending. The authors concluded that when intervening with high risk youth, fostering at least one protective factor, and building resilience may reduce risk for re-offending. Lodeswijks, de Ruiter, and Doreleijers (2009) also concluded that protective factors buffered or mitigated the risk of violent re-offending and strong social support and strong attachment to prosocial adults were significant predictors of desistance.

2.4 Desistance

Desistance is defined as a gradual and dynamic (rather than an abrupt) process leading to an individual reducing or ceasing their involvement in crime. Primary desistance is any hiatus in criminal activity, while secondary desistance is a more long-term process. The process of desistance is rarely straightforward. The onset is best described as a "zigzag process" which may be preceded by "tenuous motivation, instability and uncertainty" and temporary cessations and decelerations in activity (Healy 2010:431). The age-crime curve shows that the prevalence of delinquent behaviour peaks in late adolescence or early adulthood and then declines (Hughs 2010). Hence a significant proportion of desistance from crime happens in late adolescence and early adulthood, which means that many serious youth offenders will be in the early stages of the change process if they are engaged at all (Kilgour 2011).

Healy (2010) explored the psychological and social changes involved in the early more turbulent stages of desistance. The sample consisted of 73 male offenders aged between 18 and 35 under probation supervision, categorised into two groups: primary desisters (no offending in past month) and current offenders. A regression analysis found that age, age at onset, and criminal thinking styles were important predictors of primary desistance. Perceived social circumstances, historical criminal thinking, procriminal attitudes and the risk for re-offending score did not emerge as significant predictors. Primary desisters tended to start their criminal careers later, were older at the time of interview, and endorsed less current pro-criminal thinking styles. The results highlight the importance of intervening early with young offenders and targeting psychological factors (particularly thinking styles) which play an important role in recent offending behaviour.

Mulvey, Steinberg, Piquero, Besana, Fagan, Schubert and Cauffman (2010) examined patterns of desistance in a sample of 1,119 serious youth offenders over a three-year period after court involvement. They identified three low to moderate reoffending groups (76.8% of the sample), two higher rate reoffending groups or "persisters" (8.7%) who continued to engage in regular and diverse crime, and "desisters" (14.6%) who showed a slow decline in reoffending. Following court involvement, the percentage of serious adolescent offenders who continued to offend consistently was small but the authors were unable to distinguish or predict which high-frequency offenders would desist from crime. Several factors were associated with persisters and higher levels of offending: paternal arrest or jail history and lower impulse control and ability to suppress aggression. A number of variables consistently differentiated low from high-

frequency offenders including: history of antisocial behaviour, paternal arrest history, deviant peers, co-morbid substance abuse, and psychosocial maturity.

Although all the youth were initially classified as serious offenders their offending patterns in the years after court involvement varied. The authors felt that this "illustrates the difficult challenge faced by practitioners who must decide which offenders are likely to represent an ongoing threat to community safety" and challenges both the popular "fixation on identifying lifelong antisocial personality problems" and assumptions within current law and policy "that the vast majority of offenders at the more serious end of the justice system are uniformly treading down the same path of continued high rate offending" (Mulvey et al 2010:470).

Stoutmaster-Loeber, Wei, Loeber and Masten (2004) examined factors which promoted or inhibited desistance in a sample of delinquent youth from the Pittsburg Youth Study followed from the age of 13 to 25. Of those classified as persistent serious delinquents, 60.5% persisted in committing serious crimes into early adulthood, while 39.5% desisted either partially or completely. They analysed factors which promoted or inhibited desistance across two age bands (13 to 16 and 17 to 19).

In the 13 to 16 age group, factors which promoted desistance included: individual factors (being accountable, believing one is likely to be caught), family factors (low physical punishment from caregiver) and peer factors (having good relationships with peers, low peer substance abuse). Risk factors associated with a lower probability of desistance included: individual and attitudinal factors (being manipulative, having a positive attitude to delinquency) and peer factors (high peer delinquency).

In the 17 to 19 age group factors associated with desistance included: individual and attitudinal factors (believing one is likely to be caught, having many skills for getting jobs, low non-physical aggression), peer factors (low peer substance use), and positive interactions with interviewers (possibly reflecting positive attitudinal factors or higher social skills). High peer delinquency was a risk factor for continued antisocial behaviour across both age groups. Risk factors associated with a lower probability of desistance included: individual and attitudinal factors (cruelty, having a positive attitude to delinquency, frequent substance use, being a victim of violence) and peer factors (gang membership and high peer delinquency).

Factors which more accurately predicted desistance in early adulthood included:

- low physical punishment by parents (in early adolescence 13 to16)
- being in education in early adulthood (20 to 25)
- being employed in early adulthood (20 to 25).

Risk factors inversely associated with desistance in early adulthood included:

- cruelty in late adolescence (17 to 19)
- serious delinquency status during late adolescence (17 to 19)
- use of hard drugs in early adulthood (20 to 25)
- gang membership in early adulthood (20 to 25)
- a positive perception of problem behaviour in early adulthood (20 to 25).

Gang membership presents a special challenge in prisoner desistance and reintegration initiatives following release. In Stoutmaster-Loeber et al's (2004) research, gang membership was a risk factor which made desistance less probable by early adulthood. Within the YOUs, rates of youth gang membership are high and on moving into adult prisons, youth are vulnerable to active recruitment and pressure from adult gangs. Gang membership for NZ offenders has been associated with much poorer

recidivism outcomes. For example, in his analysis of reconviction rates of offenders on community sentences, Nadesu (2009a) found that 90% of gang-affiliated offenders had been reconvicted within 60 months; 46% of them were imprisoned. Gang-affiliated offenders were 2.7 times more likely to be imprisoned than non-affiliated offenders. Ongoing gang membership is believed to increase the likelihood of recidivism after release by limiting investments in prosocial bonds, providing additional opportunities to engage in crime, and diminishing ability to achieve a prosocial identity (Thornberry et al 2003 cited in Braga, Piehl & Hureau 2009).

Eggleston's research (2000) on NZ youth gangs cited themes of: acquiring a sense of belonging, protection from vulnerability, enhancing masculine identity, and the appeal of trouble (risk-taking arousal, rebel status and money) associated with gang membership. Tamatea (2010) analysed the process of entry and exit for 21 men who were identified as having left, retired, or being in the process of leaving NZ gangs. The entry phase had two components: 1) the access process itself (via familial connection, non-familial peers or charity), and 2) identification of gangs as a preferable reality. Engagement factors served either the individual (rewards, relationships and reputation) or the collective (structure, shared identity and social control).

According to Tamatea's research an individual's decision to leave the gang involved internal changes (e.g. aging, physical decline) and external conditions (e.g. worsening relationships with peers). Exit conditions include *deterioration* of relationships with their partner or family, *disillusionment* with gang lifestyle, and *desensitization* (e.g. oncerewarding aspects of the gang losing much of their value). The key functional process was a motivational shift. Relevant intervention strategies at the exit stage included: supporting prosocial attitudinal shifts in favour of an improved life vision (and seeking to address barriers), supporting prosocial relationships, and monitoring and supporting alternative behaviours and activities which are preparatory in nature (such as employment). Tamatea suggested that the model set out in Table 8 may help facilitate exit from gangs in a manner which maintains personal safety, and offers the most closure of gang membership and opportunities to maintain desistance.

Table 8: Relationship between exit strategy and perceptions of respect (to the chapter), control (of the encounter) and anticipated risk of harm (to self) (Source: Tamatea, 2010: 71)

Strategy/action	Underlying	Perceived	Perceived	Perceived
	motivation	respect	control	risk
Procedural	Approach	High	Low	High
Withdrawal	Avoid (passive)	Mod-High	High	Low
Escape	Avoid (active)	Low	Mod	High
Negotiate	Approach	Mod	High	Low
Expulsion	Avoid	Low	Low	High

2.5 Reintegration

Successful reintegration into the community following imprisonment is important. Bahr, Harris, Fisher and Armstrong (2009) followed 51 parolees for three years after release to find out what differentiated successful from unsuccessful parolees. Contrary to

expectations, closeness to a mother or father, having a partner, being a parent, or education level were not associated with success. Those who succeeded were more likely to have attended a substance abuse course while incarcerated, and on release spent more time in enjoyable activities with friends. Those who were in full-time employment (i.e. worked at least 40 hours per week) were more likely to complete parole successfully. Qualitative data indicated that successful parolees had more support from family and friends and a greater sense of self-efficacy, which helped them stay away from drugs or peers who consumed drugs.

Tripodi and Kim (2009) explored the association between employment and recidivism in more detail. Their results support the view that stopping offending is a process with multiple stages. Securing employment was not associated with a significant decrease in the likelihood of reimprisonment, but it was associated with a significantly longer time until reimprisonment. The authors argued that this could be an indicator of behaviour change, which could be supplemented by motivational interventions.

Braga, Piehl and Hureau (2009) looked at the Boston Re-entry Initiative (BRI). This is an inter-agency initiative to help violent offenders transition from prison back into their communities through mentoring, social service support, and vocational training. The authors found that the BRI was associated with significant reductions (in the order of 30%) in overall and violent arrest rates. They concluded that individualised treatment plans, facilitated by mentors and supported by a network of criminal justice, social service and community-based organisations, can positively affect high risk offenders returning to high risk communities. However, half of the sample were gang members and this status was associated with an elevated risk for violent recidivism.

