A LITERATURE REVIEW

Mental health & alcohol and other drug screening, assessment and treatment for Youth Justice populations.

The Werry Centre

for Child and Adolescent Mental Health

Workforce Development

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

This document was prepared by a project team from The Werry Centre for Child and Adolescent Mental Health Workforce Development. We give special thanks to the members of the reference group, and Trish Gledhill from Kina Families & Addictions Trust for their valuable contribution.

Project Team

The project team from The Werry Centre for Child and Adolescent Mental Health, University of Auckland included:

- Tania Wilson, Senior Advisor
- Ellen Nicholson, Evaluator and Researcher
- Julliet Bir, Research Fellow
- Louise Dentice, Project Support
- Diana van Vugt, Research Support

Reference Group

- John Zonnevylle, Senior Advisor, Ministry of Health
- Sue Treanor, Director, The Werry Centre for Child and Adolescent Mental Health, University of Auckland
- Rawiri Wharemate, Kaumatua, The Werry Centre for Child and Adolescent Mental Health, University of Auckland
- Dr Arran Culver, Child and Adolescent Psychiatrist, Hauora Waikato
- Dr Andy Parkin, Consultant Child and Adolescent Psychiatrist
- Dr Craig Immelman, Consultant Child and Adolescent Psychiatrist
- Dr Liz Myers, Consultant Child and Adolescent Psychiatrist, Auckland Regional Youth Forensic Service and Child and Family Unit, ADHB
- Dr Grant Christie, Child and Adolescent Psychiatrist, Altered High, Waitemata District Health Board
- Patrick Au, Co-ordinator Asian Mental Health Service, ADHB

EXECUTIVE SUMMARY

INTRODUCTION

There are substantially higher rates of mental health disorders among youth offenders than youth in the general population. Despite the high prevalence of mental health/Alcohol and other Drug (AoD) concerns for young people within the justice system, internationally, the needs of these young people have generally not been adequately addressed. Without addressing their mental health needs the research suggests that interventions aimed at addressing re-offending and aiding young people's development into well-functioning adults maybe compromised.

The first step in providing treatment to young people in the justice system with mental health/AoD concerns is the identification of those problems which increase the risk of negative outcomes. The greater percentage of these young people have not been identified or treated in their communities and workers within the justice system have reported struggling to identify or manage this group of young people.

In New Zealand, young people who offend generally come to official notice because of their behaviour or because of care and protection concerns. Young Māori are disproportionately represented in the Youth Justice System. Much of the focus has been on addressing the offending behaviour or environmental issues while mental health/AoD issues which may underpin the problem are not necessarily assessed. Forensic mental health services were first established in New Zealand in 1989. A service delivery framework for these services was later developed by the Ministry of Health (2001) but focused on adult offenders acknowledging that further work was needed to address the needs of children and youth.

To provide a platform to develop a national service delivery framework for Youth Forensic Services the purpose of this paper is to identify evidence based information relevant or directly pertaining to the assessment and treatment of youth with mental health and/AoD issues who offend and consider optimal service delivery models. The project brief and key findings from the review are outlined below.

PROJECT BRIEF

- Best practice for mental health and AoD screening and assessment of mental health and AoD in Youth Justice populations
- Screening for mental health and AoD issues in the Youth Justice setting including which tools to use and by who and what implications this has for the workforce (building on our previous review)
- Best practice in working with families/support networks while youth are incarcerated
- Best practice for mental health and AoD specialist treatment of mental health and AoD in Youth Justice populations
- Interventions recommended for young offenders with mild to moderate mental health /AoD issues
- Models of service delivery that are most efficacious and efficient. Consider specialist versus generalist services and location of services for young people with mental health and AoD issues who are in the Youth Justice system
- Consideration of what and how services should be delivered for Māori, Pacific, Asian and other minority populations
- Transitional planning, particularly from institutional settings to the community
- How should secure care best be provided for young people with acute mental health and AoD presentations and what (if any) resource guidelines for numbers of secure beds exist.

KEY FINDINGS

General

- Mental illness is less defined in adolescents than it is in adults. The notion of mental illness can be broad for this group and include issues such as suicidality, substance abuse, risk of violence, conduct issues, in addition to more obvious clinical disorders.

- Prevalence rates of between 40% and 60% highlight that mental health and AoD issues cannot be ignored in the Youth Offending population. The incidence of psychiatric disorders and AoD issues is even more pronounced among those youth who are detained or incarcerated.

- A reoccurring theme in the literature is that that juvenile justice system is not adequately equipped to meet the needs of youth with mental health and/or AoD issues. Improvement is needed in: coordination of services; availability of trained or specialist staff; integration of services; encouraging community support for success; effective services; and leadership structures.

Screening & Assessment

- There is a need to at least screen and, where necessary, comprehensively assess a young person involved in the Youth Justice process to inform treatment decisions, manage potential risk and enable community referrals.

- To aid decision making, the right tool and process is vital. This should include the selection of evidence based, scientifically sound screens that are well-validated and reliable, and that assessment and screening processes in youth justice settings are standardised.

- Given that the young person may be presenting under coercion and may not recognise that they have problems or that they need help there is a need to: engage the youth; understand the developmental and contextual background; and understand their issues within a family system.

- Although no specific protocols for minority groups have been specified in the literature there is a clear need for culturally sensitive responses and certainly this is an area which needs development.

- Conducting screening and assessments in youth or juvenile justice settings is challenging and requires a working knowledge of clinical, cultural, risk and legislative issues. Specialised training and appropriate supervision for clinicians and other practitioners is of key importance.

Intervention & Treatment

- Service delivery models such as Multisystemic Therapy (MST), Multidimensional Treatment Foster Care (MFTC), Functional Family Therapy (FFT) or Wraparound allow a more systemic and targeted approach, and ensure that the young person's problems albeit behavioural (offending) together with mental health and/or AoD issues are dealt with in an ecologically comprehensive way. These models provide a framework in which other treatment strategies can be applied.

- Enhancing parental competence has also been found to contribute to reduction in problematic behaviours and so parent management models such as Incredible Years provide an intervention that can be applied as an early intervention, but also throughout middle years may also mitigate behavioural and emotional problems escalating.

- There is still a lack of research on the impact of safe care management for at risk youth offenders either in the community or in purpose built facilities and/or the influence of a trained workforce. Risks requiring secure safe care may include from others, toward others and self and acute psychiatric states.

- Managing high risk, aggressive and psychiatrically disturbed youth is responded to in varied ways internationally which has precluded the development of parameters of best practice.

- Successful transition back into the community for youth offenders who have been detained in either a hospital, residential or institutional settings is achieved through the provision of integrated individual and family support services. Evidence based practices in treating young offenders in residential settings, without follow-up systemic interventions tend to have little effect when young people return to unchanged home and community situations.

Service Delivery

- To improve access to mental health services for young people the "gateway provider model" provides a promising start and may minimize the mismatch between assessments made by specialists and the expectations of what is required by the referring agents.

- Integrated services utilising mental health as the core paradigm with all mental health staff trained in drug and alcohol assessment and treatment is needed. Employment of a specialist AoD worker to support the team and an Indigenous health worker embedded in the service structure is strongly recommended.

- A need for system reform, which includes system integration, collaboration, information sharing, and the adoption of a collaborative leadership model, involving all stakeholders in decision making.

- A comprehensive framework of Mental Health Service delivery be adopted underpinned by explicit principles which embrace the key areas of need for the Youth Justice population and highlight foundation cornerstones necessary for effective service delivery.

- A need for the development of a social justice systems model or System of Care, based on a "child's right to care" which incorporates the young person alongside universal services of health and education embedded in a community context.

1.0 INTRODUCTION

Research has generally found substantially higher rates of mental health disorders among youth offenders than youth in the general population (Otto, Greenstein, Johnson, & Friedman, 1992). Unfortunately, despite the high prevalence of mental health and alcohol and other drug (AoD) concerns for young people within the justice system, internationally, the needs of these young people have generally not been adequately addressed. The English Criminal Justice System was described as poor at detecting the mental health/AoD needs of young offenders and the National Health Service as inadequate at meeting them once referred (Hagell, 2002). Advocating for the development of programmes, tools and resources to identify and respond to the mental health/AoD needs of young people who offend in the American Juvenile Justice System, Skowyra and Cocozza (2006) report that frequently youth are detained for relatively minor offences due to a lack of community based mental health treatment. This detention of young people who offend, in large justice facilities or inpatient hospitalisation, has proven ineffective and can increase the incidence and severity of the offending behaviour (Howell, 2003). In his review, Hagell (2002) concludes that without addressing their mental health needs, the bottom line is that criminal justice interventions will not successfully address re-offending, and the young people will not be successfully reintegrated into their communities or develop into well-functioning adult.

The first step in providing treatment to young people in the justice system with mental health/AoD concerns is the identification of those problems which increase the risk of negative outcomes. The greater percentage of these young people have not been identified or treated in their communities and workers within the justice system have reported struggling to identify or manage this group of young people (Wasserman et al., 2003). As highlighted by Cocozza and Skowyra (2000) there are five key barriers in recognising and treating youth with mental disorders in the juvenile justice system. These are:

- inadequate screening and assessment;
- lack of training, staffing and programmes necessary to deliver mental health services within the juvenile justice system;
- lack of funding and clear funding streams to support services;
- confusion across services/agencies at both the policy and practice as to who should be responsible for providing service to these youth; and
- a lack of research that adequately addresses the level and nature of mental health disorders experienced by these youth and the effectiveness of treatment models and services.

In New Zealand, young people who offend generally come to official notice because of their behaviour or because of care and protection concerns. Much of the focus has been on addressing the offending behaviour or environmental issues while mental health/AoD issues which may underpin the problem are not necessarily assessed (Grisso, 1999).

Forensic mental health services were first established in New Zealand in 1989 following the release of the Mason Report, which presented the findings of the Committee of Inquiry into Procedures Used in Certain Psychiatric Hospitals in relation to Admissions, Discharge or Release on Leave of Certain Classes of Patients 1989 (Mason, 1988). In response to issues raised in this report, four regional forensic services were established to address the needs of adult offenders. The role of these regional services was to assess, treat and rehabilitate people with a mental illness who had, or were alleged to have committed a crime and those who were likely to offend. These services were in addition to the National Secure Unit and were adult offenders. Further studies found that, in comparison with the general population, a disproportionately high number of prisoners have mental illness (Simpson, Brinded, Laidlaw, Fairley, & Malcolm, 1999). A service delivery framework for Forensic Services was subsequently developed (Ministry of Health, 2001) but focused on adult offenders so suggested that further work was needed to address the needs of children and youth. There has been some progress made in recognising the needs of youth offenders with the establishment of a Regional Youth Forensic Service in Auckland and designated clinical positions attached to Regional Forensic Services and with a major NGO health provider in the Waikato area.

To provide a platform to develop a national service delivery framework the purpose of this paper was to identify evidence based information relevant or directly pertaining to the assessment and treatment of Youth with mental health/AoD issues who offend.

PROJECT BRIEF

- Best practice for mental health and AoD screening and assessment of mental health and AoD in Youth Justice populations
- Screening for mental health and AoD issues in the Youth Justice setting including which tools to use and by who and what implications this has for the workforce (building on our previous review)
- Best practice in working with families/support networks while Youth are incarcerated?
- Best practice for mental health and AoD specialist treatment of mental health and AoD in Youth Justice populations
- Interventions recommended for young offenders with mild to moderate mental health /AoD issues
- Models of service delivery that are most efficacious and efficient. Consider specialist versus generalist services and location of services for young people with mental health and AoD issues who are in the Youth Justice system
- Consideration of what and how services should be delivered for Māori, Pacific, Asian and other minority populations

- Transitional planning, particularly from institutional settings to the community

- How should secure care best be provided for young people with acute mental health and AoD presentations and what (if any) resource guidelines for numbers of secure beds exist.

1.2 SEARCH STRATEGY

This literature review involved four steps based around three key stages of search, assessment, and analysis.

Step one involved consideration of the purpose of the literature review and the search parameters, specifically related to review parameters (national and international prevalence data; safe care management, including suicide risk, bullying, and victimisation); screening and assessment process and tools; effective/evidence based interventions; family and community support; models of service delivery; special populations (including girls and indigenous youth); secure care, settings (youth justice; forensic mental health services; secure care; community care; diversion), conditions (mental health problems and issues; emotional, behavioural and conduct disorders; Post Traumatic Stress Disorder (PTSD) and trauma; psychosis, substance abuse, co-occurring disorders) and interventions (evidence based screening and assessment tools, and clinical interventions utilised in the treatment of youth offenders/youth offenders with mental health disorders). Limits were initially placed on the literature search, restricting publications to systematic reviews, meta-analyses, and evidence based practice reviews published in English in the last 10 years. Older publications referred to in relevant publications that met one or more of the above criteria were also sourced.

In step two, the literature was searched using internet search engines (specifically Google), electronic databases available through the Auckland University library (specifically CINAHL, Evidence Based Medicine Reviews, PsychINFO), internet-based and publication-based bibliographies and published content from a range of relevant organisations including the Office of Juvenile Justice and Delinquency Prevention (OJJDP) and OJJDP Model Programs Guide; the Promising Practices Network; the Substance Abuse and Mental Health Services Administration (SAMHSA), RAND, the Center for the Promotion of Mental Health in Juvenile Justice, and the National Center for Juvenile Justice and Mental Health. Approximately 250 publications were sourced.

In the third step, the publications were reviewed and filtered for those that most met the criteria for this review. These publications were then summarised and themes drawn from the literature were identified. Additional publications further detailing or supporting the evidence based interventions recommended in the Evidence Based Practice (EBP) review documents were also accessed, analysed and summarised.

The final step was compilation of this report. This included documenting the evidence base, giving an overview of findings drawn from the literature, and providing recommendations for a system philosophy and potential service configurations. This step also included requesting feedback from the reference group on the draft report.

1.3 LIMITATIONS

Limitations to this review include search limitations, such as access to full-text journal publications; the general paucity of rigorous, independent evaluation research, specifically around the effectiveness of different interventions and service configurations with different juvenile justice populations and the recognised "developers as publishers" issue; the prevalence of research in controlled rather than real-world settings; the significant number of US-based studies, initiatives, and publications; and the lack of New Zealand reporting around evidence based practices, evaluation, and research. An additional limitation is related to the timeframe for completion of this extensive and exhaustive review, which may have resulted in important publications or findings being missed.

2.0 PREVALENCE STUDIES

2.1 INTERNATIONAL CONTEXT

Prevalence rates of mental illness in juvenile delinquent populations appear to be much higher than the general youth population in the United States; four times higher for conduct disorder, 10 times higher for substance abuse and 3-4 times higher for Affective Disorders (Teplin, 1998; Grisso & Barnum, 1998; Timmons-Mitchell et al., 1997). These prevalence rates apply to both youth who commit violent crimes and those who do not (Huizinga & Jakob-Chien, 1998). Three studies of youth who offend reported that the prevalence rate of mental health concerns was around 40% and 50% (Grisso, 1999). A further study found the prevalence of any disorder in the juvenile justice sector was around 52.1% and around 60.3% for youth in alcohol and drug services largely for Attention Deficit Hyperactivity Disorder (ADHD)/disruptive disorders (with elevated rates for Conduct Disorder) (Garland et al., 2001). This is almost double the incidence of mental health issues in the general youth population which is estimated to be 20-30% of all school age children (Fonagy, Target, Cottrell, Phillips, & Kurtz, 2000).

There appears to be a significant incidence of psychiatric disorders and AoD issues among incarcerated or detained youth. Teplin's studies conducted in the early nineties are considered to be two of the most systematic studies on prevalence of mental health disorders in incarcerated youth, due to the use of random sampling, a large sample size and the use of a structured diagnostic instrument (Teplin, 1990, 1994). Teplin (1990) found that the prevalence rate for severe disorders (Schizophrenia & Major Affective Disorders) in male jail detainees aged 18-22 years (4.36%) was higher than the general population (1.94%). She later tested for psychiatric disorders and substance abuse in a younger sample of male jail detainees (16-22 years) and found that 39% had Antisocial Personality Disorder and 20% had Substance Abuse Disorder (Teplin, 1994).