Altschuler (2008:7) discussed the importance of prioritising both rehabilitation and reintegration for youth offenders, and creating a bridge between residential and aftercare services to ensure continuity of care. Continuity of care involves the "orderly and sequenced process in which each and every step is linked to both the preceding and successive steps" with a focus on transferring and generalizing gains achieved in group living to a community setting. The evidence points to CBT approaches and interpersonal skills training being central to programming in both residential and aftercare services. It is important that all staff, providers and support people understand the intervention and that there is a partnership between residential and aftercare staff with a graduated and planned handover. It is also essential to formulate a plan with the offender on how community adjustment can be successful.

Underwood and Knight (2006) commented on post-release rehabilitative programmes for juvenile offenders including: system diversion (such as family intervention and wraparound services), non-system diversion (e.g. court-ordered family counselling, skills training), and community corrections programmes (work programmes, probation, parole). They argue that effective post-release rehabilitation programmes must balance three major goals (1) ensuring public community safety, (2) holding youths accountable for their actions, and (3) providing an environment in which youth can develop into capable, productive and responsible citizens. Core post-release treatment strategies focus in part on skill building with the ultimate goal of reducing recidivism. Strategies may include mental health screening, transition planning, provision of ongoing case management services, and family interventions. Family factors that contribute to poor adjustment in post-release programmes include familial antisocial or delinquent values and behaviour, harsh parental discipline, and family conflict. This knowledge needs to be incorporated into post-release programmes.

The authors conclude that many promising evidence-based post-release programmes are available in the juvenile justice setting, including: multi-systemic therapy (MST),

functional family therapy (FFT), multi-dimensional treatment foster-care (MDTF), intensive aftercare, vocational training, big brother/big sister, and the wrap-around Milwaukee programme. They conclude that promising aftercare programmes are generally multidimensional, action-orientated, culturally competent, remedial, and systemic in nature. Those using CBT principles had the best results.

2.6 Summary

In summary, the literature on protective factors, desistance and reintegration shows that:

- Interventions should aim to harness or develop particular protective factors including: more prosocial thinking styles, strong attachments to prosocial adults, strong prosocial supports, prosocial involvement, strong commitment to school, positive attitude towards intervention and authority, and resilient personality traits.
- Hooking young offenders into pro-social environments which support development
 of skills, mastery, pro-social relationships, and material gain (i.e educational and
 vocational settings) is important.
- Interventions should aim to reduce exposure to delinquent peer groups and modelling of and access to frequent substance use.
- Gang affiliation impacts negatively on re-entry; treatment should minimise potential for recruitment, and enhance young people's motivation and ability to exit gangs safely.
- The development of an individualised relapse prevention or reintegration plan is important as is sharing this plan with prosocial supports.
- Residential programmes should plan for reintegration back into the community, and work with appropriate family and community supports and aftercare or wrap-around services, particularly those with a CBT orientation.

3. Interventions and youth offending

3.1 General outcome studies

Lipsey (2009) reviewed research on delinquency programmes to identify 1) principles of effective programmes and 2) intervention types associated with the greatest reductions in recidivism. He based his analysis on 548 independent study samples and 361 primary research reports from 1958 to 2002. All covered juveniles aged 12 to 21 receiving intervention targeting their delinquency. He analysed various moderator variables and compared the seven different therapeutic intervention philosophies set out below, clustering different types of interventions within each philosophy:

- 1) Skills building (e.g. CBT therapy, social skills training, behavioural programmes, challenge programmes, academic and job related interventions)
- 2) Counselling and its variants (e.g. individual, mentoring, family counselling, group counselling, peer programmes, mixed)
- 3) Restorative programmes (e.g. restitution, mediation)
- 4) *Multiple coordinated services* (e.g. case management, service broker, multimodal regimen)
- 5) Surveillance (e.g. attempting to inhibit reoffending via close monitoring)
- 6) Deterrence (e.g. Scared Straight programmes)
- 7) Discipline (e.g. boot camp or military programmes).

Lipsey found little relationship between the effectiveness of interventions and the level of juvenile justice supervision i.e. whether youth were on diversion, under probation supervision, or incarcerated.) The level of supervision had no significant influence on

later recidivism. This suggests that effective treatment is not highly context dependent. Good programmes can be effective when run in institutional environments with more potential for adverse effects (e.g. greater exposure to antisocial peers). Three principles emerged as the major correlates of programme effectiveness:

- A therapeutic intervention philosophy
- Characteristics of the juvenile sample (i.e. high risk offenders)
- The quality of implementation.

The most effective interventions embodied therapeutic philosophies such as counselling, skills training, multiple co-ordinated services and restorative interventions with mean recidivism reductions of 10 to 13%. The largest mean effective size was for CBT (26%), followed by behavioural interventions (22%), group counselling (22%) mentoring (21%) and case management (20%). In contrast, interventions based on strategies of control or coercion - surveillance (monitoring), deterrence (scared straight), and discipline (boot camps) - achieved negligible or negative effects).

Table 9: Recidivism effect sizes for different types of interventions within each treatment philosophy (Adapted from Lipsey 2009)

Intervention philosophy and type	% Recidivism reduction philosophy	% Recidivism reduction Intervention type
1. Skills building	-12%	
Cognitive behavioural		-26%
Behavioural		-22%
Social skills		-13%
Challenge		-12%
Academic		-10%
Job-related		-6%
2. Counselling	-13%	
Group counselling		-22%
Mentoring		-21%
Family counselling		-13 %
Family crisis		-12%
Individual counselling		-5%
3. Multiple co-ordinated	-12%	
services		2007
Case management		-20%
Service broker		-10%
Multimodal regime	100/	-3%
4. Restorative programmes	-10%	
Mediation		-12%
Restitution		- 9%
5. Surveillance	-6%	
6. Deterrence	+2%	
7. Discipline	+8%	

Note: Recividism reduction (or increase) for the intervention group compared to a control group with a 0.50 recidivism rate.

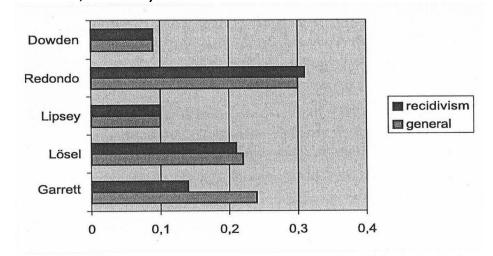
Some reviews focus on treating serious delinquent offenders. Genoves, Morales and Sanchez-Mec (2006) reviewed 30 experimental and quasi-experimental studies from 1970 to 2003 involving treatment in secure facilities to identify what worked for serious juvenile offenders aged 12 to 21 who were deemed chronic and/or violent. The types of interventions included: psychological approaches (cognitive, cognitive-behavioural, behavioural), educational programmes, and non-behavioural approaches. The overall

mean effect size of these 30 studies was relatively small at r= 0.07 (or 7 % points difference between the treatment and control groups). When viewed separately, the cognitive behavioural (d=0.22) and cognitive (d=0.12) methods of treatment were most effective in decreasing recidivism.

Lipsey and Wilson (1998) also undertook reviewed 200 experimental or quasi-experimental studies published between 1950 and 1995 relating to serious and violent juvenile offenders aged 14 to 17 years. The mean-adjusted effect sizes were comparable for institutional (0.10) and community interventions (0.14). For institutional based interventions, the largest effect sizes were for interpersonal skills training (0.39), teaching family homes (0.34), behavioural programmes (0.33), community residential facilities (0.28) followed by multiple services (0.20). For community based interventions, the largest mean effect sizes were for structured individual counselling (0.46), interpersonal skills training (0.44) and behavioural programmes (0.42), with less consistent results for provision of multiple services (0.29). Effect sizes for deterrence-based initiatives were close to zero or negative.

Garrido and Maroles (2007 cited in McGuire 2008) updated aspects of the review by Lipsey and Wilson (1998) focusing only on interventions provided in secure institutions and confined to studies containing groups of violent and chronic delinquents. The cumulative sample size was 6658 with a median follow-up period of 18 months. The odds ratios for general and serious recidivism were 1.235 and 1.354 respectively in favour of the treatment groups. Similarly, Grietens and Hellinckx (2004) examined the effects of residential treatment for juvenile offenders by synthesising five reviews. All reported positive effect sizes, with *d* statistics ranging from 0.09 to 0.31 and an average reduction in recidivism of 9% (see Figure 7)

Figure 7: Mean effect sizes of meta-analyses on recidivism reduction and general outcomes for residentially-treated juvenile offenders (Source: Grietens and Hellinckx, 2004:405).



Note: Lipsey and Dowden used recidivism as the only outcome measure

3.2 Cognitive behaviour therapy

Meta-analytic reviews focused on cognitive behavioural therapy have found it to be effective in reducing recidivism among juvenile offenders.

Wilson, Bouffard and MacKenzie (2005) examined 20 studies of group-oriented CBT programmes for juvenile offenders, including Moral Reconation Therapy and Reasoning and Rehabilitation. They concluded that representative CBT programmes

reduced re-offending by 20 to 30% compared to control groups. Pearson, Lipton, Cleland and Yee (2002) reviewed 69 research studies of behavioural (e.g. contingency contracting, token economy) and CBT programmes. CBT programmes were more effective than the behavioural ones in reducing re-offending, with a mean reduction in recidivism of about 30 percent for treated groups.

Although these reviews provide strong indication of the effectiveness of CBT, they cover a range of offender types, treatments, outcome variables, and quality of study design (Lipsey 2005). In a more circumscribed analysis Lipsey, Chapman and Landenberger (2001 cited in Lipsey, 2005) looked at 14 experimental and quasi-experimental studies focusing on cognitive change as the defining characteristic of CBT. They considered effects for general offender samples, and used recidivism information as the treatment outcome. The results showed that the probability of recidivism for offenders receiving CBT was only about half (55%) that for offenders in control groups. In a later study, Lipsey and Landenberger (2005 cited in Lipsey 2005) analysed 14 randomised experiments and found that the mean recidivism rate for treatment groups was 27% lower than for control groups.

While CBT has significant effects on recidivism there were significant variations across studies in effect sizes. Landenberger and Lipsey (2005) investigated moderator variables that may be associated with larger versus smaller effect sizes. Criteria for including studies were:

- (1) Intervention: The treatment had to be a variant of CBT representing or substantially similar to recognised "brand name" programmes (e.g. Moral Recognition Therapy; Aggression Replacement Training, Reasoning and Rehabilitation). In particular, the programmes had to be directed towards changing distorted or dysfunctional cognitions or teaching new cognitive skills, and involve therapeutic techniques typically associated with CBT (i.e. structured learning experiences designed to affect cognitive processes, identifying and compensating for distortions, reasoning about right and wrong behaviour, generating alternative solutions and making decisions about appropriate behaviour).
- (2) Participants: These were either juvenile or adult criminal offenders treated while on probation, imprisoned, or during aftercare/parole. Offenders were drawn from a general offender population, and not restricted to those committing specific types of offences.
- (3) Outcome measures: Recidivism rates for participants who had undertaken treatment versus the recidivism rates of untreated offenders.

Landenberger and Lipsey's (2005) analysis confirmed the findings of the positive effects of CBT on recidivism. Offenders in the treatment group were 1.53 times less likely to re-offend in the 12 months after treatment than those in the control group. A mean re-offending rate of 0.30 for the treatment group represented a 25% decrease on the 0.40 mean rate for the control group. The most effective configurations of CBT produced odds ratios nearly twice as large as the mean, with re-offending rates of around 0.19 in the treatment groups, less than half the 0.40 rate of the average control group.

The primary emphasis of the review was to identify situations where CBT would produce greater effects. Two key themes emerged. Firstly, variables characterising subject samples (minority, recidivism risk rating), the amount and implementation of CBT (session, hours per week, total treatment hours) and the CBT treatment elements (e.g. cognitive restructuring, anger control) were significantly correlated with effect sizes for recidivism outcomes. Secondly, moderator variables with the strongest

independent relationships to effect size were (a) the risk level of participating offenders, (b) how well the treatment was implemented, and (c) the presence or absence of a few treatment elements. Including anger control and interpersonal problem-solving components in the treatment programme was associated with larger effects, while including victim impact and behaviour modification was associated with smaller effects.

The authors found that CBT was as effective for juveniles as for adults. The treatment setting was not related to treatment effects, with incarcerated offenders (generally close to the end of their sentences) demonstrating reductions in recidivism comparable to those treated in the community (e.g. while on probation, parole, or in aftercare).

3.3 Moral Reconation Therapy

Moral Reconation Therapy (MRT) is a specific cognitive-behavioural treatment approach developed by Little and Robertson (1988) based on Kolberg's (1976) cognitive-developmental theory of maturation. Little (2004) reviewed 22 studies on the use of MRT with juvenile offenders and at-risk youth. All but one found that MRT produced significant results. Kirchner and Kirchner's 2009 study also supported the use of MRT in the juvenile youth court context.

Little (2005) reviewed nine published outcome reports detailing the effects on recidivism in juvenile and adult parolees and probation clients. A statistically significant reduction in recidivism (defined as re-arrests or re-incarceration) was reported, with a transformed effect size of 0.25. This result was consistent with a prior review by Little (2001) based on published outcome studies on MRT recidivism outcomes with incarcerated offenders, with an effect size of 0.23.

3.4 Interventions for aggression and violence

a) Interventions with young offenders

Several intervention methods have consistently yielded positive outcomes in reducing violent and sexual recidivism among young offenders:

- (i) Interpersonal skills training consists of a series of exercises designed to improve a young person's skill in interacting with others. In small groups, youth identify situations which they mishandle or where they are uncertain how to act, and discuss prosocial ways of responding. They practice using role-play, behavioural rehearsal and feedback.
- (ii) Teaching family homes are residential units or group homes where specially trained adults work in pairs as 'teaching parents' developing working alliances with youth, and imparting a range of interpersonal and self-management skills, counselling and advocacy.
- (iii) Behavioural interventions involve contingency contracting, where youth offenders and their supervisors compile a list of problem behaviours and develop a reward system for modifying such behaviours. Interventions include behavioural training procedures, such as modelling, graduated practice, and cognitive and problem-solving skills training.
- (iv) Structured individual counselling involves structured approaches based on problem-solving and multi-modal frameworks.

b) CBT and reactive anger and aggression

McGuire (2008) looked at studies targeting reactive anger and resultant aggression based on a model developed by Novaco, which describes the link between cognitive

appraisal, emotional arousal and an angry response, and associated techniques for regaining control. Sukhodolsky et al (2004 cited in McGuire 2008) analysed 40 studies (80% random assignment) of anger-based interventions for children and adolescents, with a mean effective size for anger control of +0.47 and for physical aggression +0.63. Other reviews (Del Veccchio & O'Leary 2004; DiGiseppe & Tafrate 2003; Gansle 2005) also found impressive effective sizes with adult offenders. However most offenders were from general population samples, and were seeking help to manage their anger. Overall results with violent offenders, where anger management programmes have been implemented in prison settlings, have been less consistent and not uniformly successful. Not all aggression is linked to a loss of control over anger, and where individuals exhibit over-controlled or instrumental aggression, more elaborate multimodal programmes may be more appropriate.

c) CBT skills programmes for adult offenders

Cognitive skills programmes aim to help participants acquire new skills for thinking about and solving problems, particularly in the interpersonal domain. According to McGuire (2008), the Reasoning and Rehabilitation programmone is one of the most widely disseminated CBT programmes. It has a sequence of interlinked modules focusing on problem-solving, social intervention, impulse control and self-management, negotiation and conflict resolution, and critical thinking. A large scale evaluation of this programme for Correctional Services Canada, with a sample of 1444 prisoners, resulted in a reduction in recidivism of 36.4% compared with controls (Robinson & Porporino 2001 cited in McGuire 2008).

d) Other multi-modal CBT interventions for violence

Aggression Replacement Training (ART) is a multimodal CBT programme that uses social skills, anger management, and moral reasoning training in an integrated 30-session format (Goldstein & Glick 2001). Evaluations of ART with young offenders, while based on small samples and in non-equivalent designs, have found positive results. Aos et al (2001 cited in McGuire 2008) reported on four studies with adjusted effect sizes ranging from 0.07 to 0.26. The ART protocol has also been used with adults on probation with the ART completer group showing a significant reduction in reconviction below predicted levels (McQuire & Clark 2004; cited in McGuire 2008).

A more recent study by Holmqvist and Lang (2009) compared ART (combined with token economy) with relationally-oriented treatment at two residential treatment units each. In all, 57 adolescents between 16 and 19 participated. The general finding was that although most adolescents continued with criminal behaviour, a substantial group did not. After 2 years, 20% had not been sentenced for serious crimes. Case descriptions suggest that a more individualised approach, where ART is used for motivated adolescents, may give better results.

Two more intensive multimodal CBT interventions in NZ residential or prison contexts have shown some success in reducing violent offending among adult offenders. They are the NZ Montgomery House Violence Prevention programme and the NZ Violence Prevention Unit (Polaschek, Wilson, Townsend & Daly 2005; Polaschek 2006). Overall, there is sufficient evidence to support the view that aggression and violence can be reduced by well-targeted psychosocial interventions.

3.5 Relapse prevention

A review of 40 tests of relapse prevention treatment (Dowden, Antonowicz and Andrews 2003) revealed mean reductions in recidivism of 0.15 (with higher reductions for adolescents). Certain elements of the relapse prevention model (i.e. training significant others in the programme mode and identifying elements of the offence

chain) yielded stronger effects than providing booster/aftercare sessions and developing coping skills). Further analyses showed that adherence to the clinically-relevant and psychologically-informed principles of risk, need, and general responsivity yielded the strongest reductions in recidivism.

3.6 Family interventions

Latimer (2001) reviewed 35 studies exploring the impact of family treatment for delinquent youth. In general, family intervention reduced recidivism among young offenders significantly more than traditional non-familial responses to youth crime. Less rigorous experimental designs produced lower recidivism rates than more rigorous designs. Dowden and Andrews (2003) went on to a further 38 studies of family intervention programmes with juvenile offenders, paying attention to the appropriateness of the programme (in terms of adherence to the risk, needs, responsivity model). Although the effects of the programme decreased mildly under the strictest methodological conditions, appropriate treatment continued to produce significant mean reductions in reoffending. The authors stressed the importance of family interventions targeting criminogenic family needs of young offenders, including increasing family affection, improving communication and parenting practices, and monitoring and supervision.