Richards (1996) found that his entire sample (n=100) of remanded and sentenced detainees referred to a psychiatric outreach service in New South Wales (NSW), Australia had at least one psychiatric diagnosis with 73% diagnosed with Substance Abuse Disorder closely followed by Conduct Disorder (71%). In this sample 25% were diagnosed with Mood Disorders and 4% with PTSD. Incarcerated adolescents had significantly more psychiatric disorders (85%) than youth in the community with highest rates for Oppositional Defiant Disorder (ODD) (45%) followed by alcohol dependence (39%), Conduct Disorder (31%) and Depression (31%). Twenty-two percent had one disorder and 63% had two or more (Ulzen & Hamilton, 1998). A more recent study on detained young people showed that two-thirds of the males and three-quarters of the females met the diagnostic criteria for one or more psychiatric disorders (Teplin et al., 2006). Australian surveys of young offenders suggest that as many as 60% of incarcerated young offenders are at risk of significant mental health problems (Lennings, 2003).

The NSW Department of Juvenile Justice health survey results (2003) on 242 young people remanded or sentenced to 9 juvenile detention centres in NSW found that 88% of the sample

reported mild to severe symptoms of a clinical disorder, the three most prevalent were Conduct Disorder (61%), Substance Abuse Disorder(61%; cannabis, tobacco and alcohol) and Adjustment Disorder (39%).

These findings which span more than ten years highlight the high incidence of mental health concerns for youth who offend with AoD issues being a significant feature of this population.

2.1.1 Gender Differences

The gender gap for youth offenders has been decreasing, with the number of female offenders increasing and the number of males decreasing (Goldstein et al., 2003), and females are committing crimes as serious as those committed by males (Timmons-Mitchell et al., 1997).

In terms of differences between the sexes, Grisso (1999) found that girls have an equal or greater prevalence of mental disorders. Interestingly, Cauffman, Frances, Goldweber, Schulman, and Grisso (2007) found that gender differences were more pronounced in detained youth than in the community, with detained female offenders reporting greater mental health symptoms. Incarcerated girls were also more likely to experience internalising disorders (Anxiety and Depression) while boys are more likely to experience externalising disorders (anger and Conduct problems), this being initially identified by Timmons-Mitchell et al. (1997)and later confirmed by Cauffman et al., (2007).

These findings highlight that girls and boys have different pathways to delinquent behaviour. For boys, problem behaviour is usually the result of delinquent lifestyles and peer influences, while for girls it is the result of traumatic life experiences (Dembo, Williams, & Schmeidler, 1993). Cauffman, Feldman, Waterman, and Steiner (1998) found that female incarcerated youth had an extremely high rate of exposure to trauma (70%), were more likely to be victims of violence (either sexual or physical abuse) and had significantly higher rates of PTSD symptoms compared to males (49% and 32% respectively).

Abram et al., (2004) in a later study found a much lower prevalence for PTSD (11%) and also found no differences in prevalence rates by sex and ethnicity. Differences in prevalence rates was reported to be due to the different diagnostic tools used to assess PTSD. However, Abram's findings did show that females were more likely to be victims of sexual abuse. Histories of sexual and physical abuse were also highly prevalent in incarcerated female offenders (Goldstein et al., 2003; McCabe, Lansing, Garland, & Hough, 2002) as well as high rates of suicidal ideation (Goldstein et al., 2003).

2.1.2 Types of Problems

An English literature review of the mental health needs of young offenders concluded that the levels of mental health problems among young people who offend were at least three times higher than the non-offenders, with Conduct Disorder, emotional disorders, attentional disorders and substance abuse being the most common amongst both groups (Hagell, 2002). This review also highlighted the following:

- the most common disorders associated with youth who offend are substance use and disruptive behaviour;
- co-occurrence of mental health and AoD is common amongst young people who offend;
- there is a higher prevalence of all mental health disorders amongst detained females than detained males;
- males are more likely to have externalising disorders such as Conduct Disorder, while females are more likely to have internalising disorders such as Depression and Anxiety; and
- the rate of depression is high amongst detained young people and remains difficult to treat in residential settings (Teplin et al., 2006).

Co-occurring Disorders

Shelton (2001) found 74% of committed and detained youth had more than one diagnosis. The NSW Department of Juvenile Justice health survey results (2003)reported 73% of the sample reporting two or more clinical disorders with Substance Abuse Disorder and Conduct Disorder co-occurring most frequently. Richards (1996) found that 86% of the sample of remanded and sentenced detainees reported more than one diagnosis, also reporting Conduct Disorder and Substance Abuse Disorder most frequently co-occurring.

International studies suggest that approximately half of all adolescents receiving mental health services have a dual diagnosis (Greenbaum, Foster-Johnson, & Petrila, 1996) while among the juvenile justice population this may be higher (Otto et al., 1992). The high prevalence of co-morbidity between mental health and substance abuse has been widely recognised in the youth offender population (Aarons, Brown, Hough, Garland, & Wood, 2001; Lennings & Pritchard, 1999; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). Similarly Richards (1996) found that 86% of the sample of remanded and sentenced detainees reported more than one diagnosis with Conduct Disorder and Substance Abuse Disorder most frequently co-occurring. Co-occurring disorders are especially common in conduct disorder with other clinical disorders (Grisso, 1999). Eppright, Kashani, Robison, and Reid (1993) found that 87% of their sample of incarcerated youth met criteria for conduct disorder with a high frequency of antisocial personality disorder and Pliszka, Sherman, Barrow, and Irick (2000) found high rates of conduct disorder (60%) co-occurring with affective disorder.

Studies have shown that females have higher rates of co-morbidity than males. Abram, Teplin, McClelland, and Dulcan (2003) found that significantly more females (57%) at a temporary detention centre met criteria for two or more disorders. Teplin et al., (2006) had a similar finding. Female young offenders reported significantly more mental health needs in the area of depression, self-harm and post-traumatic stress (Chitsabesan et al., 2006).

The co-existence of mental health and AoD issues amongst young people increases the complexity of the situation, and can be difficult to treat (Harwood, Kowalski, & Ameen, 2004)

Mood Disturbances

Young female offenders presenting with mental health issues were most likely to exhibit mood disturbances. Timmons-Mitchell et al., (1997) found an 84% prevalence rate for mental disorders amongst females in the juvenile justice system with 88% diagnosed with a mood disorder. Goldstein's study (2003) on a large sample of females awaiting disposition (n=232) in a secure facility found that 63% of females were depressed and 56% were anxious and 71% reported clinical levels of substance abuse. This was consistent with a Canadian study (Ulzen & Hamilton, 1998) which despite very small sample of females (11), found a high rate of depression (73%) in the female sample followed by Oppositional Defiance Disorder (ODD) (64%) and alcohol dependence (64%). Comorbidity was also more prevalent in the female sample (82%). This study also found high prevalence of alcohol dependence and substance abuse (39%), with the highest proportion of the sample (69%) using marijuana.

Suicidality

The incidence of suicide among young people aged 15-24 years in New Zealand is disproportionately high compared to other age groups and, although decreasing in recent years, has remained high by international standards (Associate Minister of Health, 2006). Of concern to workers in the Youth Justice arena is that the risk factors for teen suicide include care and protection history and exposure to violence (New Zealand Guidelines Group, 1999). As already highlighted, young people with these risk factors are disproportionately represented in the youth justice population. The Canterbury Suicide project also confirms the connection between mental disorders and young people who make serious suicide attempts. The reviewed literature highlights the need to educate and train professionals to "better identify, refer, treat and manage young people at risk of a range of mental health disorders and of suicidal behaviors" (Beautrais, 1998).

Substance Use

High prevalence of substance use disorders in youth in juvenile justice ranging from 50% (Teplin et al., 2002) to 81% of 11-17 years olds met DSM-III-R criteria for SUD (Milne, 1991, cited in Aarons et al., 2001) and prevalence of Substance Use Disorders were highest for youth in the juvenile justice sector when compared to four other sectors (Aarons et al., 2001). McCabe et al., (2002) and Cauffman, Piquero, Broidy, Espelage and Mazerolle (2004) later found similar rates of substance abuse disorders among detained males and females (34% & 36% respectively in Cauffman et als' (2004) study. Lennings and Pritchard (1999) found 90% of youth offenders in Queensland detention centres had some degree of substance abuse, mainly for alcohol, nicotine and marijuana.

As already highlighted, Teplin et al., (2006) found that female detainees had higher rates of mental health disorders than males (75% and 66% respectively) with the most common disorder being substance use disorder followed by disruptive behaviour disorders and anxiety disorders in both samples.

Trauma

For males, witnessing violent acts against someone which led to serious injury or death was the most frequently reported trauma precipitating PTSD (Abram et al., 2004). Steiner, Garcia and Matthews (1997) reported high rates of PTSD in their sample of randomly selected group of incarcerated youth as well as in the clinically referred group. Twenty percent met partial criteria and 32% met criteria for current PTSD with participants commonly reporting intra-familial violence (abuse, murder and grave injury) and witnessing violent acts in the community which were usually gang related. Overall, Abrams et al, (2004) concluded that Trauma and PTSD seem to be more prevalent among juvenile detainees than those young people remaining in the community.

Psychosis & Offending Behaviour

Data on offending behaviour and early onset of schizophrenia is limited (James, 2004) and prevalence studies have tended to focus on the adult population. While the complexity of adolescence and the associated issues of family, peers, school and occupation needed to be considered there are clear clinical similarities between early onset and adult forms of schizophrenia (Hollis, 2000). Notwithstanding this caution is needed when comparing early onset to late onset schizophrenia. As James (2004) and Tengstrom et al (2001) highlight early onset schizophrenia is often characterised by histories of parental substance abuse, early school failing, conduct disorder and later antisocial personality disorder. Generally this group tend to display greater rates of violent criminal behaviour and substance abuse.

Learning Difficulties & Disabilities

Kroll et al., (2002) found that boys before being admitted to secure care had high rates of mental retardation with largely reading difficulties and high rates of mental health needs (conduct disorder, substance abuse and major depression) but there was a reduction in needs after admission which was largely due to the process of being incarcerated and supervised. Harrington et al., (2005) followed the same sample of boys after discharge and found that although educational needs, aggression and oppositional behaviour was lower, substance abuse was more common, few participants had access to treatment programmes and many re-offended. Cauffman et al., (2007) also found significantly lower IQ levels in detained youth than those in the community.

While 20% of youth in Chitsabesan et als' study (2006) had significant depressive symptoms, also noted were high levels of learning difficulties. Bickel and Campbell (2002) found that 48% of their sample had learning difficulties. However, the measurement tool used only collects suggested diagnoses, there was no community control group and the study had a 62% participation rate.

2.2 PREVALENCE IN NEW ZEALAND

To date in New Zealand, there have been limited specific studies conducted on the prevalence of mental health disorders in youth offenders. Consequently in this section we will consider the prevalence data on mental health disorders that are available and have based on the general population of youth. In light of the international research which suggests that the prevalence of mental health and AoD issues greater in the youth offending population than the general population this should give an indication of the likely prevalence of such issues for youth offenders in New Zealand.

There are two major longitudinal studies which began in the 1970s. These are the *Dunedin Multidisciplinary Health and Development Study (DMHDS)* and the *Christchurch Health and Development Study (CHDS).* These studies investigated the health, development and behaviour of a large sample of people born in two urban centres in the South Island.

The *CHDS* birth cohort of 1,265 children were born in the Christchurch urban region during mid 1977. Mental health assessments on the Dunedin sample began in the 80s when the children were around 11 years of age. Anderson, Williams, McGee and Silva (1987) found an overall prevalence rate of any disorder around 18% and around 12% for pervasive disorders. This sample of 943 was reassessed at age 15 (McGee et al., 1990) and 930 at age 18 (Feehan, McGee, Raja, & Williams, 1994). Assessment was based on the abbreviated version of the Diagnostic Interview Schedule for Children (DISC-C) which was based on DSM-III criterion for disorder and DSM-III-R for the later study. While at age 15, 22% of the sample had one or more disorders with the highest prevalence for anxiety disorders (5.9%) followed by non-aggressive conduct disorder (5.7%), at age 18 the rates had increased to 36.6% for at least one disorder, with highest prevalence for major depressive disorder (16.7%) followed by social phobia (11.1%) and alcohol dependence (10.4%) (*differences in rates could be due to the use of the later version of the DSM-III).* Mental health assessment of 1,000 15 year olds from the original sample was conducted by Fergusson and colleagues in 1993 (Fergusson, Horwood & Lynskey, 1993). Employing a similar interview method used by McGee et al., (1990) but using DSM-III-R criteria instead of the earlier version used by McGee and colleagues (1990), they found similar rates with overall prevalence of disorder around 25.7% to 27.3%, from 10.7% to 12.8% for anxiety disorder, from 6.6% to 7.8% for mood disorders, from 8.1% to 10.8%, of ADHD from 2.8% to 4.8% for conduct/oppositional disorders, and from 5.2% to 7.7% for substance abuse/dependence.

More recent studies have found that by the age of 15 years, 25% of the general youth population meets criteria for a mental health disorder (Fergusson & Horwood, 2001) such as anxiety, mood, conduct and alcohol or drug issues and by age 18 years this prevalence increases to 42% (Fergusson et al., 2003). Māori children and adolescents are reported to be 1.5 to 2.0 times more likely to suffer from a mental health disorder than non-Māori, although this appears to be related to disadvantage (Ramage et al., 2005; Wille, 2006). While girls reported significantly higher rates of major depressive

disorder, there were no significant differences in alcohol and marijuana dependence (Feehan et al., 1994).

Fergusson et al. (1993), also reported a significantly higher prevalence of disorder in 15 year old girls (from 32.2% to 32.9% for girls compared to 19.1% to 21.6% for boys) especially for anxiety and mood disorders with rates 2.7 to 4.2 times higher than boys. No significant differences were found in the rates of conduct/oppositional disorders, although boys showed a slightly higher prevalence. An earlier study (McGee et al., 1990) found that 15 year old girls reported a greater prevalence of disorders (25.9%; largely for anxiety disorders and non-aggressive disorders) than boys (18.2%), and also found that more boys were diagnosed with ADHD and aggressive conduct disorder. Later assessments at age 18 yielded consistent results with girls generally reporting higher prevalence of disorders (major depressive disorder, social and simple phobias and alcohol dependence). Boys reported higher prevalence of alcohol dependence followed by major depressive disorder, conduct disorder and social phobia.

Girls also had a slightly higher prevalence of substance use disorders (Fergusson et al., 1993). High prevalence of these disorders in girls could possibly be due to the age of the sample as prevalence of these disorders is said to increase after puberty for boys. Feehan et al., (1994) confirmed this by reporting similar rates of alcohol and substance abuse in 18 year old girls and boys.

In terms of co-morbidity McGee et al., (1990) found that 25% of the 15 year old sample had two or more disorders where co-morbidity was largely seen with depressive disorder, while co-morbidity had almost doubled (46%) for 18 year olds (Feehan et al., 1994). Co-morbidity of two or more disorders in Fergusson et al., (1993) study (41% of 15 year olds) were almost double that of McGee et al., (1990) study and similar to the rates in 18 year olds in Feehan et al (1994). Overall these studies highlight that there were clustering of disruptive disorders with substance use disorders and anxiety disorders with mood disorders.

In New Zealand, consistent with overseas findings, there is also a notably high prevalence of mental health disorders for children and adolescents who come to the official notice of Child Youth and Family and the Justice system. A study assessing the needs of young people in the Youth Justice North facility (Newman & O'Brien, 2005) found that the combined percentage of young people who identified drug and alcohol concerns was 76% with the most common drug used being marijuana. Other drugs used included P-methamphetamine, morphine and ecstasy. Alcohol was identified as being used by many most days of the week with young people stating that their lifestyle of drug and alcohol use was a significant factor in their crime. In this study the occurrence of mental health issues (conduct disorder, mood disorders, psychosis, PTSD) for the combined total of young people was 56% and was higher in females at 73%. A further study found that Māori males in the 14-18 year age groups are more likely than non-Māori to have major alcohol and drug problems and dependency states (Te Rau Matatini, 2006). For many young people this behaviour ceases during adolescence, although for some young people, the early age of initiation, intensive frequency and

quantity of use, and the balance of positive versus negative consequences, leads to substance use problems later in life (Christie et al., 2007).

2.2.1 Cultural Considerations

Māori

Data from the CHDS study showed that half (49.5%) of the 18 year old Māori youth had prevalence of at least one disorder with highest prevalence for mood disorders (29.7%) and anxiety disorders (24.2%) (Fergusson, Horwood, & Lynskey, 1997). Furthermore, prevalence rates for conduct disorder were three times higher (12.1%) and rates for substance abuse were two times higher (16.5%) than the non-Māori sample (3.9%, 7.8% respectively). However, the authors suggested that socioeconomic status could be a factor that could explain these results rather than ethnicity alone. When adjusted for socioeconomic status, these differences were non-significant. While the data from these two large scale studies are valuable pieces of work on the health of New Zealand children, there needs to be some caution in generalising these results to the rest of New Zealand due to differences in socioeconomic levels and low Māori and Pacific representation.