Multisystemic therapy (MST) is a family- and community-based treatment designed to address the multiple risk factors associated with juvenile offending. This model was developed in the late 1970s. It is described as a family-ecological systems approach (Henggeler et al 1998). Henggeler and Schaeffer (2010) summarised findings from 15 published randomised and two quasi-experimental clinical trials with youths presenting with serious antisocial behaviours and clinical problems (e.g. violence, substance abuse, serious emotional disturbance, sexual offending, and chronic illness). They concluded that MST has become a well validated and widely disseminated evidence-based treatment of antisocial behaviour in adolescents.

Henggeler and Schaeffer (2010) cited early efficacy trials supporting the potential of MST to effect favourable results for juvenile offenders and their families (Borduin Mann, Cone, Henggeler, Fucci, Blaske, & Williams 1995; Borduin, Henggeler, Blaske, & Stein 1990; Brunk, Henggeler, & Whelan 1987). Subsequent trials provided further support for the intervention's ability to improve family functioning and decrease the rearrest and incarceration rates of youth offenders (Henggeler, Melton, Brondino, Scherer & Hanley 1997; Henggeler, Melton & Smith 1992; Letourneau, Henggeler, Borduin, Schewe, McCart, Chapman & Saldana 2009). Henggeler and Schaeffer (2010) concluded that treatment fidelity played a critical role in achieving favourable outcomes, with higher therapist treatment fidelity being associated with better long-term youth outcomes.

Several randomised trials of MST with juvenile sexual offenders (Borduin, Henggeler, Blaske & Stein 1990; Borduin, Schaeffer & Heiblum 2009; Letourneau et al 2009) showed evidence of the short and long-term effectiveness of MST with problem sexual behaviours. Clinical adaptations included interventions to ensure the safety of victims, address the functions served by the sexual offence(s) (e.g. sexual experimentation or social connection), and reduce family denial of the offence. Trials showing favourable effects have also been achieved with juvenile offenders meeting diagnostic criteria for substance abuse or dependence (Henggeler, Pickrel, & Brondino 1999; Henggeler, Clingempeel, Brondino & Pickrel 2002; Henggeler et al 2006).

Several studies have shown good transportability (e.g. Timmons-Mitchell, Bender, Kishna & Mitchell 2006; Ogden & Hagen 2006a; Ogden & Halliday-Boykins 2004). Curtis, Ronan, Heiblum and Crellin (2009) compared pre-post findings from MST

programmes in NZ with results from clinical trials in the USA and found high rates of treatment completion (98%) and clinical outcomes consistent with those achieved across previous studies. In contrast, Sundell et al. (2008) failed to support the greater effectiveness of MST in treating youth with conduct disorder. Henggeler and Schaeffer (2010) thought that this failure might be due to low programme fidelity and therapist adherence. Others have suggested that it is premature to draw conclusions about the effectiveness of MST, as results have been inconsistent across studies that vary in quality and context (Littell, 2005; Littell, Campbell, Green & Toews 2005).

Functional Family Therapy (FFT) is another family-systems based approach, which has three phases - engagement and motivation, behaviour change, and generalisation. Its overarching goals are enhancement of family communication, parenting and problem solving. Both randomized trials and non-randomized comparison group studies have shown that FFT produces positive outcomes with less serious juvenile offenders (Alexander & Sexton 2002).

The following assumptions should be considered in interventions with families:

- "Every youth enters treatment with a 'family' whether distant, functional, or dysfunctional, and that involvement of their family is a critical component in ensuring compliance and developing skills necessary to build and support productive lifestyle changes.
- 2. The family should be seen as the primary socializing unit and in most cases as the most influential system to which the youth belongs. The focus of family interventions should be on family strengths.
- 3. The youth cannot be considered separate from the social context in which he or she resides.
- 4. The family remains a family, whether reunited or not, and family members will often continue to have relationships throughout their lives"

(Underwood and colleagues cited in Underwood and Knight 2006:544):

4. Characteristics of effective programmes

4.1 Risk, needs and responsivity principles

The Psychology of Criminal Conduct (PCC) (Andrews & Bonta 2010) underpins correctional rehabilitation in NZ. Reviews of the literature support the risk, needs, and responsivity (RNR) principles to identify:

- who might best benefit from intensive treatment programmes
- what offender needs should be addressed, and
- how we should best intervene.

a) The risk principle

The *risk* principle has two aspects: (1) criminal behaviour can be predicted and (2) offenders should be provided with services commensurate with their identified risk for reoffending (Andrews & Bonta 2010). Lowenkamp and Lastessa (2004) examined reviews relating to youth which showed that adherence to the risk principle can affect a programme's effectiveness (see Table 10). More intensive correctional interventions are more effective when delivered to youth at higher risk of engaging in a lifetime of crime, while lower risk offenders should be directed into low intensity or no interventions.

Table 10: Summary of meta-analyses investigating the risk principle (Source: Lowenkamp & Lastessa 2004:4)

Study	No of studies reviewed	Type of studies reviewed	Findings - effect size
Andrews et al. (1990)	85	Juvenile, mixed	Five times as great when focusing on high risk
Dowden & Andrews (1999a)	26	Juvenile and adult female, or mainly female	Six times as great when following risk principle
Dowden & Andrews (1999b)	229	Young offenders	Four times as great when using risk principle
Dowden & Andrews (2000)	35	Juvenile and adult violent outcomes only	Twice as great when following risk principle
Lowenkamp et al. (2002)	33	Juvenile and adult drug courts	Twice as great when following risk principle
Wilson et al. (2002)	165	School based interventions	Three times as great when targeting high risk youth
Wilson et al. (2003)	221	School-based interventions targeting aggression	Four times as great when targeting high risk youth

Lowenkamp and Lastessa (2002 cited in Lowenkamp & Lastessa 2004) conducted a large review with 13,221 youth offenders placed into half-way houses or community-based correctional facilities. They analysed changes in the probability of recidivism by programme for low and high risk offenders. Only a handful of programmes reduced recidivism for low risk offenders, with the largest reduction being 9% (see Figure 8). In contrast, Figure 9 shows that most programmes were associated with reductions in recidivism for high risk offenders, with eight programmes reducing recidivism by over 20% and three by over 30%. Programmes that were less effective for this risk band may have been affected by programme integrity issues. The same programme that had the greatest impact on high risk offenders (30%) increased recidivism by up to 7% in low risk youth. This principle also held with sexual offenders.

The authors asked 'why interventions are successful with high-risk offenders but undesirable for low risk offenders. High-risk offenders have multiple dynamic risk factors, while low risk offenders tend to be fairly prosocial in nature. Placing a low risk offender in more intensive correctional interventions exposes them to higher risk offenders, and we know that having antisocial associates is a risk factor in itself. When we place low risk offenders (who are fairly prosocial) in a highly structured and restrictive programme, we potentially disrupt the factors that make them low risk (e.g. reduced time to participate in educational or vocational activities, reduced exposure to prosocial attitudes, reduced exposure to prosocial peers and family). Other factors like intellectual functioning and maturity may also come into play, with lower functioning (low risk) offenders being manipulated by higher risk, more sophisticated and predatory offenders (Lowenkamp and Lastessa, 2004).

Figure 8: Change in the probability of recidivism by programme for low-risk offenders (Source: Lowenkamp and Lastessa 2004:5)

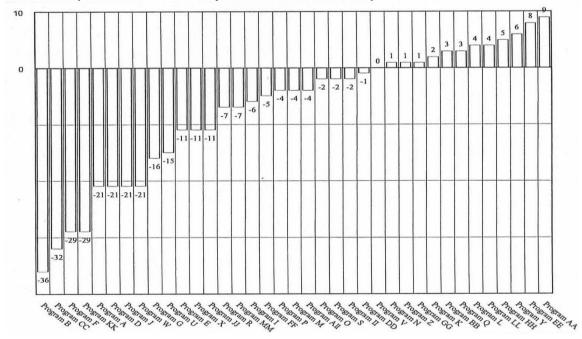
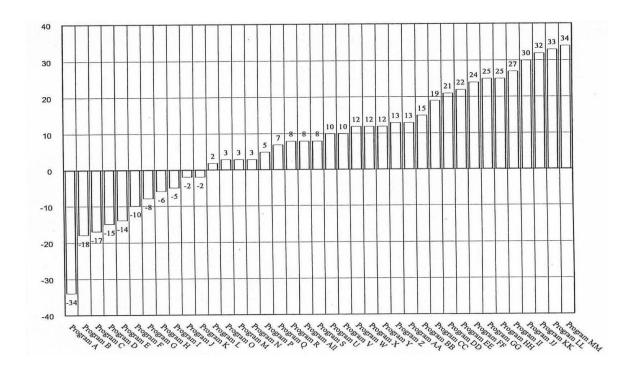


Figure 9: Change in the probability of recidivism by programme for high-risk offenders (Source: Lowenkamp and Lastessa 2004:5)



b) The need principle

The *need* principle distinguishes between criminogenic and non-criminogenic needs. Criminogenic needs are dynamic risk factors (or a subset of an offenders' risk level) which are associated with changes in the probability of recidivism when targeted by good interventions. Pro-criminal attitudes and self-regulation deficits would make

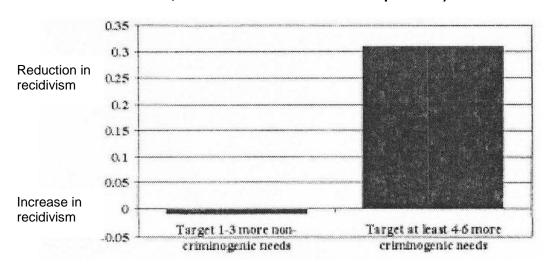
appropriate targets for interventions because these needs have been shown to be linked to re-offending. Non-criminogenic needs are factors that are weakly (or not) associated with recidivism. For example, self-esteem and non-specific mental health issues would not serve as good targets, because they have not been shown to be consistently linked with offending (Andrews & Bonta 2010). Table 11 summarises variables that are reliably identified as being criminogenic (or dynamic risk factors) and those that are not. These appear to be generally applicable across age.