To address these limitations of these previous studies, a Research Group led by Simon Denny from the University of Auckland conducted a large scale national health survey in 2001 entitled *Youth 2000* which included almost 12934 students aged 13-17 years from 389 schools randomly selected from Kaitaia to Invercargill (Adolescent Health Research Group, 2003). The total number of students who agreed to participate in the study was 9,567 from 114 schools, representing 4% of the total secondary school roll in 2001. A large range of questions about student's general health and well being were addressed including emotional health, violence and substance abuse. A follow-up study was conducted in 2007 with preliminary findings due to be released.

Results from the *Youth 2000* study which included a total of 2,325 Maori students, showed that more Māori students (16.2%) reported depressive symptoms than New Zealand Europeans (11.7%) (see Table 1). Māori students were twice as likely to attempt suicide (11.5%) than New Zealand Europeans (5.7%). Alcohol use (weekly and binge drinking) was also higher in Māori students (50.9% for binge drinking) and marijuana use was almost three times higher in Māori students (12.9%) than New Zealand Europeans (4.7%).

Māori females (22.7%) reported significantly more symptoms of depression than boys (9.9%). Suicidal thoughts and attempts were also significantly higher in girls (33.4%, 15.3% respectively) than boys (18.3%, 8.0% respectively). While mental health symptoms were higher in Māori girls, there were differences in alcohol use but marijuana use was higher in Māori boys (Adolescent Health Research Group, 2003).

Table 1. Youth2000 Findings (2003) by Ethnicity

	NZ European %	Māori %	Pacific %	Asian[6] %
Depressive Symptoms[1]	11.7	16.2	18.0	16.8
Suicide Thoughts[2]	22.6	26.0	27.0	22.1
Suicide Attempts[2]	5.7	11.5	13.0	9.3
Alcohol Current [3]	17.5	21.6	13.5	5.4
Alcohol Binge[4]	41.1	50.9	33.0	28.3
Marijuana Use[5]	4.7	12.9	9.0	9.5

1. Reynolds Adolescent Depression Scale (RADS)
2. In the last 12 months
3. In the last month
4. 5 or more drinks in 1 session-within 4hrs
5. Weekly use
6. Total figures estimated from Rasanathan et al., (2006)

Pacific

The Youth2000 study included 1,100 Pacific students, 12% of the total sample of youth who agreed to participate in the 2001 survey. The results indicated that more Pacific students (18%) reported depressive symptoms than New Zealand Europeans (11.7%) (see Table 1). There were no significant differences in suicidal thoughts between Pacific students (27%) and New Zealand Europeans (22.6%). On the other hand, significantly more Pacific students (13%) than New Zealand Europeans had attempted suicide in the previous year. There were no significant differences in alcohol use between Pacific and New Zealand European students (Mila-Schaaf, Robinson, Schaaf, Denny, & Watson, 2008).

As reported for the overall sample and for Māori students, Pacific females reported more depressive symptoms and more suicidal thoughts (34%) and attempts than Pacific males (19%). While more Pacific males drank on a weekly basis, there were no differences between boys and girls in binge drinking (Mila-Schaaf et al., 2008).

Asian

It has been well documented that the Asian youth population in New Zealand is a growing population. Chinese and Indians make up the largest groups (Rasanathan et al., 2006). The term 'Asian', although frequently used to identify a single ethnic group, actually includes an extremely diverse group, with differences in ethnicity, language, socioeconomic status and duration of residence which all contribute to the health status of this group. Despite the significant growth in this population, very little was known about the health needs of young Asians until the Youth2000 study (Rasanathan et al., 2006).

A total of 907 Asian students were surveyed for the Youth2000 study (Rasanathan et al., 2006) and the majority was either born in New Zealand or had been resident for over 5 years. Results showed that more Asian students reported depressive symptoms (16.8%) than New Zealand Europeans (11.7%) (see Table 1). Around 5% of Asian students were current drinkers (alcohol use in the past month), of these, around 28% reported binge drinking. New Zealand born Asian students were

significantly more likely to be current drinkers (43.5%). Asian female students reported significantly higher prevalence for depressive symptoms (21.6%), suicide thoughts (27.5%) and attempts (11.7%) than boys (11.1%, 16.7%, and 4.1% respectively). Asian male students were more likely to be current and binge drinkers and marijuana users (Rasanathan et al., 2006).

2.2.2 Alternative Education (Youth2000 Results)

Alternative Education Schools were set up by the Ministry of Health for students with behavioural problems, repeated expulsions and/or pregnancy/child care responsibilities that preclude them from attending their usual secondary schools. In 2002, approximately 1.6% of the total population of young people aged 13 to 15 years was attending these schools. Research indicates that young people excluded from mainstream education are more likely to have significant health issues. Due to the behavioural problems often associated with this group of young people and the high correlation of youth offending with youth who have been excluded from school some parallels can be drawn between the incidence of mental health and AoD issues identified in the Alternative Education population and the Youth Justice populations. To investigate the health needs of this population, a total of 268 students from Alternative Education Schools from the Northland and Auckland regions were also surveyed as part of the Youth2000 study (Adolescent Health Research Group, 2002). Results confirmed findings that Alternative Education students have significantly more health issues than students from mainstream schools (see Table 2).

Table 2. Youth2000 Results

Youth 2000 Results	General	Alternative Education	General	Alternative Education
	Male %	Male %	Female %	Female %
Depressive Symptoms	8.0	21.1	20.5	35.4
Anxiety	5.4	5.0	4.2	18.0
Suicide Thoughts[1]	16.9	33.9	29.2	43.9
Suicide Attempt	5.1	21.2	12.8	38.3
Alcohol use[2]	13.7	31.3	4.9	49.3
Marijuana Use[2]	6.8	50.4	5.7	55.2
Physically Harmed	16.0	38.4	10.3	42.5
Touched Sexually	17.2	29.3	24.3	52.0

1. Last 12 months
2. Weekly use

2.2.3 Exposure to Violence

The Youth2000 study (Fleming et al., 2007) also looked at young people's experiences with violence in the home and school. Sixteen percent reported witnessing adults physically harming children in the home and 6% witnessed adults harming other adults. Around 20% reported unwanted sexual contact with females reporting significantly higher rates than males (Fleming et al., 2007). Almost half of the students reported being physically hurt by others with slightly higher rates reported by males. Males were harmed by friends and at school while females were harmed by family members

and at home (Fleming et al., 2007). Almost half of the students reported physically hurting others with boys (49%) reporting significantly higher rates than girls (32%). Around 2% had used weapons and had forced others to perform sexual acts against their will. Perpetrators of violence were also more likely to have witnessed or had been victims of violence at home themselves (Fleming et al., 2007). Although gender differences were highlighted in students who had experienced violence, no significant differences were found by age and ethnicity. However, these students reported higher rates of depression, anxiety, suicidality, problem behavior, substance abuse and relationship difficulties (Fleming et al., 2007).

2.2.4 Prevalence of Psychiatric Disorders in Adult Offenders - Implications for Youth

While studies regarding the prevalence of mental health disorders for the youth offender population in New Zealand are limited, studies conducted on the adult offender population do highlight that the trajectory of life prevalent mental health and AoD issues is reported to have commenced during adolescence for many offenders.

In a study, (Bushnell & Bakker, 1997) assessing alcohol and drug disorders among new male arrivals at a medium/minimum security prison in Christchurch, found that 81% reported a lifetime prevalence of alcohol disorder and 39% reported 6 month prevalence prior to incarceration. In 1995, Brinded, Stevens, Mulder, Fairley, Malcolm and Wells (1999) conducted the very first pilot prevalence study in New Zealand on a sample of 183 remanded and sentenced adults (remand males=45; sentenced males=101; sentenced females=37) from four Christchurch prisons. Using a structured diagnostic interview tool (Composite International Diagnostic Interview–Automated) they found high rates of current and lifetime prevalence rates for most of the major psychiatric diagnoses compared to community samples. Both remanded and sentenced prisoners had the highest lifetime prevalence for alcohol dependence, non-alcohol psychoactive substance dependence, simple and social phobias and major depressive disorders.

The lifetime prevalence for both remanded and sentenced male prisoners for alcohol dependence was 74%, 64% for non-alcohol psychoactive substance dependence and 26% for both simple and social phobias and 25% major depressive episodes. Although the life prevalence rates for these disorders for both remanded and sentenced male prisoners were similar, remanded males reported much higher rates than sentenced prisoners, indicating greater psychiatric needs (Brinded et al., 1999).

Sentenced females had the highest lifetime prevalence for alcohol dependence (51%), major depressive disorder (48%) and similar rates (41%) for non-alcohol psychoactive substance dependence and simple phobias (Brinded et al., 1999).

Brinded and colleagues (Brinded, Simpson, Laidlaw, Fairley, & Malcolm, 2001) replicated their pilot study on over 1,000 remand and sentenced inmates from all prisons in New Zealand. All women and remand inmates were included while sentenced inmates were randomly selected. Forty-one percent of the total sample reported at least one psychiatric disorder in the last month which were double

the rates reported for a community sample (Oakely-Browne, Joyce, Wells, Bushnell, & Hornblow, 1989) (see Table 3). Disorders of significance included post-traumatic stress disorder with remanded inmates reporting the highest rates (54%) closely followed by sentenced females (52%) and sentenced males (29%) Although sentenced male rates were lower than remand male and sentenced female rates, they were higher than community rates reported in Oakely Browne et al., (1989) study.

Table 3. Adult Prison Study

Adult Prison Study	General Population[1] N=1489	NZ National Study[2] N=1243
Any Disorder	**22.5**	**40.9**
Substance Use Disorders	**7.4**	**14.6**
Alcohol Dependence	6.9	5.3
Drug Abuse	0.9	9.3
Major Depressive Disorder	4.1	8.3

1. Christchurch Epidemiology Study (Oakely-Browne et al., (1989)
2. NZ Prison Study (Brinded et al., 2001)

Note: Data reported is based on one month prevalence rates

Sentenced females reported high rates of PTSD (16.6%) followed by major depression (11.1%). Remanded males reported high rates of major depression (10.7%), post-traumatic disorders (9.5%) and cannabis abuse (8.6%). Sentenced males reported high rates for post-traumatic disorders (8.5%), major depression (5.9%) and obsessive-compulsive disorders (4.8%).

In Simpson's study (Simpson, Brinded, Fairley, Laidlaw, & Malcolm, 2003), 13% of prisoners were under 20 years of age and were proportionally similar in ethnicity as the total prison population (Māori=50.9%; Pacific=16.8%; Pakeha/Other=32.4%). When looking at rates of disorder for prison inmates who were younger than 18 years of age, they found similar rates of disorder as the older age group (see Table 4). Simpson et al., (2003) also reported prevalence rates for prisoners under the age of 20 years by ethnicity and found no significant differences in current or lifetime prevalence rates by ethnicity however there was a significant lifetime prevalence of substance abuse/dependence in the European/Other ethnic group (see Table 4).

Māori continue to be over-represented in the prison population constituting approximately half of the prison population in New Zealand (Brinded et al., 2001; Department of Corrections, 2007; Simpson et al., 2003). Simpson et al., (2003) reported prevalence rates by ethnicity on the sample of prison inmates used in Brinded's 1997 study (Brinded et al., 2001). Māori made up 48%, Pacific Island 8% and European/Other 43.3% of the total sample. They found no significant differences in lifetime prevalence of psychiatric disorder by ethnicity however current prevalence rates showed that major depression was significantly more prevalent in the European/Other group than Māori or Pacific (see Table 4).

Table 4. Adult Prison Study: Disorders

Adult Inmates	Lifetime %				Current[1] %			
Disorder	**Māori N=622**	**Pacific N=107**	**European/Other N=556**	**Total N=1285**	**Māori N=622**	**Pacific N=556**	**European/Other N=556**	**Total N=1285**
Alcohol	79.5	68	72.4	75.4	-	-	-	-
Drug	37.6	29.7	43.1	39.3	-	-	-	-
PTSD	22.2	27.7	23.3	23.2	8.9	10.5	11.3	9.4
Major Depression	20.9	12.6	18.7	23.6	6.5	4.2	10.7	5.2
Phobias	19.1	21.4	23.8	21.3	6.3	6.3	9.4	7.1
Suicide Ideation	-	-	-	-	16.3	24.2	23.6	20.5

Source: Simpson et al., (2003)
1. One Month Prevalence Rates

2.3 SUMMARY

Prevalence rates of mental health issues of between 40% and 60% highlight that mental health and AoD issues cannot be ignored in the Youth Offending population. The incidence of psychiatric disorders and AoD issues are even more pronounced among those youth who are detained or incarcerated. In terms of gender differences between the sexes, girls have an equal or greater prevalence of mental disorders. The differences were more pronounced in detained youth than in the community with detained female offenders reporting greater mental health symptoms. This difference was also evident in the only local study on detained youth. The findings do highlight that girls and boys may have different pathways to delinquent behaviour. For boys, problem behaviour is usually the result of delinquent lifestyles and peer influences, while for girls it results from traumatic life experiences.

Although New Zealand studies have focused on prevalence in the general youth population, if we consider the international literature which consistently finds that the prevalence of Mental Health Disorders with youth who offend is significantly higher than the general population, the findings do shed light on the level of need of youth involved in youth justice. As already highlighted Māori are disproportionately represented in Youth Justice. The prevalence of mental health issues (conduct disorder, mood disorders, psychosis, PTSD) for Māori in the general population is unfortunately almost double that of Non-Māori, with Māori males in the 14-18 year age groups more likely than non-Māori to have major alcohol and drug problems and dependency states. For many young people this behaviour ceases during adolescence. There are however others who as adult offenders will have a lifetime prevalence of substance use, particularly alcohol. The few New Zealand studies

on the adult offending population also confirm that the prevalence of any disorder is more than twice that of the general population. This highlights that in New Zealand there is a significant need to ensure youth who offend have access to mental health and AoD services.

3.0 SCREENING & ASSESSMENT

3.1 DEFINITIONS & ISSUES

One key issue in the Youth Forensic arena is defining "mental illness" as it is a less defined term for young people (Grisso, 1999). The difficulty is extending the categorical approach currently taken in conceptualising and defining mental health into a developmentally sensitive population, and the assumptions associated with mental illness and the categorical system (Lennings, 2003). Heaston, Jenuwine, Walsh and Griffin state that "mental health" can be a broad or narrow term and can include issues such as suicidality, risk of violence, psychosis, major mental illness, general mental illness, substance abuse, sexual offending, and cognitive functioning – all of which require the provider to employ different tools and questions (2003, p. 148). As already highlighted, youth who offend are 2 – 3 times more likely to present with mental health /AoD issues. Grisso and Underwood (2004) point out that the growing awareness of these youth needs and the impact they have on the juvenile justice and mental health systems has prompted concern as to how to provide appropriate treatment services. The authors also add that responding to these needs however requires accurate identification of the youth's mental, emotional and substance use problems.

In overcoming issues highlighted above Grisso and Underwood (2004) outline several considerations. These are:

Psychiatric Disorders - One approach in screening and assessment is the attempt to identify youth who meet the criteria for a diagnosis as defined in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) (American Psychiatric Association, 2000). The problem is that disorders of adolescence do not fit easily in homogenous classes as do disorders of adulthood. In fact "co-morbidity (co-occurrence) of disorders is the rule rather than the exception among adolescents" (Grisso & Underwood, 2004, p. 7). These authors also cite Mash and Barkley (1996) who found co-morbidity of substance use with other disorders. This is also the case with co-morbidity of conduct disorder with other disorders.

Symptoms & Problems Behaviours - This approach acknowledges that there are many symptoms and problem behaviours which may be associated with more than one disorder. Consequently the emphasis is on identifying mental and emotional disturbances or potential symptoms without requiring an actual diagnosis. Grisso and Underwood (2004) highlight that this may be sufficient to assist the Juvenile Justice Systems to respond appropriately.

Family Characteristics - The key difference between adults and adolescents is their dependency on family and the influence their caregivers weaknesses and strengths have on them. It is therefore important that screening and assessment acknowledges this developmental context and obtains relevant information about the family which can inform treatment planning. The importance of family focused intervention will be covered later in this review.

Strengths **-** Grisso and Underwood (2004) point out that many assessment tools focus on deficits and disorders rather than identifying the youth's capabilities. The young person and their family's strengths however provide a starting point on which treatment and rehabilitation can be built.

Other considerations include:

- Screening and assessment of whom (age, gender, ethnicity)?
- Screening and assessment in what context (time constraints, financial cost, expertise of personnel, information sources, the screening and assessment relationship, purpose of screening and assessment)?

Another key issue is the use of the terms "screening" and "assessment" as separate events, utilising a range of tools is potentially confusing, given that "assessment" is usually the term used in behavioural sciences to refer to any measurement of psychological characteristics (Grisso & Underwood, 2004).

Despite these challenges the literature does however predominantly refer to "screening" and "assessment" as separate events and tools; screening being defined by two unique characteristics, that is:

1. the screen being applied to every young person at entry into the youth justice system;
2. the screen focusing on identification of conditions/issues that require an immediate response such as suicide risk, AoD issues, or the need for more specific information relating to the young person's mental health (Trupin & Boesky, 1999).

As Grisso and Underwood (2004) highlights, the screening is a triage process and is not intended to provide an accurate psychiatric diagnosis, but rather to flag the need for an immediate response. This may include closer monitoring by staff and/or identify the need for further evaluation. Emergent risk screening is "identifying potential risk for harm to self and others, and mental health crisis" (Wasserman et al., 2003, p. 754). Of note, Wasserman and colleagues separate emergent risk screening from screening/assessment of mental health service needs and a comprehensive mental health assessment.

Assessment is defined as being performed selectively with some young people, and generally follows on as a result of the outcome of the screen, and is a more individualised, more thorough review of the young person's mental health. Desai, Goulet, Robbins, Chapman, Migdole and Hoge (2006) identify that the purpose of assessment is to:

1. inform treatment decisions inside the facility
2. perform risk management of potential behavioural problems
3. assist in community referrals for care.

3.2 CHALLENGES

One of the key challenges facing clinicians working with youth is the dilemma of whether there are mental health concerns, fluctuations in severity of symptoms, or just typical development? "The fact that two-thirds of youth in detention centers meet criteria for a psychiatric disorder does not mean that they are seriously in need of psychiatric treatment" (Grisso, 2007). Seagrave and Grisso (2002) recognise that a number of youth forensic screening and assessment tools are currently only being used in research, but warn of the potential "false positive dilemma" between identification of psychopathic traits and transient developmental phenomena in young offenders – that is, use and interpretation of assessment/screening tools to identify youth at risk of becoming psychopathic adults, when they may in fact be demonstrating extremes of "normal adolescent behaviour". True positive (identification of youth with serious conduct problems who also exhibit psychopathic tendencies) and true negative (identification of youth with serious conduct problems who do not exhibit psychopathic tendencies) phenomena are also explored. As such, and following a considered review of studies relating to three identified assessments, the authors have developed standards for acceptance of psychopathy measures in juvenile forensic assessments, including:

- Developmental time frames and psychopathy ratings
- Temporal and contextual validity
- Corroboration in forensic assessment
- Predictive capacity
- Base rates and cut off scores
- Co-morbidity
- Ethnicity

Of note, Lennings (2003, p.4) states that by 17, we can confidently assume that a young person can understand the implications of his/her behaviour and be responsible for it, but that prior to this, young people demonstrate reasoning, emotional and social competencies more similar to children than adults.

Getting it done vs. doing it right

When services are offered incentives to complete mental health screening with all young offenders, decisions about which is the right tool and process; concerns related to the potential consequences of sharing of information and the safety of the young person's information; how, when and by whom, can be lost (Grisso, 2007).

Some of the literature focuses on assessment as a predictor of psychopathy or recidivism rather than identifying genuine mental health issues for young offenders, although the key players in the field,

Grisso, Wasserman et al, (2003) seem very committed to best practice mental health services for young offenders. Wasserman however has expressed concerns around the availability of evidence based instruments that systematically obtain information about family medical and psychiatric history, service history, and mental status.

One of the general principles in the assessment of risk in adolescents is to gather accurate information from several sources (family, teachers, and patient information) due to the potential inaccuracies reported by the offenders via self report methods (Stathis & Martin, 2004). However this method is often challenged by the lack of availability or lack of information from these various sources.

3.3 BEST PRACTICE

The American Academy of Child and Adolescent Psychiatry (AACAP) Practice Parameters on the assessment and treatment of youth in juvenile detention and correctional facilities has identified the several challenges for clinicians in working in juvenile justice settings, which is contrast to the usual clinic or hospital setting (Penn & Thomas, 2004). The client group can be aged between 9 and 20 years, although in New Zealand this is more commonly between 12 and 17 years. The chronological and developmental maturity combined with other factors such as offence status, the stage of Court proceedings, their legal history, gang affiliation, family and psychosocial resources, attitudes towards the justice process and associated medical and mental health services as well as cultural, has multiple clinical implications. Consequently the clinician faces considerable challenges in providing effective consultation and evaluations. To address these issues the American Academy of Child and Adolescent Psychiatry Practice Parameter (Penn et al., 2004) on the assessment and treatment of youth in juvenile detention and correctional facilities recommends that (abridged):

1. [Mental Heath] clinicians should have an awareness and understanding of the youth justice system and the issues that affect it.

2. All youth entering a facility should be screened for mental health and substance use disorders, suicide risk factors and behaviours, and other emotional or behavioural problems.

3. All youth held in a facility should receive continued monitoring for mental and substance disorders, emotional or behavioural problems, and especially suicide risk.

4. Any youth with recent/current suicidal ideation, attempts, or symptoms of a mental health or substance-related disorder during the period of incarceration should be referred for further evaluation by a mental health clinician.

   Recommendation **5, 6,** and **10** relate to the safety of the clinician and the security of the young person, and role boundaries.

7. Adequate time and resources are required to perform a mental health assessment of a young person, utilising a bio-psychosocial approach with special attention to culture, family, gender and other relevant youth issues.

8. Clinicians should be alert for symptoms, behaviours and other clinical presentations of malingering secondary gain, and manipulative behaviours.

9. All clinically refereed youth should be evaluated for current and future risk behaviour.

Recommendation **11** relates to policies and procedures around seclusion and restriction, while recommendation **12** relates to the use of psychotropic medication.

13. Clinicians should be involved in the development, implementation, and reassessment of a young person's individualised treatment plan, and planning for community re-entry.

Recommendation **14** relates to clinicians being financially, fiscally, agency, and role aware.

3.4 SCREENING

Screening should be performed for all youth at the earliest point of contact with the juvenile justice system. Wasserman et al (2003) recommend emergent risk screening occurs within the first 24 hours. Grisso and Underwood (2004) and the AACAP (Penn et al., 2004) recommend selection of a screening tool that requires 10-30 minutes to administer, can be administered by someone who does not have advanced training to mental health evaluations, are standardised and highly structured, and free from potential racial, ethnic, and socio-economic biases.

Due to the complex and changing nature of mental health needs due to time and circumstances, youth offenders need to be reassessed during transition within the justice system and services should be tailored to meet these changing needs (Harrington et al., 2005).

3.5 ASSESSMENT

Assessments should be performed with youth who require further evaluation. Desai et al., (2006) and the OJJDP (Grisso & Underwood, 2004) recommend that assessment occurs within seven days of admission into detention or residential settings. Care should be taken to identify the most appropriate instruments, including careful consideration of suitability and appropriateness for population seen; established reliability and validity; contextual factors; and psychometric properties and adequacies. Further to this, needs and risk levels should be appropriately balanced.

Recommendations around mental health assessment drawn from Wasserman, Ko and McReynolds (2004, pp. 5-6) are that assessments should be:

- Based on multiple methods of evaluation and on the input of multiple informants.

- Based on reliable and valid instruments.
- Inclusive of parental input.
- Focused on recent symptoms to determine current treatment needs.
- Used again! Reassessment should occur periodically.

Structured interviews are deemed more reliable than clinical interviews as clients may often be less honest in their self report in a clinical interview (Otto et al., 1992). Heaston, Jenuwine, Walsh and Griffin (2003) take a more pragmatic approach and split the assessment process into identification of what to assess, how to assess, how to use assessment findings, and where to refer.

Given the high prevalence of Substance Use Disorders (SUDs) in the youth justice population, screening and assessment for substance use and SUDs should be implemented across all sectors of care to reduce negative effects of substance involvement on mental disorders and functioning and to increase effectiveness of other mental health services (Aarons et al., 2001). In 1999, as part of the Treatment Improvement Series, Winters developed a protocol (available online at http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.chapter.54841) for the screening and assessment of substance use in adolescents (Winters, 1999). The protocol aims to provide general guidelines for evaluating, developing, and administering screenings and assessment instruments and processes for those who screen and assess young people for substance use disorders; inform a wide range of people about the processes, methods, and tools available to screen for potential substance use problems in adolescents; discuss strategies and accepted techniques that can be used to detect related problems in the young person's life and to see that these problems are dealt with during the primary intervention for a substance use disorder; and to outline a screening and assessment system designed to identify those youths with potential substance use problems in various settings. While the protocol cannot endorse specific assessment and screening tools, and summarisation of the report does not do justice to the depth and breadth of insights and recommendations offered in the report, Winters (1999) highlights important features of individual screening and assessment instruments for young people, including:

- High test-retest reliability.
- Evidence of convergent validity (i.e., the instrument is strongly correlated with other instruments that purport to measure similar constructs).
- Demonstrated ability to predict relevant criteria, such as school performance, performance in treatment, and substance use relapse.
- Availability of normative data for representative samples based on, for example, age, race, gender, and different types of settings (e.g., school, detention centre, and drug clinic).
- The ability to measure meaningful behavioural and attitude changes over time.

Winters (1999) also suggests principles which should be kept in mind when assessing families and family members such as:

- Definitions of family: Adolescents, the law, and society may define and describe “family” in non-traditional ways. Treatment providers should allow adolescents to identify and acknowledge the people they would describe as "family," even though they may not live with the adolescent.

- Respect for cultural and ethnic differences in family structures.

- Young people with substance use disorders may be victims of family discord. The treatment provider should be aware that the core problem may reside outside the adolescent and that the young person's problems are a symptom of this environmental distress.

In addition, Deas, Riggs, Langenbucher, Goldman and Brown (2000) in their round-up of identified presentations from the 1999 Research Society on Alcoholism symposium, stress the importance of considering the developmental needs of young people when conducting substance abuse assessments, thus ensuring that adolescents are not assessed and treated as adults. The authors recommend a range of developmental approaches to assessment, including targeting of a number of determining factors and problems through a comprehensive and systematic assessment of the young person, family factors and influences, peer factors and influences, and the likelihood of multi-substance abuse, through a DSM-IV diagnostic lens (Deas et al., 2000, p. 232). A range of developmental assessments are briefly reviewed, with a urine analysis recommended as an additional measure of current drug use and treatment response, and the Adolescent Obsessive Compulsive Drinking Scale (developed by the lead author) reviewed in detail.

The relative success of extracting any key information however depends on the extent to which the assessor can engage the young person. This is compounded by the possibility that when young people present for AoD screening and assessment, they can be under some form of coercion or insistence from family, school, and/or the Police – if they present at all. Wells, Horwood and Fergusson (2007), in their review of why young adults (n=1003) do and don’t seek help for alcohol problems in New Zealand, found “denial of the severity of the problem” to be the primary reason as to why young people did not seek help for alcohol problems (95.9%), followed closely by those who thought the problem would resolve by itself (28.8%) and those who did not think to ask for help (25.3%). Of the 26 participants who did seek treatment support, 73% did so because they felt they needed help, while 12% were ordered to by the Court or police.

3.6 CULTURAL ISSUES

The international literature highlights minority groups disproportionately represented (67 %) in the Juvenile or Youth Justice system (Penn et al., 2004). In New Zealand, Māori are similarly represented (Canterbury Suicide Project). Despite this, there is limited research on assessment processes with respect to Māori, however a number of factors associated with Māori youth offending have been identified in a survey of young Māori, families, and community informants (Owen, 2001). Despite the clear need for culturally sensitive responses, no specific protocols for minority groups have been specified in the literature.

3.7 SCREENING & ASSESSMENT TOOLS

In selecting screening and assessment tools Grisso and Underwood (2004) suggests three considerations. These are: the type of information being sought; characteristics of the youth involved; and the context in which the screening or assessment should take place. Wasserman et al (2003) recommend the selection of evidence based, scientifically sound screens that are well-validated and reliable, and that assessment and screening processes in youth justice settings are standardised. The APA Guidelines on Psychiatric Services in Jails and Prisons (Kayatekin, 2000) also recommend standardisation of mental health screening procedures and instruments across settings for systematic documentation.

Sensitivity (a tool's ability to identify true positives) and specificity (a tool's ability to minimise false positives) are two key considerations in screening and assessment for mental health issues in youth offenders (Wasserman et al., 2003). However, Heaston, Jenuwine, Walsh, and Griffin highlight that no instrument can measure absolute truth and therefore, no existing instrument is essential (2003, p. 148) while conceding that some measures do have potential advantages because they are compiled, published, validated and used by others.

Evidence based assessment of youth sexual misconduct is a gap in instrument development, as identified by the AACAP (Shaw & Work Group on Quality Issues, 1999). However, two risk assessment tools are identified by the London Department of Health (Department of Health - Health Care Partnerships Directorate and Home Office - Youth Justice and Children Team, 2006) – the Juvenile Sex Offender Assessment Protocol (J-SOAP) (Prentky, Harris, Frizzell, & Righthand, 2000) and the Estimate of Risk of Adolescent Sexual Offence Recidivism (ERASOR) (Worling & Curwen, 2001)– and while these tools are in development, early research aimed to validate the tools has shown encouraging results (Department of Health - Health Care Partnerships Directorate and Home Office - Youth Justice and Children Team, 2006).

Table 5. Overview of Screening Instruments (15 minutes or less; Paper-Pencil or Structured Interview; No Clinician Training)

	Time (mins)	Age Range	Research (Juvenile Justice)	Sub. Use	Suicide Risk	Symptoms of Disorder	Multiple Scales
Substance Abuse Only							
Adolescent Substance Abuse Screening Instrument	15	12-18	x	x			x
Symptoms of Disorder							
Children's' Depression Inventory	10-20	6-17	x			x	x
Massachusetts Youth Screening Instrument (2nd Version)	10-15	12-17	x	x	x	x	x
Post-traumatic Stress Diagnostic Scale	10-15	17+				x	x
Reynolds Adolescent Depression Scale	5-20	13-18				x	
Suicide Ideation Questionnaire	5-10	12-18	x		x		
Problems/Strengths/Needs							
Behavioural and Emotional Rating Scale	10-15	5-18	x				x
Personal Experience Screening Questionnaire	15-20	12-18	x	x			x
Resiliency Attitude Scale	10-15	13-17					x
Cognitive Abilities							
Peabody Picture Vocabulary Test	10-15	2+	x				
Wechsler Abbreviated Scales of Intelligence	15-30	6+	x				x

From Grisso and Underwood,(2004). Screening and assessing mental health and substance use disorders among youth in the Juvenile Justice System.