Table 11: Criminogenic and non-criminogenic needs (Source: Andrews and Bonta 2010:310)

Criminogenic need	Non-criminogenic need
Antisocial personality/negative emotionality	Vague feelings of personal distress/poor self- esteem
Antisocial attitudes and cognitions	Feelings of alienation and exclusion
Social supports for crime	Lack of physical activity
Inappropriate parental monitoring and discipline	History of victimisation
Problems in the school/work context	Hallucinations, anxiety and stress
Poor self-control	Disorganised communities
Lack of prosocial activities	Lack of ambition

Reviews have shown that treatment programmes targeting multiple criminogenic needs with multiple foci and modules are more successful than those directed at only one aspect of the young person's problems (Dowden & Andrews 2000). For example, Latessa and Lowenkamp (2005) found that programmes which targeted at least four or more dynamic risk factors producing greater reductions in recidivism (see Figure 10).

Figure 10: Targeting criminogenic need: results from meta-analyses (Source: Gendeau et al 2002, cited in Latessa & Lowenkamp 2005:2)



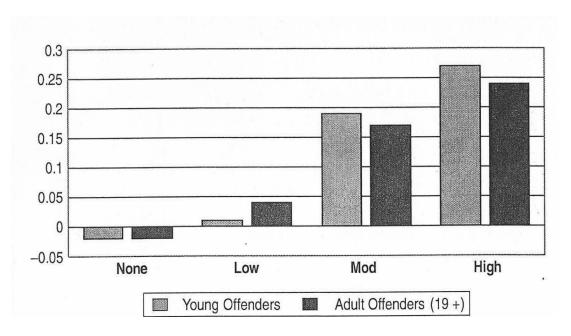
c) The responsivity principle

The responsivity principle tells us how best to intervene. It suggests that the style and mode of intervention should be matched to the learning styles of young offenders. The skills of treatment providers should be adequate for intervening with youth and to deliver the type of programme offered. Andrews and Bonta (2010:301) differentiate between general responsivity and specific responsivity. General responsivity calls for

the "use of CBT techniques to influence change because they are the most effective techniques to help people learn new attitudes and behaviours". Specific responsivity refers to adapting treatment delivery or using CBT techniques to account for different offender characteristics (such as age, culture, cognitive ability).

Andrews and Bonta (2010) found that when corrections services were delivered in a manner adherent to the risk, need and responsivity principles, the mean effect size was 0.26 in 60 tests of treatment. When only two principles were adhered to this dropped to 0.18, and when only one principle was adhered to the effect was 0.02. Thus the most adherent studies achieved the highest effect sizes, while non-adherent interventions achieved near zero or negative effect sizes (i.e. they may actually lead to increases in crime). Figure 11 shows mean effect sizes (r) by RNR adherence and offender age.

Figure 11: Mean effect size (r) by RNR adherence and offender age (Source: Andrews & Bonta 2010:75)



Smith, Gendreau and Swartz (2009) reviewed two decades of review in the correctional field (including programmes for juvenile offenders), with a special emphasis on validating the principles of effective interventions. They concluded that treatments adhering to the principles of risk, need and responsivity were more effective in reducing offender recidivism. The evidence in support of the responsivity principle surpassed the other two principles.

Bourgon and Armstrong (2005) outlined how principles of effective intervention (risk, need, responsivity) were transferred into a real world prison setting, resulting in significant reductions in recidivism. They implemented three separate programmes with similar intensity but differing scope and length (5 week/100 hours, 10 week/200 hours, or 15 week/300 hours) to 482 incarcerated offenders aged between 18 and 62. Overall, their results showed that length of treatment was significantly related to reductions in recidivism, with a linear relationship between dosage and effectiveness. For moderate risk offenders (with fewer needs) the 5 week (100 hour) programme was sufficient to significantly reduce recidivism, while for high risk offenders (with moderate needs) the 200 hour programmes was sufficient. The 15-week (300 hour) programme was required for the high risk (multiple needs) offenders to significantly reduce recidivism.

4.2 Other research on effective programmes

In Lipsey's (2009) review, the most effective interventions embodied 'therapeutic' philosophies and achieved mean recidivism reductions of 10-13% (see Table 9 above). The largest effects were achieved with youth with higher levels of delinquency risk. With few exceptions, intervention was equally effective for younger and older youth, males and females, and minority and majority cultures.

Landenberger and Lipsey (2005) and Lipsey (2009) found that none of the major CBT brand name programmes produced effects on recidivism that were significantly larger than the average effects of other programmes. The inclusion of specific anger management and interpersonal problem-solving components enhanced the effects, as did high quality implementation (represented by few treatment dropouts), tight monitoring of treatment implementation, and appropriate CBT training for facilitators. Lipsey concluded "that is does not take a magic bullet program to impact on recidivism, only one that is well made and well aimed" (2009:145).

4.3 Treatment fidelity and programme integrity

Programme integrity is subsumed under the broad term 'treatment fidelity' which refers to programmes being conducted in a manner consistent with their theory and design. Programmes with high treatment integrity have a sound theoretical basis, clear design and solid management. They are delivered to the populations for which they are intended (i.e. level of risk) and have skilled practitioners and procedures in place to monitor programme delivery. Smith, Gendreau and Swartz's (2009) review looked at therapeutic integrity using an assessment tool called the Correctional Programme Assessment Inventory (CPAI-2000 by Gendreau & Andrews 2001). This coded for the following principles: (1) organisational culture, (2) programme implementation/ maintenance, (3) management/staff characteristics, (4) client risk/needs practices, (5) programme characteristics, (6) core correctional practices (including a variety of relationship and skills factors), (7) interagency communication, and (8) evaluation. Overall CPAI-2000 scores were significantly correlated with treatment effectiveness and reductions in recidivism. Similarly, Lowenkamp, Makarios, Latessa, Lemke and Smith (2010) examined the characteristics of effective treatment programmes in community correctional facilities for young offenders in Ohio, both in terms of recidivism, and whether treatment integrity was related to recidivism. Their findings revealed that programmes which scored higher on treatment integrity were more effective in reducing recidivism. Specifically, facilities that targeted higher risk youth and dynamic risk factors with cognitive modalities, and used qualified and trained staff, had stronger effects on recidivism than those that did not.

Andrews and Dowden (2005) reviewed specific indicators of programme integrity and found that they formed a moderately correlated set and made an independent contribution to enhancing effect sizes. Positive contributions were limited to programmes delivering appropriate treatment (i.e. adhering to the principles of risk, need and responsivity). Under inappropriate treatment conditions, integrity indicators did not produce positive effect sizes. Integrity indicators included:

- (1) Specific model: a model or theory of criminal behaviour is specific in regard to desired practice.
- (2) Selection of workers: workers are selected who possess general interpersonal influence skills such as enthusiasm, caring, interest, and understanding.
- (3) Trained workers: workers are trained in the delivery of the specific programme being investigated.

- (4) Clinical supervision of workers: workers receive clinical supervision from a person who has been trained in the delivery of the specific programme being investigated.
- (5) Training manuals: desired practice is specified through printed and/or taped manuals.
- (6) Monitoring of service process and/or intermediate gain: structured procedures to assess the service as actually delivered and/or intermediate gains actually achieved.
- (7) Adequate dosage (clients receive at least 80% exposure of the desired level of treatment services).
- (8) New /fresh programme: programme in operation for less than 2 years (new programmes are expected to be offered with enthusiasm and to be less susceptible to the threat of programme drift.
- (9) Sample size: did the programme evaluation involve more or less than 100 participants in the treatment group.
- (10) Involved evaluator: the evaluator was involved in the design, delivery or supervision of the programme" (Andrews and Dowden 2005:175).

4.4 Designing programmes and manuals

In her survey of CBT group-based programmes, Polaschek (2010) developed a conceptual framework with three levels, based primarily around level of offender risk and programme intensity:

- 1. Basic-level programmes (low to medium risk, low intensity).
- 2. Mid-level multi-factorial programmes (medium to high risk and intensity).
- 3. High level comprehensive forensic therapy programmes (very high risk).

Basic-level programmes target low to medium risk offenders and usually involve brief intervention (from 40 to 70 hours) with a closed group, with the cohort moving through sessions and modules together in a fixed order. Clients have fewer problem areas and entrenched difficulties. Time constraints mean these programmes target a relatively narrow range of dynamic risk factors and have fewer intervention components. They tend to be more theoretically coherent if they specialise e.g. in cognitive and self-regulatory skills. Interventions are usually quite structured, and based on a manual to support the facilitator's more limited training. Delivery style and methods tend to be psycho-educational, and integrity monitoring may involve screening DVDs to check adherence to the manual. Basic-level programmes typically assume some readiness to change, and are not suited to clients who display more ambivalence, learning difficulties or personality issues.