Table 6. Overview of Assessment Instruments (More than 15 minutes; May Require Clinical Experience)

	Time (mins)	Age Range	Research (Juvenile Justice)	Sub. Use	Suicide Risk	Symptoms of Disorder	Multiple Scales
Substance Use as Primary Focus							
American Drug and Alcohol Survey	20-25	9-18		x		x	x
Comprehensive Addiction Severity Index for Adolescents	45-90	12-18	x	x		x	x
Drug Use Screening Inventory - Revised	20-40	12-17	x	x		x	x
Juvenile Automated Substance Abuse Evaluation	30-45	11-18	x	x		x	x
Symptoms of Disorder							
Adolescent Diagnostic Interview	45-60	12-18	x	x		x	x
Adolescent Psychopathology Scale	45-60	12-19		x		x	x
Brief Psychiatric Rating Scales for Children	20	3-17			x	x	x
Carlson Psychological Survey	15	14+	x	x		x	x
Child and Adolescent Needs and Strengths – Mental Health	20	1-18	x	x	x	x	x
Child Behavior Checklist (Parent Form)	20-25	4-18	x			x	x
Child Behavior Checklist (Teacher Report Form)	20-25	4-18	x			x	x
Child Behavior Checklist (Youth Self-Report)	20-25	4-18	x			x	x
Devereux Scales of Mental Disorders	15	5-18	x			x	x
Diagnostic Interview Schedule for Children –IV (Voice DISC)	60	9-17	x	x	x	x	x
Jesness Inventory	20-30	13-20	x			x	x
Millon Adolescent Clinical Inventory	45-75	13-19	x	x	x	x	x
Minnesota Multiphasic Personality Inventory - Adolescent	60-90	14-18	x			x	X
Practical Adolescent Dual Diagnostic Interview	20-40	13-18	x	x		x	X
Revised Behavior Problem Checklist	30-45	5-18	x			x	X
State-Trait Anger Expression Inventory	15	13+				x	X
Suicide Probability Scale	15-20	13+	x		x	x	X

Symptom Checklist-90-Revised	15-20	13+				x	X
Trauma Symptom Checklist for Children	15-20	8-16	x			x	X
Problems/Strengths/Needs							
Child and Adolescent Functional Assessment Scale	10-30	4-14	x	x	x		X
Child and Adolescent Needs and Strengths – Juvenile Justice	20	4-21	x	x	x	x	X
Connors' Rating Scales - Revised	15-30	3-17	x				X
Family Adaptability and Cohesion Evaluation Scales II	30-45	12+					X
Inventory of Suicide Ideation	10-15	13-18	x		X		
Matson Evaluation of Social Skills for Youngsters	20	4-18	x				X
Personality Inventory for Youth	30-60	8-18	x			x	X
Problem Oriented Screening Instrument for Teenagers	20-25	12-19	x	X			X
Relationship with Family of Origin Scale	20-30	15+	x				X
Sixteen personality Factor Questionnaire	45-60	16+					X
Structured Pediatric Psychosocial Interview	20	5-19	x				X
Vineland Adaptive Behavior Scale	20-90	1-18	x				X
Youth Level of Service-Case Management Inventory	30-40	12-16	x	X			x
Cognitive Abilities							
Kaufman Brief Intelligence Test	15-30	4+	x				X
Peabody Individual Achievement Test - Revised	60	5-18	x				X
Quick Neurological Screening Test II	20-30	5-18	x				X
Stanford-Binet Intelligence Scale	45-90	2-23	x				X
Wechsler Intelligence Scales	60-120	6-16/ 16+	x				x
Wide Range Achievement Test - III	15-30	5+	x				x

From Grisso and Underwood (2004). Screening and assessing mental health and substance use disorders among youth in the Juvenile Justice System.

3.8 INTERPRETATION OF SCREENING & ASSESSMENT TABLES

As the prevalence studies show as many as 65% of youths in the juvenile justice system has diagnosable disorders (Garland et al., 2001; Teplin et al., 2002; Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002).

Recommendations for evidence-based general screening tools, drawn from Wasserman et al (2003), include:

- Youth Self Report (Achenbach, 1991).
- Symptom Checklist-90-Revised (Derogatis, 1977).
- Brief Symptom Inventory (Derogatis, 1993).
- The Massachusetts Youth Screening Assessment -2 (Grisso, Barnum, Fletcher, Cauffman, & Peuschold, 2001).
- The Problem Oriented Screening Inventory (Rahdert, 1991).
- Child and Adolescent Functional Assessment Scale (Hodges & Wong, 1996).

Recommendations for evidence based screening/assessment of mental health service needs, drawn from Wasserman et al (2003), include:

- Diagnostic Interview Schedule for Children – Version IV (Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000).
- Diagnostic Interview for Children and Adolescents (Reich, 2000).

Recommendations for evidence based comprehensive assessments of a young person's mental health needs, drawn from Wasserman et al (2003), include parent interview, family history and service history. Wasserman et al. (2003) express concerns around the availability of evidence based instruments that systematically obtain information about family medical and psychiatric history, service history, and mental status.

3.9 DEVELOPMENTS IN NEW ZEALAND

In addition to the battery of tests already outlined, adolescents involved with various services and who may be involved with the Youth Justice System may be screened for risk of emotional or behavioural disturbance, substance misuse, offending and antisocial behaviour. Outlined below are the screening tools used by various sectors.

Child, Youth & Family (Ministry of Social Development)

The Cage-Kessler is a brief screening tool often used in Child Youth and Family services in New Zealand and is used by social workers particularly if the young person has been detained. There appears to be very little evidence available which attests to the effectiveness, reliability or validity of either component of the tool with adolescent populations; however it is mentioned in this report due to its inclusion in the Towards Wellbeing report and its prevalence in New Zealand social services. It is currently used to screen for substance abuse and depression. Additionally, the Kessler 10-Item Scale has been evaluated with adult populations with promising results for the general screening of recent depression and depression severity, with some concerns noted regarding comparison with other measures of depression, content validity, and issues around the identification of optimal cut-offs (Cairney, Veldhuizen, Wade, Kurdyak, & Streiner, 2007).

The above screen has been used in conjunction with Te Kahu o Te Aorangi - Towards Wellbeing: Responding to the Needs of Young People (Child Youth and Family, 2000). “Towards Wellbeing” is an intensive multi-modal programme aimed at recognising and providing effective interventions for young people at risk of adverse outcomes. The programme includes the development of best practice guidelines in 2000 (based on earlier guidelines developed for schools); an rigorous integration of training, practice and electronic case recording into the CYF social work system; and the development and implementation of a suicide monitoring programme in 2002 (Ellis & Smith, 2006). The Wellington School of Medicine operated TWB between 2001 and 2005 and in the final year of the pilot programme, sought feedback from national office CYF social workers about their knowledge of the programme, use and satisfaction with the TWB tools, satisfaction with aspects of the TWB service, and suggested improvements (Ellis & Smith, 2006). While the survey response rate was low, the evaluation found that there was generally a high degree of satisfaction with the TWB programme during the survey period, with suggested improvements including: improved access to training and guidelines for frontline staff; coordination of social work processes; clarification of the consultative role of the programme; update and review of the guidelines and assessment tools; further exploration of strategies to improve access into CAMH services; and further exploration of the appropriate use of screening and evaluation tools in an effective and efficient manner. The TWB Service is now provided by a private contractor.

Youth Aid (Police)

The **Youth Offending Risk Screening Tool (YORST)** is a screening tool developed to systematically identify young people who are most likely to persist with offending and antisocial behaviour (Atkinson, 2007). Preliminary findings drawn from a pilot of the tool in Bay Of Plenty and Waikato police districts aimed to identify specific information about the children and young people being screened and the offending needs of this group. However, additional benefits of the YORST included identification that the YORST facilitates communication between parties; allows for more consistent and transparent decision making; guides a more targeted response; allows for evaluation and monitoring of change for a young person; and provides valuable information about the nature of the offending population in the identified districts (Atkinson, 2007). A national rollout of the YORST and more rigorous research around the validity and reliability of the tool are planned (Atkinson, 2007).

Child & Adolescent Community Mental Health Services (District Health Boards)

The Strengths and Difficulties Questionnaire (SDQ) which was developed in the UK by Robert Goodman (1997) is being increasingly used. The SDQ is a very well known series of brief assessment tools, freely available for download at www.sdqinfo.com. While there is little rigorous information available attesting to the utility of the SDQ with youth offending populations, the ease of availability of the tool, as well as numerous studies measuring effectiveness, reliability, and validity (although many of these have been undertaken by/with the developer), makes this tool an excellent choice for mental health screening in youth forensics. Mathai, Anderson, and Bourne (2002) evaluated the effectiveness of the SDQ (as compared to HoNOSCA) as a screening tool prior to admission to an Australian CAMH service and found the SDQ to be sensitive to detecting emotional and behavioural problems in children and adolescents aged 11 and older. Additionally, moderate, although significant, correlations were found between the SDQ and HoNOSCA.

Adolescent AoD & Child & Adolescent Community Mental Health Services (District Health Boards)

The Substances and Choices Scale (SACS) is a new adolescent AoD screening and outcome measurement instrument developed in New Zealand by Christie, Marsh, Sheridan, Wheeler, Suaalii-Sauni, Black and Butler (2007). A one-page pencil and paper quick (5 minutes) self-report questionnaire, the SACS is designed to be administered by health professionals who are working with young people aged 13-18 years. While it can be used alone, it is in a similar format to the Strengths and Difficulties Questionnaire (SDQ) so the two instruments can be used together. The authors advise that the combined SDQ and the SACS will assist in identifying young people at risk and assessing their needs at first presentation in order to determine best treatment options. Most importantly the combination of tools can measure outcome as young people progress through the treatment process.

The SACS was piloted in a combined clinical and community (secondary school pupils) population. Item analysis (using discriminant function analysis) of the participants' responses was carried out to ascertain both the validity of the scoring system and the relative discriminant values of each item. Using these results, and with reference to the literature, the final combination of ten SACS items was obtained. In terms of ability to detect change, the results found the SACS to be reliable, valid and

highly acceptable to young people and clinicians. It was also found to measure change over time effectively which highlights its value as an outcome measurement instrument (Christie et al., 2007).

Youth Justice (Ministries of Social Development & Justice)

The ASSET (Youth Offending Team Assessment Tool) is a comprehensive and structured needs assessment tool used by Youth Offending Teams in England and Wales (Youth Justice Board, 2006). There has been some interest in the application of this tool within New Zealand Youth Justice.

The tool aims to review a young person's offending history and identify factors or circumstances which may have contributed to such behaviour. The information gathered from ASSET can be used to inform court reports so that appropriate intervention programmes can be drawn up. It will also highlight any particular needs or difficulties the young person has, so that these may also be addressed, and helps to measure changes in needs and reoffending risk over time.

An evaluation of the reliability and validity of the ASSET tool (Baker, Jones, Roberts, & Merrington, 2003) found that ASSET's ability to predict the likelihood of a young offender being re-convicted was deemed "encouraging", with the configuration of the ASSET scoring system at that time, able to predict re-conviction with 67% accuracy. This finding was particularly encouraging given the immense difficulty reported in predicting the future behaviour of young people who are at an early stage in their offending careers. The accuracy of ASSET's ability to predict the risk of reconviction was also maintained in relation to specific groups such as females, minority ethnic young people, younger age groups and those on final warnings. It was also found that the different groups of professionals scored similar groups of young people in an acceptably consistent way. Research from one YOT provided further evidence that individuals assessed by more than one practitioner (whilst at the same stage in the youth justice system there were greater differences between scores, this could usually be explained by real changes in a young person's circumstances).

Based on these evaluation findings, amendments were made to the scoring system to improve the predictive validity of ASSET, a standard format for intervention plans leading directly from ASSET profiles was drafted and piloted, and a shortened version of ASSET was designed for use at the Final Warning stage. Recommendations were also made around strategies to improve development of the link between assessment and supervision planning and the provision of additional guidelines for YOTs in interpreting assessment scores (Baker et al., 2003).

Of additional interest to this review is the accompanying Mental Health Screening Tool published by the Youth Justice Board in 2005 (Harrington et al., 2005). The tool is comprised of the Mental Health Screening Questionnaire Interview for Adolescents (SQIFA) and the Mental Health Screening Interview for Adolescents (SIFA), both of which were added to ASSET in 2005. The aim of these tools is to improve the ability of youth justice staff (YOTs) to identify young people with mental health needs and to provide both appropriate support and referral to a range of child and adolescent mental health services. The tool ensures a stepwise approach in which adolescents are initially screened by YOT staff (using the SIFA) and if a positive result a healthcare profession will then conduct a semi structured interview (using the SQIFA), If the result is positive a referral to

appropriate mental health and/or AoD services will be made. The tool also has provision for reassessment 4 – 6 weeks later. The Youth Justice Board has made an ongoing commitment to monitor and evaluate the effectiveness of the Screening Tool and to make appropriate adjustments as required and plans to consider electronic development of the tool, dependent on evaluation findings.

3.10 TRAINING

Wasserman et al. (2003) also recommend ensuring that justice and mental health staff have access to professional training in assessment and screening, and are appropriately supervised. Training for gender specific issues is of paramount importance given such high rates of mental health issues for girls. Training in recognising trauma in girls would help reduce further injury to girls and staff and to improve wellbeing of the girls. Gender specific training in the screening and assessment of girls is also important and questions for girls should include relationship and family status, presence of children and sexual activity. Screening and assessment should be sensitive to the identification of affective disorders (Veysey, 2003).

3.11 SUMMARY

Mental illness is less defined in adolescents than it is in adults. In fact, for this group the notion of mental illness can be broad and include issues such as suicidality, substance abuse, risk of violence, conduct issues in addition to more obvious clinical disorders. With as many as 75% of youth involved with the Youth or Juvenile Justice system exhibiting mental health and/or AoD issues there is a need to at least screen and, where necessary, comprehensively assessing a young person to inform treatment decisions, manage potential risk and enable community referrals.

While assessment will ideally inform decision making, youth forensic assessments are often asked to identify youth at risk of becoming psychopathic adults. The dilemma faced by clinicians is whether or not the youth may in fact be just be demonstrating extremes of “normal adolescent behaviour. A key principle of assessment of risk in adolescents is therefore to gather accurate information from several sources (family, teachers, and patient information), due to the potential inaccuracies reported by the youthful offenders. Unfortunately this is often challenged by the lack of availability or lack of information from these various sources.

To aid decision making the right tool and process is vital. This should include the selection of evidence based, scientifically sound screens that are well-validated and reliable, and that assessment and screening processes in youth justice settings are standardised. The APA Guidelines on Psychiatric Services in Jails and Prisons (Kayatekin, 2000) also recommends standardisation of mental health screening procedures and instruments across settings for systematic documentation. The potential consequences of sharing of information and the safety of the young person’s information must also be considered and included in assessment protocols.

The assessing clinician must also be mindful that the young person may be presenting under coercion and may not recognise that they have a problems or indeed that they need help. The need to engage the youth, understand the developmental and contextual background, and understand their issues within a family system will increase the accuracy of information collected to inform the decision making process. The assessment process may even include motivational interviewing to facilitate the young person identifying their current issues and needs. The international literature highlights minority groups disproportionately represented in the Juvenile or Youth Justice System. In New Zealand Māori are similarly represented. This highlights that culturally sensitive processes still need to be developed as part of assessment protocols.

Finally, it is clear that conducting screening and assessments in youth or juvenile justice settings is challenging and requires a working knowledge of clinical, cultural, risk and legislative issues. Consequently the availability of specialised training and appropriate supervision for clinicians and other practitioners working in the field is of key importance.

4.0 TREATMENT & INTERVENTION

4.1 PHILOSOPHIES OF EVIDENCE BASED SERVICE DELIVERY

In 2004, the National Mental Health Association published a compendium of promising practices in the mental health of treatment of young people in the juvenile justice system. The report advocates a system of care framework which is "child [young person] centred, family focused, community based, and culturally competent" (National Mental Health Association, 2004, p. 1) with core values and principles based on early identification and intervention; access to comprehensive and individualised services which are non-restrictive and as normative as clinically appropriate; family/caregivers being included in policy development and service planning; integration between family focused services and child/young people focused services; a care co-ordination model; a service delivery framework that includes consideration of transition; the rights of young people being protected through effective advocacy; and all services provided without regard to race, religion, national origin, sex, physical disability, or similar.

A key premise (based on current research) is that community based programmes are more effective than institution based programmes (Palmer, 1996) with intensive community based and family centred interventions being the most promising (Mulvey, Arthur, & Repucci, 1993). However, "because juvenile offenders do not constitute a single, homogenous group, no uniform treatment approach works for all young people" (Mulvey et al., 1993, p. 1). The report states that the most effective programmes adhere to the values and principles of a systems of care framework (as above) and are highly structured, intensive, and focused on social skill development, changing behaviour attitude adjustment, and rethinking perceptions (Altschuler, 1998). In addition, the best programmes will (Altschuler, 1998, p. 5):

- Intervene early.
- Target medium to high- risk juvenile populations.
- Use graduated sanctions and treatment alternatives, reserving long term incarceration as a last resort for serious, violent, and chronic offenders.
- Be based on treatment models/approaches that are evidence based.
- Ensure fidelity in programme design through well qualified and well trained staff, excellent supervision, programme monitoring and evaluation.
- Employ mental health professionals – not corrections staff – as treatment providers (Greenwood, 1994).
- Deliver sufficient treatment – at least six months in duration.
- Monitor progress and modify intervention as indicated.
- Ensure ongoing collaboration between justice, mental health, child welfare, educational, and law enforcement systems.

"Promising practices" documented in the review include Multi-systemic Treatment (MST), Functional Family Therapy (FFT), Wraparound (WA), Cognitive Behaviour Therapy (CBT), and Multidimensional Treatment Foster Care(MTFC) with three populations highlighted for specialist consideration – Youth with Co-occurring Disorders, Adolescent Girls, and Youth of Colour. The document also outlines practices which have proven ineffective in juvenile justice – punishing juveniles in adult prisons, youth curfew laws, and juvenile boot camps. MacKinnon-Lewis, Kaufman and Frabutt (2002) take this one step further by outlining what doesn't work in terms of intervention with young offenders with mental health issues – that is, fragmentation of services; attempting to "fix" individuals and problems; "out of context" service provision; blaming of families and young people; lack of access and responsiveness; and a traditional intervention model characterised by (2002, p. 355):

- "One size fits all" services based on availability.
- Family members receiving services as individuals.
- Service planning being defined, delivered, and monitored by professionals.
- Families not being encouraged to consider including extended family, neighborhood, and other community resources in intervention.

MacKinnon-Lewis et al. (2002) are also critical of programmes which establish services through internal processes of determining level of need, without input from the young person and their family.

Continuing the "system of care" philosophy and outlining a number of excellent recommendations for best practice in supporting young people with mental health issues in juvenile justice settings, MacKinnon-Lewis, Kaufman and Frabutt (2002) advocate a move away from the traditional fragmentation of services which ultimately leads to poor outcomes and fragmentation of the family. Shorr (1997) describes seven key attributes of effective approaches to improve outcomes for young people in high-risk environments –that is, services that:

1. Are comprehensive, flexible, and responsive;
2. Consider young people in the context of family, and families in the context of community;
3. Have a long-term preventative orientation, a clear mission, and evolve over time;
4. Operate with enough intensity and perseverance to achieve outcomes;
5. Encourage staff to expand the boundaries of job descriptions and build relationships;
6. Recognise the limits of a "service" strategy and collaborate with local services and agencies to provide a supportive treatment community.

In addition, the Justice for Juveniles Initiative (National Mental Health Association, 2000) called for targeted mental health and substance abuse services to be available at all phases of a young person's involvement with the youth justice system, and collaboration and integration of services to best meet the needs of "multi-system" youth.

MacKinnon-Lewis et.al strongly advocate for an innovative, developmentally orientated, strengths-focused, community-based "comprehensive, wraparound, system of care approach" (2002, p. 359) to service provision, where evidence-based intervention programmes, such as FFT, MTFC, and MST, can be coordinated and delivered. This involves a comprehensive spectrum of mental health and other services and supports, including residential and non-residential community based options (such as but not limited to crisis teams, home based services, therapeutic family/foster care, family support and education, and respite care) organised into a coordinated network (MacKinnon-Lewis et al., 2002, p. 360) which is centred on family partnership and cultural competence.

In 2007, Skowyra and Cocozza, in conjunction with The National Center for Mental Health and Juvenile Justice Policy Research Associates, and supported by the Office of Juvenile Justice and Delinquency Prevention, released Blueprint for Change: A Comprehensive Model for the Identification and Treatment of Youth with Mental Health Needs in Contact with the Juvenile Justice System. The model offers a conceptual and practical framework for developing policies and strategies for improving mental health services for young people involved in youth justice (Skowyra & Cocozza, 2006) and is underpinned by nine underlying principles and four cornerstones (Collaboration, Identification, Diversion, and Treatment). Specific to the "treatment" cornerstone, while Skowyra and Cocozza (2006) include examples of evidence based interventions (such as CBT, MST, FFT, and pharmacotherapy), they also express concern that the vast majority of mental health services and programmes are not evidence based. Recommended actions for addressing the treatment of young offenders with mental health issues include:

- Youth in contact with the juvenile justice system who are in need of mental health services should have access to treatment.
- Regardless of the setting, all mental health services should be evidence based.
- Responsibility for the provision of mental health services should be shared between juvenile justice and mental health systems, with lead responsibility varying depending on the young person's initial contact with the system.
- Qualified mental health professionals should be available to provide mental heath treatment to youth in the juvenile justice system.
- Families should be fully involved with the treatment and rehabilitation of their children.
- Juvenile justice and mental health systems must create environments that are sensitive and responsive to trauma-related histories of youth.

- Gender-specific services and programming should be available for girls involved with the juvenile justice system.

- More research is required to ensure that evidence based interventions are culturally sensitive.

- All youth in the juvenile justice system should receive discharge planning services to arrange for continuing care upon release from placements.

The model also identifies a number of critical intervention points from intake to re-entry where opportunities exist to make better decisions about mental health care and treatment.

4.1.1 Resilience

Effective intervention begins with identifying the young person's strengths or protective factors and using this as a platform to build upon. If we agree with the premise that risk can be counterbalanced by the young person's protective factors and we view resilience as a protective mechanism, then it follows that intervention should help build the young person's resilience.

For at-risk children who become involved with welfare, corrections, mental health, and educational settings, Ungar (2005a) describes resilience as "more than internal capacities or behaviour that allows one to overcome adversity" (Ungar, 2005b, p. 446). Recognising the additional influence of structural conditions, relationships, and access to social justice these children can lack the individual, family, community and socio-political resources to sustain health in challenging conditions (Ungar, 2005b, p. 423). In his extensive work and research in the area, Ungar (2005a) describes dual aspects of children's *navigation* to health resources available through services (such as shelter, clothing, and therapy), structures (such as safety, access, and social justice), and relationships; their often creative *negotiation* with service providers; and the impact that these has on a child's pathway to resilience. Ungar (2005a) argues that at-risk children and families have the capacity to navigate their way to health resources, and recommends that the design and integration of services are tailored to those served in ways that are meaningful to them (2005a, p. 442). Specifically, while Ungar recognises the significant challenge in creating changes in meaningful service delivery and integration of systems of care (2005b), he also identifies six principles of service provision that will encourage resilience in at-risk children and youth, through navigational aids (principles 1-3) and strategies to ensure successful negotiation (principles 4-6):

1. Community Reach: Specifically a shift from a "community outreach" model where power and resources are held by services and communities are acted upon, to a model where services are considered one of the many resources available within communities.
2. The One-Stop-Shop
3. A Door Back In

4. Less is more: At risk children and families need contact with as few very skilled workers as possible (who follow children) and a recognised but flexible continuum of care.
5. Unknown but Knowable: Cultivation of cultural sensitivity in staff and an openness to appreciate differences in how others view the world – the "not-knowing approach". Further to thinking about culture, context, and resilience, Ungar (2006) recommends that services and service providers recognise that there are likely multiple cultural interpretations of resilience in children; that all aspects of resilience are not created equal and, as such, a singular approach to intervention is unlikely to succeed; and that the range of factors that impact on resiliency in children are many and complex.
6. Something to Shout About: The most resilient children are those who have something special to say about themselves – when children feel heard, they are seldom compelled to act out in socially unacceptable ways as a strategy to be seen as unique or competent (Ungar, 2006, p. 458).

In practice and policy, Ungar encourages a paradigmatic inversion in that families and communities drive system organisation and service delivery, and that the impact of ethnic and organisational culture are carefully considered and addressed (2005b). Additionally, the fluidity and flexibility of a child's contact with a range of community and institutional services is seen as a cornerstone to success, although Ungar (2005b) recognises that none of these changes will be possible without frontline staff and management being able to convince government of the effectiveness of integrated and responsive services.

4.2 EVIDENCE BASED INTERVENTIONS – WHAT WORKS & FOR WHOM?

Key issue:
Are we looking to treat the young person's offending behaviour or mental health issues? Or are the two inextricably linked? And is "offending" a mental health issue?

Karnik and Steiner (2007) advocate shifting from a criminological approach to the treatment of youth offenders to one that focuses on the treatment of psychopathology (as first described in the literature by Aichhorn in the 1930's and, as such, including the neuroscience of aggression and biological psychiatry) and describe evidence based interventions across four levels:

- Prevention (not covered in this review)
- Social and community – Youth Offender Teams (Callaghan, Young, Pace, & Vostanis, 2003) and gang prevention programmes
- Family – MST, Multidimensional Treatment Foster Care
- Individual – Anger management programmes, pharmacological treatment (anti-convulsants and atypical anti-psychotics).

Of note, Karnik and Steiner (2007) identify that research and evaluation in the intervention modalities for individuals remains as the weakest and least explicated area due to young offenders being embedded in ecologically salient and powerful social and family networks thus clouding any robust review of individual-level intervention. As such, individual therapy and the judicious use of medications when indicated for co-morbid psychiatric conditions is recommended to reduce triggers in the environment for young offenders (Steiner, Remsing, & Work Group on Quality Issues, 2006; Trupin, Stewart, Beach, & Boesky, 2002).

The Youth Justice Board for England and Wales (Harrington et al., 2005), in their report on the Mental Health Needs and Effectiveness of Provision for Young Offenders in Custody and in the Community, split their review of the evidence for interventions for young offenders into those that aim to reduce anti-social (aggressive) behaviour and those that aim to improve mental health. In summary, findings drawn from the literature are outlined in Table 7.

Table 7. Intervention Summary (Sourced from Harrington et al. (2005)

Interventions to Reduce Anti-Social Behaviour		
Psychological treatments (parent management training, cognitive problem-solving skills training, and anger management)	PMT is effective for children but not adolescents with behaviour problems Problem solving and cognitive approaches are "promising practices" No evidence for anger management.	Kazdin (1993) Kazdin & Holland (1997)
Pharmacotherapy	Rarely effective in isolation; Limited evidence for mood stabilisers and neuroleptics for ST effect; Do have a role in treating co-morbid mental illness.	
Systemic/family therapy	FFT deemed "promising"	
Multi-modal treatments	Significant body of evidence for MST although predominantly conducted by the developers.	
Interventions to Co-Morbid Mental Illness		
In General	MST and CBT are evidence based interventions for young offenders with mental health issues.	Borduin (1999); Kazdin et. al. (1997)
ADHD	Stimulants	MTA Cooperative Group (1999a/b)
Depression	Individual CBT Fluoxetine	Harrington et. al. (1998); Rohde et. al. (2001)
Emotional dysregulation/self harm/emerging borderline traits	Dialectical Behaviour Therapy (DBT)	Miller et al. (2006)
Suicidal behaviour	Group CBT	Wood et. al. (2001)
Anxiety	CBT (General population) Pharmacotherapy	
PTSD	CBT (General population) Psychological treatment	 Perrin et. al. (2000)
Substance Abuse	CBT/Problem based approaches Structural family therapy MST Motivational work	Myers et. al. (1993) Stanton et.al. (1997) Henggeler et.al (1990) McCambridge & Strong (2003/2004)

Osher, Quinn, Poirier, and Rutherford (2003) deconstruct interventions in juvenile justice based on efficacy, effectiveness, and cost-benefit analysis with three caveats; most of programmes are researched by the programme developers; although all the interventions demonstrated positive outcomes in real world conditions, the strongest evidence for effective interventions comes from studies undertaken in ideal conditions; the true efficacy of programmes depends on a number of independent variables, such as intervention targets and the capabilities and motivations of facilitators.

Table 8. Programme Summary

Programme	Net Cost ($USD)	Net Taxpayer and crime Victim Benefits/Participant ($USD)	Benefit-Cost Ratio ($USD)
Aggression Replacement Training (ART)	$738	$33 143	$44.91
FFT	$2161	$59 067	$27.33
Juvenile Boot Camps	-$15 424	-$3587	NA
MTFC	$2052	$87 622	$42.70
MST	$4743	$131 918	$27.81
Nurse-Home Visitation	$7733	$15 918	$2.06
Perry Pre-school Programme	$14 716	$105 000	$7.16
"Scared Straight" Programmes	$51	-$24 531	NA
Seattle Social Development Project	$4355	$14169	$3.25

Osher et al. (2003) split their evidence based review by Early Interventions (Nurse-Family Partnership and Perry Pre-school Programme), School and Community Based Interventions (Seattle Social Development Project) and Interventions for Severe Offenders (Aggression Replacement Training , Wraparound, MST, FFT, and MTFC – see sections to follow for further breakdown of findings). The authors also issue four challenges for future research and evaluation measuring the effectiveness of interventions in juvenile justice - redeploying wasted resources and eliminating harmful interventions; eliminating bias; changing practice; and developing political will.

Lipsey, Wilson, and Cothern in their contribution to the April 2000 OJJDP Bulletin focusing on effective intervention of serious juvenile offenders, contend that research around effective interventions has demonstrated general effectiveness but that there has been little systematic attention given to the effectiveness of interventions with distinct types of young offenders or with serious offenders (2000, p. 1). The authors' split their review according to interventions that improve outcomes (reduce re-arrest and recidivism) for non-institutionalised youth and institutionalised youth.

Table 9. Treatment Summary

Types of Treatment Used with Non-Institutionalised Youth	Types of Treatment Used with Institutionalised Youth
Positive Effects/Consistent Evidence	
Individual Counseling Interpersonal Skills Behavioural Programmes	Interpersonal skills Teaching family homes
Positive Effects/Less Consistent Evidence	
Multiple services Restitution, probation/parole	Behavioural programmes Community residential Multiple services
Mixed but Generally Positive Results/Inconsistent Evidence	
Employment support Academic programmes Advocacy/casework Family counseling Group counseling*	Individual counseling Guided group counseling Group counseling
Weak or No Effect/Inconsistent Evidence	
Reduced caseload, probation/parole	Employment support Drug abstinence Wilderness/challenge therapy
Weak or No Effect/Consistent Evidence	
Wilderness/challenge therapy Early release, probation/parole Deterrence programmes Vocational programmes	Milieu therapy

Table One "A comparison of treatment types in order of effectiveness" adapted from Lipsey, Wilson, & Cothern (2000, p. 5). *

4.2.1 Evidence Based Psychosocial Treatment Reviews - Disruptive Behaviours, Depression & Conduct Disorders.

Eyberg, Nelson and Boggs (2008) reviewed the literature from 1996-2007 to provide an update on Breston and Eyberg's earlier review of evidence based psychosocial treatments for child and adolescent disruptive behaviour, including oppositional defiant disorder and conduct disorder. 28 well-conducted studies were rigorously evaluated and sixteen evidence based treatments were identified, with nine "possibly efficacious" treatments also included. While no single intervention emerges as "best" (Eyberg et al., 2008, p. 223), the 16 evidence based treatment protocols are: Anger Control Training (Lochman, Barry, & Pardini, 2003); Group Assertive Training (Huey & Rank, 1984); Incredible Years (Parent Training/Child Trainings) (Webster-Stratton & Reid, 2003);

Multidimensional Treatment Foster Care (Chamberlain & Smith, 2003); Multisystemic Therapy (Henggeler & Lee, 2003); Parent-Child Interaction Therapy (Brinkmeyer & Eyberg, 2003); Problem-Solving Skills Training (Kazdin, 2003); Positive Parenting Program (Sanders, 1999); and Rational Emotive Mental Health Program (Block, 1978), with Parent Management Training Oregon Model (Patterson, Reid, Jones, & Conger, 1975) being the only intervention to meet the criteria for a well-established treatment. Based on the evidence, the authors also recommend that clinicians consider parent-training as the first line approach for working with younger children and reserve direct child-training approaches for working with older children and youth (Patterson et al., 1975, p. 223).

David-Ferdon and Kaslow (2008) reviewed the evidence base for psychosocial treatment outcomes for depressed youth since 1998 and concluded that CBT in general is a well established treatment for childhood depression. More specifically, CBT provided through the modalities of child-group only and child group and parent components are well established interventions for depressed children, while CBT adolescent group and Interpersonal Therapy (Individual) are well established treatments for adolescent depression. "Probably efficacious" treatments for children include behavior therapy, while "probably efficacious" treatments for adolescents include CBT adolescent group and parent components, CBT individual, and CBT individual and parent/family components.

Frick (2000) presents four evidence based interventions for children and young people with conduct disorders (Contingency Management Programs, Parent Management Training, CBT Skills Training, and Stimulant Medication) but expresses concerns regarding fundamental limitations to each of these approaches that will significantly reduce effectiveness– that is, the multi-determined nature of conduct disorder and the heterogeneous nature of children and young people diagnosed with the disorder. As such, two promising interventions which integrate practice and knowledge relating to work with children and young people with conduct disorder (the Family and Schools Together Program (FAST-Track) and MST) are described, alongside three critical elements for an intervention framework (Frick, 2000, p. 35): 1) to select the most effective intervention package, a clinician must understand the basic nature of conduct disorder and the multiple causal processes involved, 2) a flexible treatment approach requires a clear, comprehensive, and individualised conceptualisation of the child or young person to guide the design of a focused and integrated approach to treatment, and 3) successful implementation for children and young people with conduct disorders typically involves multiple professionals and multiple agencies to provide a comprehensive and integrated service, utilising evidence based interventions whenever possible.