Mid-level multi-factorial treatment programmes target medium to high risk offenders at medium to high intensity (100 to 300 hours). They target multiple dynamic risk factors, include an array of intervention components, and use a range of learning processes to achieve client change. They usually involve a closed programme with clients working through a sequence of interventions together. Some may follow a more open format focused more directly on the individual. Manuals tend to be less prescriptive, with explicit emphasis on balancing content and process. Facilitators are more qualified and trained in psychological principles, CBT and administering the programme. The longer time means the content can be more complex, facilitators can use more group processes to promote learning and there are more opportunities for members to help others change, with more time for homework review and skills practice. Responses to readiness difficulties will vary, but could include pre-programme individual motivational

treatment or preparatory groups. Despite such preparation, readiness difficulties may continue. For more challenging or high risk groups (e.g. high PCL scores) it may be better to incorporate motivational enhancement methods into treatment itself. The current FOCUS programme is close to the classification of a mid-level programme.

High-level comprehensive forensic therapy programmes target very high-risk offenders, or those at high risk for interpersonal crimes (including PCL-psychopaths and personality disordered clients). Such programmes have the same dosage as mid-level programmes, and are embedded in a fully therapeutic environment or setting. They are expensive and resource-intensive with interventions conducted in purpose-built facilities, with highly trained therapeutic staff working with the same few offenders. Integrity monitoring requires skilled supervisors who understand the programme theory. Monitoring meshes into professional supervision and development. The NZ Te Whare Manaakitana programme (formally the Rimutaka Violence Prevention Unit) is an example of such a programme.

Treatment manuals are the norm for CBT-orientated offender programmes. According to Mann (2009) the benefits of manuals include: association with better outcomes, treatment being more empirically based, keeping treatment focused on criminogenic needs, enhancing treatment integrity, and enabling evaluation and replication. Programme manuals do not have a 'one size fits all' standard (Polaschek 2010). For basic-level programmes, content and delivery is fully covered in the manual. For midlevel multi-factorial programmes, manuals tend to be less detailed and prescriptive, and focus on creating a balance between content and process. For high-level comprehensive programmes, manuals are orientated to achieving client goals and session competencies. They allow some latitude in choosing how to achieve goals with a client and in adjusting methods and goals as progress occurs.

McCulloch and McMurren (2007) surveyed 32 offender programme trainers (deemed experts) to identify the features of a good offender treatment programme manual. Features included: a comprehensive account of the programme theory, clearly stated aims and objectives, detailed instructions, advice on delivery, examples and choices, a readable presentation, jargon-free language, and a user-friendly format for materials. Polaschek and Collie (2005) concluded that successful rehabilitative programmes required both an adequate empirical evidence base, and coherent, clearly articulated theoretical models of causal factors. For Mann (2009), the components of a good treatment manual were: that it specifies the goals of the programme; focuses on well established risk factors; is preceded by comprehensive assessment; is accompanied by therapist training and supervision; provides some choice and flexibility; and sets process as well as content standards.

4.5 Ineffective interventions

Programmes that do not adhere to principles of effective correctional intervention have poorer outcomes (Andrews & Bonta 2010). Programmes that include both low and high risk offenders resulted in poor outcomes or increased recidivism for low risk offenders (Lowenkamp & Lastessa, 2004). Interventions with young people which had negligible or negative effects (i.e. they increased recidivism) were based on strategies of control or coercion - surveillance (monitoring), deterrence (Scared Straight), and discipline (boot camps).

4.6 Summary

The literature suggests that effective programmes:

- Are underpinned by sound theory and principles (cognitive behavioural, social learning, and systems theories).
- Embody 'therapeutic' philosophies (such as counselling, skills training, multiple coordinated services, and restorative interventions) and involve development of new pro social skills.
- Adhere to the principles of risk, need and responsivity
- Are commensurate with an offender's identified risk for reoffending.
- Have a design (i.e. basic, mid or high level programme), intensity, and dosage that match offender risk.
- Target criminogenic needs (or dynamic risks associated with youth offending) and target multiple criminogenic needs with multiple foci and modules.
- Include distinct anger management/aggression control and interpersonal problemsolving components, in addition to core modules such as addressing dysfunctional cognitions and teaching problem-solving and relapse prevention skills.
- In terms of the general responsivity principle, programmes should use CBT techniques to influence change.
- Account for the different characteristics of youth offenders (i.e. ethnicity, cognitive abilities, learning disabilities, and co-morbid mental health conditions); target noncriminogenic needs as appropriate, particularly when they are considered barriers to effective intervention.
- Implemented to a high quality, with close monitoring of programme fidelity and treatment integrity.
- Have treatment manuals (theory, facilitator and client manuals) which match the programme type (basic, mid or high level programmes).
- Select facilitators who haves the desired interpersonal influence skills, and qualifications and/or training in CBT principles and techniques as they apply to the programme.
- Have clinical supervision from a person who knows about the programme,
- Plan for generalisation, reintegration and aftercare.

5. Specific responsivity

Specific responsivity refers to the adaptation of treatment delivery or use of CBT techniques to account for offender characteristics. These characteristics include biological factors (e.g. age and gender), social variables (e.g. culture) and psychological variables (e.g. personality, emotional well-being, cognitive ability and learning style). The following table is adapted from Andrews and Bonta (2010:508) and summarises responsivity domains and considerations.

Table 12: Principles of specific responsivity

Responsivity domain	Responsivity considerations
Age	Deliver developmentally appropriate services
Gender	Provide gender appropriate services
Ethnicity/culture	Provide culturally responsive services
Cognitive/interpersonal skills	Match the intervention style and mode of deliver to the level of functioning. Programmes that are verbally and interpersonally demanding should be reserved for high functioning individuals
Antisocial personality pattern	Consider specific responsivity issues and structure treatment accordingly. E.g. for low anxiety, empathy, manipulation: implement high monitoring and transparent staff communications. For sensation seeking: programme with novel are exciting opportunities or events
Interpersonal anxiety	Avoid interpersonal confrontation and very intensexchanges
Motivation	Match intervention to stage of change
Strengths	Build on the strengths of a person
Mental disorder	Address needs specific to the disorder
Weak social supports for change	Neutralise antisocial associates: expose to other who model and reinforce real alternatives to antisocial styles of thinking, feelings and acting

5.1 Relevant theoretical approaches

a) Strengths-based approaches

Strength-based approaches are often advocated when intervening with adolescents, and there is increasing debate about the value of incorporating 'strengths-based' content and tone into correctional rehabilitation. Tony Ward has been a major advocate of strengths-based approaches. His 'Good Lives Model' (GLM) has attracted national and international attention (Ward & Stewart 2003). According to Ward, human beings are predisposed to seek a number of 'primary goods' or needs (such as autonomy, mastery, friendships/relatedness) to maintain their wellbeing. Offenders share the same inclinations and basic needs as other people, but they may seek them in unhelpful ways. For example, a youth offender who has been excluded from school may have learnt to achieve the primary human need of mastery through committing burglaries. The GLM encourages us to assess offending behaviour and identify the human goods or needs that the person was trying to achieve, and then help the offender to re-evaluate their life, and consider how they could achieve those needs in a manner which is healthy, safe and contributes to society. Ward argues that the central goal of correctional intervention is to equip offenders with the ability to lead satisfying and meaningful lives, a by-product of which would be the reduced likelihood that they will need to inflict harm on others (Ward, Mann & Gannon 2007).

b) Motivational approaches

Youth offenders are generally characterised as challenging, resistant and ambivalent. They may see little need to change their behaviours, viewing their offending as a 'skill' which offers 'payoff' or rewards. Most youth presenting for treatment in the youth or adult justice system are encouraged or mandated to do so, either by the justice system or by their parents, and may be naturally resistant. This makes motivational interviewing particularly relevant when working with youth.

Motivational interviewing (MI) has been defined as a client-centred, therapeutic interview, "designed to resolve motivational issues that inhibit positive behaviour change" and "enhance readiness for change by helping clients explore and resolve ambivalence" (Miller & Rollnick 2002:41). An evolution of Roger's person-centred counselling approach, MI elicits the client's own motivations for change (Hettema, Steele & Miller 2005:92). Research shows that counsellors who practice MI elicit increased levels of change talk and decreased levels of resistance from clients compared to those who use more directive methods. The strength of a client's verbal commitment to change during MI and across sessions is related to the level of subsequent behaviour change (Hettema et al 2005).

A review of 72 clinical trials covered a range of target problems (including substance use, gambling, health behaviours, and treatment compliance). While results varied across providers, settings and target problems, the average between-group effect size at one year was 0.30. The effects of MI were seen early suggesting an immediate response and diminished across a year of follow-up. The average effect size at 1 to 3 months post-treatment was 0.77, dropping to 0.39 by 3 to 6 months, and to 0.30 by 6 to 12 months. Hence, if MI is offered as a stand-alone intervention, long-term effects may be enhanced by booster sessions or stepped care. When used as a prelude to treatment, its effects appear to endure across time, suggesting a synergistic effect of MI with other treatment procedures. Observed effect sizes were larger when the practice of MI was not manual-based. This related to the increased tendency for therapists to do exactly what the manual told them, and to press on even if the client wasn't ready or resisted (Hettema et al 2005).