A quick note about FAST-Track:

The Families and Schools Together Programme is an early intervention strategy developed by the Conduct Problems and Prevention Research Group in 1992 and integrates four key intervention complements – Parent Management Training, Case Management, Cognitive-Behavioral Skills Training, and Academic Enhancements (Frick, 2000). While a major criticism of the programme is that there is no process for matching treatment components to the individual needs of children and families (that is, everyone gets the same package), the research (four RCT's) cautiously indicates improvements in social skills in children and youth, a decrease in aggressive behaviors in children, and improved outcomes for children and youth at school, at the 12 month follow-up (as reported by parents and teachers). Of note, the FAST-Track programme receives an exemplary rating on the Office of Juvenile Justice and Delinquency Prevention Model Programs Guide. (please refer http://www.ojjdp.com)

Note: See "Treatment of Special Populations" section for EBT reviews for children and adolescents exposed to traumatic events and adolescent substance abuse.

4.2.2 Family Inclusiveness & Interventions

The notion of understanding the adolescent within a developmental and systemic context has been influenced by the ecological systems theory (Bronfenbrenner, 1979, 1986). Bronfenbrenner identified and defined four Microsystems which have direct contact with the individual. For a child or adolescent these include their family, school and peers. This theory highlights the key role the young person's context (including families) play. Furthermore this theory can explain the influence culture exerts on the social context and relationships between the Microsystems. Bronfenbrenner's ecological systems theory has underpinned the development of models such as MST, Wraparound, Brief Strategic Family Therapy (BSFT) and MFTC.

Woolfenden, Williams, and Peat (2002) reviewed the research around the effectiveness of family and parenting interventions with young offenders with conduct disorder and their families and concluded that participation in these programmes can reduce the time a young person spends in an institution and can have a positive impact on their criminal behaviour (subsequent arrest/s). The authors completed a meta-analysis of eight RCT's, involving 749 children and young people (10-17 years) diagnosed with CD and delinquency and focused on outcomes related to criminality, academic performance, future employment, problem behaviour, family functioning, parental mental health, and peer relationships. Intervention approaches covered by the review included MST, MTFC, parent training, and adolescent diversion.

4.2.3 Diversion

Diversion refers to the application of the theory of "therapeutic jurisprudence" whereby young offenders with mental health issues are diverted into mental health treatment in lieu of further court proceedings (Cuellar, McReynolds, & Wasserman, 2006, p. 198). As well as perceived benefit for the young person, diversion programmes are intended to be less costly than more formal services. While specialist mental health diversion programmes are new in both youth and adult settings, and as such there is a lack of research on the effectiveness of mental health diversion programmes in both populations, an early investigation by Blechman, Maurice, Buecker, and Helberg (2000) found that diversion plus skills training may be more beneficial for young people than diversion plus mentoring.

Cuellar, McReynolds, and Wasserman (2006) provide a comprehensive evaluation of a mental health diversion initiative (Special Needs Diversion Program) implemented across six services in Texas. Local mental health providers were contracted to deliver intensive treatment, client advocacy, and service planning services to young offenders sentenced to probation or deferred to the community. Of note, no dual diagnosis services were offered to youth with co-morbid substance abuse issues. Families were expected to be involved in the programmes, participation in the programme was voluntary, caseloads were limited to 15, and the average length of programme participation was 4.5 months (Cuellar et al., 2006, p. 201). While the authors recognise that findings may not be generalisable to other areas or populations, their conclusion is that mental health diversion can be used effectively to delay or prevent recidivism.

Sullivan, Versey, Hamilton, and Grillo (2007) refer to the challenge of providing effective division programmes for "multi-problem youth" and provide a comprehensive evaluation of New York's efforts to do so, with the Mental Health Juvenile Justice Diversion Project. The authors, in describing the project and their findings, highlight the importance of comprehensive and integrated services being provided for young offenders with mental health issues – the "one stop shop" – that services are developmentally appropriate, and that services are youth centred and strengths focused, directed to mobilising the young person's strengths, resources and resiliencies (Sullivan et al., 2007, p. 559). Findings drawn from the study indicated that, in this case, diversion was not generally successful in impacting on reducing offending behaviours, primarily due to the complexities of youth offending and treating multiproblem youth, and that prior behaviour and the nature of the offence were better predictors than treatment (Sullivan et al., 2007, p. 771). In conclusion, there is insufficient evidence to support the benefits of diversion.

Skowyra and Cocozza (2006) however include diversion as a key cornerstone of their comprehensive model for the identification and treatment of youth with mental health needs in contact with the juvenile justice system, recommending that;

- wherever possible, youth with mental health needs should be diverted into community treatment;

- procedures must be in place to identify those youth who are appropriate for diversion;
- effective community based services and programmes must be available for youth diverted into treatment;
- diversion mechanism must be instituted at virtually every key decision making point within the processing continuum;
- consideration should be given to the use of diversion as an alternative to incarceration;
- diversion programmes should be regularly evaluated to determine their ability to effectively and safely treat youth in the community.

4.2.4 Safe Care Management

Tragically, while incarcerated, many young people are likely to be victimised, abused, and attempt suicide (MacKinnon-Lewis et al., 2002). US data suggests that completed suicides are between two and four times higher among young people in custody than young people in the general population (Gallagher & Dobrin, 2006; Memory, 1989). In fact, given the significant increase in young offender suicides in prison over the past decade, the subjective experiences of vulnerable young offenders has been recognised as a research priority (Inch, Rowlands, & Soliman, 1995).

Abram and Choe et al. (2008) examined suicidal ideation, suicide attempts, lethality of suicidal attempts, and the relationship between psychiatric disorder and recent attempts in 1829 newly detained juveniles (aged 10-18), and found that 1 in 10 detainees considered suicide in the past 6 months, and 1 in 10 had previously attempted suicide. Additionally, more than one third of young offenders and nearly half of females felt hopeless or considered death in the six months prior to detention, and recent suicide attempts are more prevalent in young woman, and young people with internalising disorders, such as depression or generalised anxiety disorders. While there are a few noteworthy limitations to the study (use of a diagnostic interview (Diagnostic Interview Schedule for Children) vs. a self-report clinical questionnaire; the impact of recent detention; reduced statistical power in analysis of racial/ethnic differences in uncommon behaviours; use of a correlational analysis; limited generalisability to urban populations), findings generated indicate that juvenile justice services need to be vigilant about keeping young people safe – at the minimum, any young person in distress must be considered at risk for self harm (Abram, Choe et al., 2008, p. 297). Abrams et.al. provide two recommendations drawn from their study (2008, p. 298):

- Juvenile detention facilities must quickly and systematically screen for suicide risk.
- Access to mental health services in detention must be improved. Young people with psychiatric disorders are at particular risk for suicide and detention staff must be trained to recognise depressive and anxiety disorder symptoms and refer for specialist support.

While not strictly related to young people or juvenile justice populations, Mann et.al (2005) presented a systematic review of the effectiveness of specific suicide prevention strategies. The review found education and awareness programmes and screening high risk individuals to be the most effective preventative strategies, and pharmacotherapy (specifically anti-depressant and anti-psychotics), psychotherapy (specifically AoD treatment and CBT), follow-up care following an attempt, reduced access to lethal means, and media reporting guidelines for suicide to be the most effective interventions for individuals contemplating suicide. The authors also offer recommendations for future directions relating to suicide prevention – relevant to this review are the recommendations around screening, which include consideration of the cost-effectiveness of screening general vs. at-risk populations; the predictive validity and reliability of screening assessments; and the appropriateness of screening tools across different cultures.

4.2.5 Barriers & Challenges

Abram, Paskar, Washburn, and Teplin (2008) looked at perceived barriers to accessing mental health services among youths in a detention centre (n=1829) and found that the majority of young people interviewed reported that the problems they were experiencing would go away without help (59.3%). Of interest, despite meeting criteria for a mental illness, many young people included in the study stated that they did not have mental health problems; and the research indicates that acknowledgement of mental health problems and the need for mental health support are key to seeking services (Kim & Fendrich, 2002; Lopez, 2003) and staying in treatment (Ortega & Algria, 2005). Additional barriers to accessing services included uncertainty about who was the right person/service to help (40.4%), the perception that it was too hard to ask for help (16.5%), concern about what others would think (17.8%), and worry about cost (12.1%).

4.2.6 Specific Evidence Based Treatment/Intervention Models

In terms of treatment success, the use of brief interventions, such as motivational interviewing and enhancement, have been found to be “very promising practices” in the treatment of young people presenting with alcohol and other drug problems (O'Leary-Tevyaw & Monti, 2004). The authors, while acknowledging the need for more research in the area, reflect on the “remarkable” impact that brief interventions have had in the AoD field (O'Leary-Tevyaw & Monti, 2004, p. 99) in their review a small number of clinical studies detailing the effectiveness of motivational-enhancement interventions with young people and college students. Preliminary findings drawn from this limited research base indicate a positive impact on the negative consequences and problems associated with substance use, decrements in substance use, and improvements in treatment engagement, especially for those young people with heavier substance use patterns and/or less motivation to change. The authors also offer a number of strategies for translating and exporting effectiveness research on motivational enhancement into practice, such as internet-based, and computer-based and computer assisted interventions; improved collaboration and support between researchers, clinicians, administrators, and policy makers; and identification of ways to adapt motivational enhancement interventions across whole populations or high-risk subgroups.

Multisystemic Therapy (MST)

MST is an intensive, multi-modal, family based treatment approach aimed to empower families to cope with the challenges of children with emotional and behavioral problems, and to empower young people to cope with family, peer, school, and neighborhood influences (National Mental Health Association, 2004).

Cited as one of the best available treatment approaches for youth with mental health issues who are involved in the juvenile justice system (National Mental Health Association, 2004), there is an extensive body of research (summarised below) supporting the short term effectiveness of MST with juvenile populations with emotional and behavioural problems (National Mental Health Association, 2004), with reductions of up to 70% in long-term rates of re-arrest, reductions of up to 64% in out-of-home placements, significant improvements in family functioning, and decreased mental health problems in serious juvenile offenders (Greenbaum et al., 1996). Kazdin (2002) and Martens (1997) suggest that there is only mixed evidence for the long term success of current MST, with Martens (2004) speculating a number of reasons for this, including a lack of attention to the neurologic treatment of neurobiological correlations with anti-social behaviour; co-occurring disorders; other evidence-based therapeutic treatment models; and environmental and cultural factors.

Martens (2004) offers a number of "evidence based suggestions" for improvement of MST with antisocial youth. These include careful consideration of the impact of a young person's pro-social behaviour in their anti-social environment or the belief that many young people have that being pro-social is "boring" , offering specific retreatment of co-occurring mental health disorders, including substance abuse, and a host of other suggestions around combination therapies, increased responsibilities, adequate housing and guidance, capturing important learning moments, and consideration of cultural influences. Martens (2004) also suggests adding a neurologist, a forensic psychiatrist, a neurofeedback specialist, a pediatrician, a trauma therapist, and a social worker to the standard MST team to enhance the effectiveness and improve the long term outcomes of MST (p. 392).

One of the key issues with the research around MST is that most studies have involved direct oversight of one or more of the principal developers of MST, Drs. Scott Henggeler and Charles Borduin (Timmons-Mitchell, Bender, Kishna, & Mitchell, 2006). Timmons-Mitchell et.al (2006) conducted the first trial of MST with juvenile offenders in a "real-world mental health setting "in the US that did not involve oversight from the model developers. Outcomes measured included re-arrest and improvement in functioning, and both were partially supported by the research, although insufficient sample size (n=93), budgetary constraints, lack of specific information regarding" treatment as usual", and generalisability of the programme were noted limitations of the study. One of the significant successes of the research may be the independence of the investigators and recommendations gleaned for implementing MST in "real world settings". These recommendations include securing adequate funding to support programme development, implementation, and evaluation; ensuring the implementation of the model with fidelity is a priority (as opposed to trying to make the model fit with "business as usual"); and following all the recommended programme

practices, including employing dedicated MST therapists, providing cell phones to staff to facilitate access to families, and ensuring caseloads do not exceed six families/therapist (Timmons-Mitchell et al., 2006, p. 235).

In terms of the Cost-benefit ratio (Osher et al., 2003): A review of eight RCT's, with the three included in a cost-benefit analysis estimating a net cost of $USD4743/participant (approx. $NZD 6896) and the value of reduced crime outcomes of participants to taxpayers is estimated at $USD31, 661 (approx. $NZD 46,030). When the value of reduced victim costs is included alongside reduced criminal justice costs, benefits increase to $USD131,918 (approx. $NZD 192, 000) with a cost-benefit ratio of $USD27.81 (approx. $NZD 40.50) – that is for every $1 invested, MST yields about $28 in benefits (p. 104).

Functional Family Therapy (FFT)

FFT is a 90 day, intensive and comprehensive family based intervention programmes for youth with behavioural problems, developed in 1969, and reflecting a core set of theoretical principles in which behaviour is seen as a representation of the family relational system (Littell, Winsvold, Bjorndal, & Hammerstrom, 2007). The overarching goals of FFT include changing the maladaptive behaviours of young people and families; reducing personal, societal, and economic consequences of disruptive behaviour disorders; and being more cost-effective than many other treatments available (Sexton & Alexander, 2002).

Research indicates that FFT is particularly effective at reducing recidivism, with re-arrest rates being approximately 25% for youth who participate in FFT as compared with youth who receive no treatment, eclectic treatment, or appear in juvenile court (re-arrest rates range from 45%-70%). Sexton and Alexander (2000) in a five-year follow-up found that less than 10% of youth who participated in FFT had a subsequent arrest, as compared to almost 60% of re-arrests in youth who appeared in juvenile court. In addition, Sexton and Alexander's research (2000) showcases the importance of training social workers in FFT as cost/case and rate of out-of-home placements are significantly less when workers are well trained in the model and can replicate it with fidelity. More specifically, in an OJJDP Juvenile Justice Bulletin review of outcomes findings for recidivism in RCTs (1973-1998) and comparison studies (1985-1995), FFT can reduce adolescent arrests by 20-60% compared with no treatment, alternative treatments, and traditional juvenile justice services, such as probation (Sexton & Alexander, 2000).

Wraparound

A unanimous definition of Wraparound appears difficult to come by although Stambaugh et al. (2007) describe Wraparound as a process for developing individualised service plans at a system level through the "wrapping" of existing services around youth and families to address problems in a ecologically comprehensive way (pp. 143-144).

Research indicates that while the successful implementation of Wraparound is challenging to achieve, it is a promising practice in the treatment of youth in the juvenile justice system with mental health and emotional needs (National Mental Health Association, 2004).

While the evidence base for Wraparound remains small in comparison to other child and family interventions, Burchard, Burns, and Burchard (2002) in their contribution to Community Based Interventions for Youth, reviewed fifteen studies to assess the effectiveness of the Wraparound approach: two qualitative case studies, nine pre-post studies, two quasi-experimental studies and two studies involving randomised clinical trials. The review of the qualitative evidence (two case studies) found that receiving Wraparound intervention resulted, in general, in children requiring less out of home placements and displaying less high risk behaviour. The review of the quantitative evidence found that majority of children and young people were able to maintain a stable adjustment in the community (nine pre-post test studies), marked behavioural improvement (two quasi-experimental studies) and a greater decline in behavioural symptoms, lower overall impairment, fewer externalising, social problems and thought problems, fewer placement changes and fewer days absent from school, lower rates of delinquency and better externalising adjustment than the boys in standard foster care. Also, the older wraparound youths were more likely to achieve a permanent living arrangement in the community (two randomised clinical trials). See http://depts.washington.edu/wrapeval/wrapdef.html for a full description of the research findings.

One of the key challenges in the successful implementation of Wraparound is maintaining fidelity. Bruns, Suter, Force, and Burchard (2005) investigated the association between adherence to Wraparound principles and child and family outcomes in a federally funded system-of-care site, and found that there is a significant link between these two variables. Stambaugh et al. (2007) measured "real-world" observational outcomes for Wraparound and MST in a system-of-care demonstration site. The study focused on clinical and functional outcomes at three consecutive 6 month follow ups for youth enrolled in wrap-only, MST-only, and MST+Wrap intervention groups. The study is interesting for a number of reasons, notwithstanding the adversarial history between the "research and theory, brief behavioural intervention" proponents of MST and longer-term system-level philosophy of Wraparound (Stambaugh et al., 2007, p. 144). Despite the study design limiting the ability to causally link treatment with outcomes, the limited representation of ethnic minority youth in the sample, the lack of fidelity data for inclusion in the study, and the significant difference in baseline severity for youth in each of the groups (Stambaugh et al., 2007, p. 152), findings suggest that, at best, youth enrolled in MST, Wraparound, or both will improve over time on both clinical symptoms and general functioning and that a system-of-care approach successfully maintains youth in the community without the need for restrictive placements. Other tentative findings drawn from the study are that youth receiving MST-only demonstrate more improvements in clinical symptoms than those receiving Wrap-only at 18 months follow-up, and that youth who receive MST-only are more likely to move out of the clinical range for impairment than youth enrolled in Wrap-only. The significant difference in baseline severity for youth in each of the groups (the naturalistic setting meant that young people with the most severe problems received Wrap+MST) had a significant impact on the author's ability to draw conclusions about the effectiveness of MST over Wraparound

– at face value, however, youth with the most severe problems may need more than services are realistically able to offer (Stambaugh et al., 2007, p. 152). Additional findings indicate that family income and placement history may better predict outcomes regardless of the treatment a young person receives.