In a more recent review of 119 studies, Lundahl, Kunz, Brownell, Tollefson and Burke (2010) investigated the contribution of MI to counselling outcomes and how MI compared with other interventions. The studies covered substance use, gambling, health-related behaviours and engagement in treatment variables. When judged against weak comparison groups, MI produced statistically significant, durable results, with an average effect size of 0.28. However, when judged against specific treatments, MI produced non-significant results (average 0.09). These findings suggest that MI works best as a prelude to treatment, as a supportive intervention (in conjunction with standard treatment), or as a means to improve treatment adherence.

Recent work with at-risk adolescents has shown that interventions that use motivational interviewing can be effective, as MI offers a collaborative, non-judgmental and non-confrontational communication approach (Baer & Peterson 2002). There is a growing literature about the use of MI with: mandated youth populations (Barnett, Murphy, Colby, & Monti 2007; Barnett, Tevyaw, Fromme et al 2004; Borsari, Tevyaw, Barnett, Kahler, & Monti 2007); for enhancing treatment engagement in juveniles (Stein, Colby, Barnett, Monti, Golembeske, Lebeau-Craven et al 2006), and as a treatment adjunct in justice settings (Feldstein & Ginsburg 2007; Ginsburg, Mann, Rotgers, & Weekes 2002). Kilgour (2010) took a preliminary look at one-year follow-up data with a group of NZ offenders offered a manual-based short motivation programme (SMP), with greater reductions of recidivism observed for the SMP group than for a matched control.

There is also support for its use in group therapy contexts (Walters, Ogle & Martin 2002). D'Amico, Osilla and Hunter (2010) examined how teens who had committed a first-time alcohol or other drug offence responded to motivational interviewing in group intervention. Data on how they felt about the process, content, and format of a group intervention showed that group MI can be acceptable for at-risk youth, with feedback indicating high levels of evocation, collaboration, autonomy/support, and empathy. Youth said that they enjoyed the collaborative spirit of the intervention; they felt that the facilitator listened to them, was empathic and they were encouraged to "share" the talking in the group setting.

The table below summarises key ideas from Miller and Rollnick (2002) and DiClemente and Velasquez (2002) (in Andrews and Bonta 2010).

Table 13 Specific responsivity: Stages of change and motivational interviewing (Source: Andrews & Bonta 2010:510)

Stages of change	Motivational interviewing focus		
Precontemplation	-		
Reluctance	Use reflective listening, summarszing, affirmation to explore the situation		
Rebellion	Roll with resistance, don't argue: Argue that change can't be forced upon one, encourage menu of options		
Resignation	Instil hope, explore barriers, encourage small steps, build self-efficacy		
Rationalisation	Empathy and reflective listening; encourage mapping of pros and cons; don't argue		
Contemplation	Accurate information on the risky behaviour; mapping of pros and cons don't argue		
Preparation: Developing a plan	Listening, reflecting, pros and cons and a realistic plan		
Action: Implementing the plan	Listening and affirming		
Maintenance: Relapse	A slip is not failure. Return to earlier stages		

5.2 Staff characteristics

a) Therapeutic alliance

Therapeutic alliance refers to the collaborative relationship that develops between a therapist and a client. A strong alliance is evident when clients have: a positive view of the relationship with the therapist; a sense of common goals or purpose; agreement on the means and methods; and a sense of safety and trust in the therapy process Evidence suggests that a strong therapeutic alliance predicts better outcomes in therapy. Martin, Garske and Davis (2000) reviewed 79 studies that related alliance to outcome. The overall relation of the therapeutic alliance with outcome was moderate but consistent, regardless of the many variables that have been posited to influence the relationship. A review by Swift and Callahan (2009) suggested that attending to client preferences (e.g. in terms of gender, cultural background, location of clinic) also

resulted in better outcomes. Miller et al (2006) found that formally and regularly eliciting feedback from clients about the therapeutic alliance (using session rating scales and outcome rating scales) also improved client retention and outcome.

When looking at therapeutic alliance in adult offender populations, Marshall, Fernandez and Serran et al (2003) reviewed the literature up to 2003, and outlined therapist features conducive to developing a therapeutic alliance:

- A general respectfulness and empathic concern towards others.
- Interpersonal warmth (displaying care and support, acceptance).
- Genuineness (displaying an honest and interested manner, confidence, and being comfortable with oneself).
- Modelling and encouraging appropriate emotional responses.
- Open-ended questioning.
- Rewarding (reinforcement and encouragement for steps in the right direction).
- Flexibility (being able to alter one's approach to suit different participants),
- Directiveness (providing structure and direction to participants, and being clear about the need for and value of change).
- Encouraging participation,
- · Providing a moderate amount of self-disclosure, and
- Use of humour.

Subsequent research has confirmed that many of these factors are important to successful intervention, particularly facilitator confidence, competence, and persuasiveness. Clients were more motivated to engage in treatment when they had positive perceptions of the characteristics of facilitators, and of the relationship between the offender and facilitator. Their estimate of the likelihood of success was also higher (Drapeau 2005).

There is less literature specific to therapeutic alliance and youth offenders. Florsheim Shotorbani, Guest-Warnick et al (2000) looked at the role of the working alliance in the treatment of delinquent boys in community-based programmes in the United States. They found that young offenders who developed positive alliances with staff after three months of treatment were more likely to have made significant therapeutic gains and less likely to reoffend after one year. Matthews and Hubbard (2008) examined the relationship variables between probation officers and young offenders. The authors discussed strategies for enhancing the therapeutic alliance and recommended building an organisational culture conducive to developing helping alliances through: 1) hiring people with the right values and skills, 2) training staff on the interpersonal skills needed to develop strong therapeutic relationships, 3) matching staff and youth based on personality characteristic, interests and skills, 4) assessing staff's capacity to develop strong therapeutic relationships, and 5) supporting staff in their work.

Premature or unplanned drop-outs are problematic for any service or programme. Sharf, Primavera and Diener (2010) reviewed 11 studies relating to therapeutic alliance and drop-outs or exits from therapy. The results showed a moderately strong relationship between psychotherapy dropout and therapeutic alliance (d = .55). Clients with weaker therapeutic alliance were more likely to drop out of therapy. Therapist features which inhibited the development of a therapeutic alliance with offenders included: needing to be liked, sarcasm, nervousness, rejecting, boundary problems, being uncomfortable with silence, being unable to wait for answers, anger and aggressive confrontation (Marshal et al 2003).

b) Staff training and education

Staff selection is important. Facilitators require adequate interpersonal influence skills, and adequate qualifications and training in CBT principles and techniques as they

apply to the programme. Facilitators require regular clinical supervision from competent and experienced supervisors (Andrews & Dowden 2005).

5.3 Offender characteristics

Delinquent youth are a heterogeneous population who differ in their personality, abilities, conceptual thinking, verbal skills, and motivation. Intervention programmes need to be designed with this variability in mind, and retain enough flexibility to accommodate these varying presentations.

a) Learning and cognitive considerations

Rucklidge, McLean and Bateup (2009) undertook a prospective study examining the learning disabilities and criminal offending of 60 youth aged 16 to 19 from the Christchurch and Rimutaka prison youth units. Data was collected from youth, parents, guardians, significant others, and police records, about developmental history, estimated general intelligence (using the short form of WAIS-III), learning difficulties (WIAT-II), risk of re-offending (YRS) and actual convictions.

Learning disabilities (LD) are broadly defined as problems in academic areas such as reading, comprehension and mathematics. The prevalence rates in the sample exceeded those of international studies, with 91.7% of offenders showing significant difficulties in at least one area of achievement. For example, the mean reading comprehension level scores fell at the fourth percentile, indicating a severe level of difficulty. A community sample of NZ youth showed much lower rates of LD than incarcerated youth. On most LD measures, offender sample rates were 30% higher than community samples. When looking at estimated Full Scale Intelligence, the participants had a mean FSIQ of 89.1 (SD 10.1) with a range in FSIQ scores between 68 and 117.

Recidivism rates among released youth were investigated four years post assessment. Poor reading comprehension predicted recidivism across a variety of measures capturing rate, seriousness, and persistence of offending post-release. A higher level of reading comprehension difficulty was associated with more serious and persistent offending in the post-assessment period. This association remained significant when controlling for risk level and general intelligence.

b) Co-morbid mental health issues

Rucklidge, McLean and Bateup (2009) also looked at attention deficit hyperactivity symptoms (ADHD) in youth offenders in prison in New Zealand. Fifty-three percent of the sample evidenced ADHD symptoms based on at least two informants (self, parent or teacher) reporting problems above the T-score cut-off on the DSM subscales of the Connors Rating Scale-Revised or the Connors Adult ADHD Rating Scales (dependent on the age of the youth). The developmental questionnaire indicated that 17.4% of youth had been diagnosed by mental health professionals prior to their study. This suggests that ADHD may be under-diagnosed within the youth prison population.

Other reviews have found that the young offender population in custody has higher rates of 'acting-out' behaviours and emotional problems than adults. Townsend, Walker and Sargeant (2009) cite numerous studies which suggest that youth offenders experience high levels of co-morbid mental health problems (including mood disorders, anxiety, suicidality, self-harm, and substance abuse/dependence). The longitudinal studies previously cited suggest that young offenders often have histories of neglect, disrupted or chaotic care, and abuse (physical or sexual). Of the pool of 21 high risk

youth who entered the Te Hurihanga pilot for youth offenders, 80 to 90% had come from homes which had historically featured family violence.

Youth offenders may have had prior involvement with mental health and social service agencies. A recent report by the Centre for Social Research and Evaluation (CSRE) and the Department of Corrections examined the 'flow rates' from CYF to Corrections. It identified that those from 1985 and 1989 birth cohorts with CYF child or youth records were heavily over-represented among Corrections' clients. Almost 60% of Corrections' clients had a prior CYF record, increasing to 69% for incarcerated adults and 83% for teenage prisoners (Report to the Minister of Social Development and Employment 2010).

These factors underpin the importance of an integrated approach by facilitators, custodial staff, and relevant agencies to address young people's needs to break the cycle of offending (MOJ 2010).

c) Indigenous and ethnic minority youth

Wilson, Lipsey and Soydan (2003) reviewed 305 studies to determine whether mainstream programmes that are not culturally tailored for young offenders were less effective with minority youth. They found positive overall intervention effects with ethnic minority youth on their delinquent behaviour, school participation, peer relations, academic achievement, behaviour problems, psychological adjustment, and attitudes. Overall, they concluded that mainstream service programmes were effective for both minority and majority offenders. While the overall weighted mean effect size for minority youth was 0.11 compared to 0.17 for majority youth, the difference was not statistically significant. They then examined their database of 500 studies for culturally tailored programmes and found only one with an effect size of 0.03 (indicating no difference between the treated and control groups). Another 13 programmes used minority personnel to provide services to minority youth (but gave no indication of the nature of the service itself) with mean recidivism effect sizes of 0.13.

Similarly, Huey and Polo (in press) examined evidence-based psychosocial treatments (EBT) for ethnic minority youth. Although no well-established treatments were identified, provably efficacious or possibly efficacious treatments were found for ethnic minority youth with conduct problems, attention/deficit hyperactivity disorder, substance abuse problems, trauma-related problems, depression and anxiety-related problems. A brief review showed medium overall effect sizes (*d*=0.44) with larger effects when EBTs were compared with no treatment. Among the EBTs, cognitive-behavioural approaches with elements from social learning principles and cognitive theories were most successful with ethnic minority youth. The authors conclude that ethnic minorities often benefit from well-designed psychosocial interventions.

Huey and Polo (in press) acknowledged that minority researchers have long advocated that culture must be taken into account when treating ethnic minority clients, yet in their study, ethnicity (African, American Latino, mixed/other minority) and culturally responsive treatment status did not appear to moderate outcome. They recognised that many EBTs incorporated at least one culturally-responsive component in the form of provider characteristics, treatment procedures, or therapy content. Indeed, for several EBTs, particularly those targeting Latino youth, cultural adaptations were vital components. At the same time, they suggest that there is no compelling evidence yet that these adaptations actually promote better clinical outcomes for ethnic minority groups. They caution against over-promoting conceptually appealing but untested cultural modifications, which could inadvertently result in inefficiencies in the conduct of treatment with ethnic minorities (particularly if core intervention components are replaced or compromised in favour of cultural adaptations). Given the ambiguous

evidence, they recommend two broad approaches to applying EBTs to ethnic minorities. The first is to maintain EBTs in their original form and only apply culturally responsive elements that are already incorporated into the EBT protocols (e.g. cultural match of therapist with client and providing therapists with training and resources to help them understand the culture and contexts in which their clients are embedded). A second approach would be to assume that EBTs are culturally adequate, and simply individualise treatment for ethnic minority youth as barriers and/or opportunities arise, but only to the extent justified by the client's needs.

Despite these findings, NZ studies which incorporate culturally-responsive content within mainstream interventions have shown reasonable outcomes with adult offenders (e.g. Montgomery House Violence Prevention Programme, Te Piriti). Maori are over-represented in YOUs and adult prisons. Client engagement is critical and the content and delivery of treatment needs to be responsive to this group. Singh and White (2000) synthesized feedback from stakeholders, programme providers and NZ analysts, and suggested several principles for programmes seeking to reduce reoffending with indigenous groups (including Maori):

- 1. Have staff who are sensitive, culturally appropriate, and with whom young people identify.
- 2. Adopt a holistic approach incorporating different strategies.
- 3. Incorporate and emphasise cultural material (including Te Reo and Tikanga Maori).

Singh and White (2000) found that the most successful programmes for Maori youth:

- Adopt a whanau (family) focused approach.
- Take time to find out the young person's and whanau's needs.
- Consistently offer acceptance and aroha (love).
- Acknowledge the importance of identity, cultural knowledge and history.
- Address academic, vocational and employment needs.
- Address financial management and emotional stability.
- Teach young people about the relevance of Maori values and ways.
- Are provided by people (preferably Maori) who have mana and with whom young people can identify.

Young Pacific offenders should also be recognised, although Pacific peoples are not a homogeneous group. Singh and White (2001) cited authors who suggest that interventions for Pacific youth work best when they:

- Recognise and address the confusion felt by many NZ-born Pacific people.
- Are staffed by workers who recognise the difficulties young Pacific people face and with whom they can identify.
- Strike a balance between notions of individual rights and family and community responsibilities.
- Emphasise family involvement and collective support networks.
- Provide education about the NZ context for example relating to law, and cultural attitudes towards women and disciplining children.
- Offer a self-help format where youth are able to share with and support one another while learning to interact in a more positive way.
- Deliver information through interactive group processes rather than lecture formats.
- Teach CBT techniques that are modelled by facilitators.

5.4 Summary

The literature related to specific responsivity identifies five key points in working with youth offenders:

- Strength-based approaches focus on understanding the underlying functions of an adolescent's offending in terms of attempts to achieve primary human needs. They then build on the young person's ability to achieve these needs in prosocial ways.
- Motivational approaches are a useful adjunct to therapy and can promote readiness and commitment to change and reduce resistance.
- Staff characteristics, particularly an ability to build and maintain a therapeutic alliance, can improve client retention and treatment success. Staff training and education can also affect treatment outcomes.
- Treatment delivery should be adapted to account for youth offender characteristics (including cognitive functioning, potential learning disabilities, and co-morbid mental health issues).
- Mainstream CBT programmes can be effective for minority and majority young
 offenders, but it may be appropriate to incorporate culturally responsive elements
 into therapy (e.g. cultural match of therapist with client), and to address cultural
 barriers as they arise.

6. Conclusion

There is no doubt that youth offenders (i.e. those under 20) are a population of concern. New Zealand statistics show that youth aged 14 to 20 have the highest apprehension rates across major offence categories (MOJ 2010). Following release from prison, under 20 year-olds have the highest reconviction (88%) and reimprisonment (71%) rates within a 60-month period, with almost a quarter reoffending within three months of release, and almost half reoffending and returning to prison within 12 months. Prior incarceration increases the likelihood that youth will return to prison after any given release. First-timers to prison are 66% likely to return, and recidivist youth 88% likely to return within 60 months (Nadesu 2009b). Offenders at or near their peak offending age (i.e. those under 25) cause the most harm to society in any given year. Intervening before they reach their peak offending age gives more opportunity to prevent harm (Hughs 2010). While many youth grow out of criminal offending (or desist from crime more quickly), a small group persists and become New Zealand's chronic low or high rate adult offenders.

Nadesu (2009) suggested that intervening with young offenders within prisons should be a Departmental priority, as effective interventions are likely to have significant downstream benefits. This review was undertaken to identify the characteristics of effective programmes for young offenders. Effective programmes: are underpinned by sound theory and principles (cognitive behavioural, social learning); embody 'therapeutic' philosophies (i.e. involve development of new pro social skills); are cognitive behavioural in nature, and include anger management/aggression control and interpersonal skills training components in addition to the other core modules. They adhere to the principles of risk (i.e. interventions are commensurate with risk level), need (they target multiple criminogenic needs relevant to youth) and responsivity (i.e. CBT content and delivery are adapted to account for the differing characteristics of youth offenders). Effective programmes are implemented to a high quality, with close monitoring of treatment fidelity and programme integrity. Sound programmes also plan for generalisation, reintegration and after-care. Facilitators selected to deliver such programmes possess the desired interpersonal influence skills, and have adequate qualifications and/or training in CBT principles and techniques as they apply to the programme. Clinical supervision is delivered by a person who knows about the relevant programme.

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Appendix 1 Business Rules for Referral to Psychologists Office

Rules of Referral for Prison Services

You should refer Offenders who met the following criteria:

- 1. Offenders with RoC/RoI ≥0.7
- 2. Sentence of ≥5 years for serious sexual **OR** violent offences Section 107 potential
- 3. Unmotivated sex offenders with victims ≤16
- 4. Sex offenders with victims ≥16
- 5. Young offenders ≤20
 - offending under 12
 - other behavioural problems (e.g. truancy, stealing, vandalism, violence, cruelty to animals, arson, alcohol/drug abuse from early age)
- 6. Women offenders with RoC/RoI ≥0.5 **AND** offences for sex, violence, or serious drugs
- 7. Non-completers of rehabilitation programmes with RoC/Rol ≥0.7 **OR** sentence ≥5
- 8. Years for sexual/violence
- 9. Functional support as required
- 10. Organic functioning assessment if required
- 11. Multiple rehabilitative needs for advice on Sentence Plan