Cognitive Behaviour Therapy (CBT)

Fundamentally, the CBT model views psychological problems as related to behavioural and cognitive antecedents, with the central treatment goal being to help children and young people build a coping template (Southam-Gerow & Kendall, 2000). This goal is achieved through a number of treatment strategies – affective education; relaxation training; social problem solving; cognitive restructuring/attribution retraining; contingent reinforcement; modeling; and role playing – with the active role of the therapist being collaborative consultant and coping coach (Southam-Gerow & Kendall, 2000, pp. 345-346).

CBT is deemed to be effective for youth in the juvenile justice system as it is highly structured and focused on triggers that may lead to disruptive or aggressive behavior (National Mental Health Association, 2004). For non-institutionalised offenders, CBT approaches have been found to reduce recidivism by as much as 50% (Greenwood, 1994).

As outlined above, the Youth Justice Board for England and Wales (Harrington et al., 2005) determined that CBT was an effective treatment for young people with co-morbid mental illness, with individual CBT being determined effective for young offenders diagnosed with depression and group CBT being determined effective for young offenders with suicidal thoughts and behaviours. While few studies have been conducted with anti-social youth, CBT has also been deemed effective for young people with anxiety, PTSD and substance abuse (see below).

Southam-Gerow and Kendall's (2000) review of the treatment outcome literature relating to CBT with youth concluded that there is strong empirical support for CBT with young people internalising disorders (such as anxiety and depression) and more moderate evidence for CBT with young people with externalising disorders, such as ADHD and conduct disorder, appearing more effective as part of a multi modal approach (i.e. in combination with parent training and/or medication. In addition, the evidence suggests that cognitive-behavioural interventions with antisocial youth are "promising" in addressing cognitive and social problems, but short-term, child-focused interventions may not be the ideal solution (Southam-Gerow & Kendall, 2000, p. 353). Given that parent-focused interventions are predominantly deemed to be most effective with disruptive children, integration of social-cognitive training interventions within a family or societal framework may result in better outcomes for anti-social children and youth.

As mentioned previously, CBT seems to hold its own as a well-established treatment for childhood and adolescent depression (David-Ferdon & Kaslow, 2008). In an extensive review of the research literature since 1998, CBT in general was deemed to be a well established treatment with CBT provided through the modalities of child-group only and child group plus parent components being well established interventions for depressed children, while CBT adolescent group and Interpersonal

Therapy (Individual) are well established treatments for adolescent depression. "Probably efficacious" treatments for children include behavior therapy, while "probably efficacious" treatments for adolescents include CBT adolescent group and parent components, CBP individual, and CBT individual and parent/family components.

Dialectical Behaviour Therapy (DBT)

DBT was originally developed for chronically suicidal adults. This model views suicidal behaviours as learned methods of coping with acute emotional suffering when no other coping options are available" (Rathus & Linehan, 2006, p. 35). Suicidal or self harming behaviours are thus considered to be a result of two interacting conditions:

- Lack of important interpersonal, self regulation (including emotional regulation), and distress tolerance shills and capabilities
- Personal and environmental factors inhibit the use of those behavioural skills the individuals may already have

DBT consequently focuses on (1) teaching specific skills for interpersonal effectiveness, self regulation and distress tolerance; (2) structures the treatment environment to motivate, reinforce, and individualise appropriate use of skills; (3) identifying and breaking up learned behavior sequences that precede clients dysfunctional behaviours including the removal of reinforces for these behaviours; (4) encouraging the generalisation of new skill capabilities from therapy to life situations and providing support to therapists with high risk clients. Due to success of the approach with adults diagnosed with Borderline Personality Disorder, it has now been adapted for adolescents. Miller and colleagues (2006) also highlight that as DBT employs a multi-modal approach which includes concurrent individual therapy, multi-family skills training groups, family therapy and between session consultation with both adolescents and their parents, it provides greater flexibility to address the multiple problems and suicide risk factors that adolescents may present with.

There has been promising preliminary research supporting the implementation of DBT with adolescents although Miller et al. (2006) point out that attention must be paid to the developmental issues of the adolescent age group.

Multidimensional Treatment Foster Care (MTFC)

MTFC is an intensive, highly structure, goal oriented treatment programme (Westermark, Hansson, & Vinnerljung, 2007) based on the philosophy that for many young people with anti-social behaviour, the most effective treatment is likely to take place in a family environment in which systematic control is exercised over the contingencies governing the young person's behavior (Fisher & Chamberlain, 2000, p. 3). The object of MTFC is to provide young people who have serious and chronic problems with delinquency with close supervision, fair and consistent limits, predictable consequences, a supportive relationship with at least one mentoring adult, and limited exposure and access to antisocial peers, with an aim to decrease delinquent behaviour and increase participation in developmentally appropriate social activities (Fisher & Chamberlain, 2000, p. 3).

The research summarised below cautiously recommends MTFC as an effective intervention for reducing criminal referrals, out-of-home placements, anti-social behavior, and incarceration rates, for Caucasian youth, as compared with group (usual) care. Evaluations of MTFC demonstrate that youth spent 60 fewer days incarcerated, had significantly fewer arrests, ran away three times less often, and had less hard drug use than a control group. Potential limitations of the research are: the developers (Chamberlain & Reid, 1998) are principal researcher/researcher in all four cited studies; sample size and demographics; and initial studies requiring replication.

Table 9. Research Summary MTFC

Authors	Population	Comparison	Limitations	Rx Outcomes
Chamberlain & Reid (1998)	Boys with chronic and serious juvenile delinquency (n=79)	Group care	Sample size Majority Caucasian, boys	↓criminal referrals ↓out-of-home placements
Eddy & Chamberlain (2000)	Boys with chronic and serious juvenile delinquency (n=79)	SAU (Group care)	Sample size Majority Caucasian, boys	↓anti-social behaviour
Leve, Chamberlain, & Reid (2005).	Girls with chronic delinquency (n=103) – 12 month follow-up	Group care	Sample size Majority Caucasian, girls	↓number of days incarcerated ↓caregiver reported delinquency ↓Criminal referrals (42%)
Chamberlain, Leve, & DeGarmo (2007)	Girls with chronic delinquency (n=103) – 24 month follow-up	Group care	Sample size Majority Caucasian, girls First findings (require replication)	Maintenance of effect 9as above) ↓delinquency over time (older girls)

One of the cornerstones of the success of the MTFC programme may be the inclusion of specially trained foster parents as the primary treatment agents within the treatment team (including also birth parents, school, leisure and social services) and the provision of a comprehensive treatment manual. Westermark et al. (2007) in their study addressing how 28 Swedish foster parents perceive the components and core terms specific to MTFC, found an overwhelmingly positive response to the MTFC manual, suggesting that 24 hour access to "treatment tools" (including the treatment team) are important inputs for ensuring the satisfaction of foster parents. While the study was exploratory and included a small sample size, other findings indicate that programme acceptance can be linked to whether or not foster parents perceive themselves as treatment professionals.

Incredible Years (IY)

The IY Parents, Teachers, and Children Training Series, developed by Dr. Carolyn Webster-Stratton, uses group discussion, videotape modeling and rehearsal intervention techniques to assist adults living and working with children aged 2-10 and aims to prevent, reduce, and treat conduct problems among these children, which increasing social competence (Webster-Stratton, 2000).

Incredible Years (IY) Parent Training and IY Child Training are determined to be "probably efficacious" in Eyberg et als' (2008) review of evidence based psychosocial treatments for child and adolescent disruptive behaviour, including oppositional defiant disorder and conduct disorder. Additionally, IY Parent Training plus Child Training, IY Parent Training plus Teacher Training, IY Parent Training plus Teacher Training plus Child Training, and IY Teacher Training plus Child Training are deemed "possibility efficacious" with the same population by the same review.

The Incredible Years series has been evaluated and found successful with children from various ethnic groups—including Hispanic, Asian-American, and African-American—and diverse socioeconomic backgrounds in parts of the United States, Canada, and the United Kingdom. The OJJDP Model Programs Guide rates IY as an exemplary programme and provides a comprehensive review of the evidence based for IY with children with conduct problems and antisocial behaviour including (http://www.dsgonline.com/mpg2.5/TitleV_MPG_Table_Ind_Rec.asp?id=343):

- Six randomised control group evaluations conducted by the developer and several independent replications by other investigators conclude that the parent training significantly increased positive family communication, problem-solving, and parent use of limit setting, while reducing conduct problems in children's interactions with parents and parental depression and increased parental self-confidence. Parents' bonding and involvement with teachers and classrooms and parents' positive emotional responses were improved.

- Two randomised control group evaluations of the teacher training indicated significant improvements in teachers bonding with parents, reduced child and peer aggression in the classroom and teacher use of criticism and harsh discipline, and improvements in children's positive cooperation with teachers, children's positive compliance with parental commands, use of praise and encouragement and proactive classroom management strategies by teachers, and children's positive interactions with peers, school readiness, and engagement in school activities.

- Two randomised control group evaluations indicated that the child training series significantly reduced conduct problems at home and school, and improved children's social competence and appropriate play skills, appropriate cognitive problem-solving strategies, and use of pro-social conflict management strategies with peers.

Parent Management Training Oregon Model (PMTO)

PMTO is an intervention strategy designed for use with families with children and adolescents who exhibit antisocial, aggressive, and other externalising behaviour problems including delinquency and substance abuse, based on Social Interaction Learning (Forgatch, Bullock, & Patterson, 2004). The hallmark of PMTO interventions is a focus on enhancing effective parenting and reducing coercive practices while making relevant adaptations for context, within the parameters of five core parenting skills – skill encouragement, discipline, monitoring, problem solving skills, and positive involvement (Forgatch, Patterson, & DeGarmo, 2005).

PMTO has been included in this review as it was rated the only "well established" psychosocial treatment in Eyberg et als' (2008) review of evidence based psychosocial treatments for child and adolescent disruptive behaviour, including oppositional defiant disorder and conduct disorder.

Eyberg et als' (2008) review concluded that of the four well conducted studies supportive of PMTO, two independent studies found PMTO to be more effective at reducing disruptive behaviour than alternative treatments, thus designating PMTO as a well established psychosocial intervention.

Forgatch et al (2005) evaluated the fidelity of a "real-world" PMTO intervention using the Fidelity of Implementation Rating System (FIMP), a measure of competent adherence to the model. While the primary purpose of the study was to evaluate psychometric properties and predictive validity of the FIMP, findings relevant to this review include the importance of emphasising teaching that actively engages parents in the learning process and the importance of being responsive to family circumstances, within the context of parent management training (Forgatch et al., 2005, p. 9).

Triple P – Positive Parenting Programme

The programme known as Triple P – Positive Parenting Programme is a multi-level system of family intervention aimed at reducing the prevalence of behavioural and emotional problems in children and adolescents. The interventions include:

- A population level media strategy targeting all parents
- Two levels of brief primary care consultations targeting mild behavior problems
- Two intensive parent training and family intervention programmes for children at risk for more severe behavioural problems

Central to the programme is an educative approach aimed at promoting parental competence. This is based on the premise that the development of a parent's capacity for self regulation is a core skill. There is encouraging evidence that Triple P is an effective parenting strategy (Sanders, Markie-Dadds & Turner (2003). These authors also provide a summary of research in this article which highlight the following outcomes:

1. There has been consistent findings across several studies that Triple P produces predictable decreases in child behavior problems

2. There have been clinically and statistically reliable outcomes for families.

3. Effectiveness of different levels of intervention has been demonstrated.

4. Participation in Triple P is associated with high levels of consumer acceptance and satisfaction

5. The programme has been successfully used with different family types e.g. two parent, single parent and step families.

The results of these studies highlight the Triple P Programme has a promising parent management intervention. Further research into its effectiveness and application to New Zealand Families is currently in progress.

4.3 TREATMENT OF SPECIAL POPULATIONS

4.3.1 Youth with Co-Occurring Disorders

About half of all adolescents (Greenbaum et al., 1996) receiving mental health support services will have co-occurring substance use disorders and about 75-80% of adolescents receiving inpatient substance use treatment will have co-existing mental disorders (Teplin et al., 2002). In New Zealand, young people with anxiety disorders and odds of substance dependence that was between 1.3 and 3.9 times higher than young people without anxiety disorders (Goodwin, Fergusson, & Horwood, 2004). These authors concluded that young people with anxiety disorders are at increased risk of substance dependence. While anxiety was not seen as a causal factor, associations were identified between childhood factors, prior substance dependence, co-morbid depression, peer affiliations and the development of anxiety disorders.

Effective, evidence-based interventions for young people with co-occurring disorders are intensive case management, CBT and skills training, and family-focused interventions, such as FFT and MST (McBride, VanderWaal, VanBuren, & Terry, 1997). In addition the National Mental Health Association (2004) recommends integrated treatment and aftercare and relapse prevention services as paramount to successful outcomes for the treatment of youth with co-occurring disorders. Integrated treatment refers to one clinician/team providing treatment to ensure a cohesive and coherent approach, as opposed to the “patchwork of providers” giving out contradictory messages.

4.3.2 Substance Abuse

The literature does not have a conclusive perspective as to whether substance abuse truly is a co-occurring disorder or just another way that young people break the law (Erickson & Butters, 2005). Waldron and Turner (2008) synthesized the findings from 17 studies published since 1998 evaluating outpatient treatments for adolescent substance abuse, across 46 intervention conditions, with a total sample of 2,307 young people. Despite the depth of evidence, no one substance abuse

treatment appeared more superior to others (Waldron & Turner, 2008, p. 225) but based on the studies reviewed and replications, MDFT, FFT, and Group CBT meet the criteria for well established treatments, while MST, Brief Strategic Family Therapy, and Brief Family Therapy are "probably efficacious". ACRA and other individual CBT approaches appear promising but more research is required.

In 2006, ALAC released a review of the literature relating to interventions used by specialised AoD clinicians in justice settings (Slack, Chandler, Nana, & Jameson, 2006). The literature reviewed (160 publications)indicated that diversion (in particular residential diversion), Modified Therapeutic Communities, and individual treatment may be effective treatments in reducing a young person's substance abuse, with screening, assessment and treatment matching being the best indicators of successful outcomes (Slack et al., 2006, p. 1). The review also highlights the paucity of research available regarding the effectiveness of treatement for young people with substance abuse issues, and implications of policy development and future directions.

Randall, Henggeler, Cunningham, Rowland, and Swenson (2001) illustrate an adaptation of MST coupled with community reinforcement plus vouchers approach (CRA) as a treatment for adolescent substance abuse and dependency. Key features of the CRA model enable the MST therapist and the caregiver to more specifically detect and address substance abuse issues through frequent urine testing, identification of triggers for substance use through functional analysis; self management planning; and development of substance avoiding skills.

4.3.3 Post Traumatic Stress Disorder

The National Child Traumatic Stress Network Juvenile Justice Working Group (2004) released a review of trauma focused interventions for young people in the juvenile justice system. While no research has been completed which looks at the effectiveness of PTSD treatment with young offenders (National Child Traumatic Stress Network Juvenile Justice Working Group, 2004, p. 4), only one trauma focused treatment received a higher rating for effectiveness with youth following exposure to a variety of traumatic events: CBT for PTSD (Cohen, Berliner, & Mannarino, 2003).

Silverman et al. (2008) reviewed the 21 studies (1998-2007) relating to psychosocial treatments for children and adolescents exposed to traumatic events. Trauma-Focused CBT met the criteria for a "well-established" treatment, School-Based Group CBT met the criteria for "probably efficacious", and seven other treatments met the criteria for "possibly efficacious". The authors also completed meta-analyses for four treatment outcomes (post-traumatic stress, depressive symptoms, anxiety symptoms, and externalising behaviour problems) compared to waitlist and active control conditions and concluded that, on average, treatment does have a modest positive effect on all four outcomes. Of note, Trauma-Focused CBT receives an "exemplary" rating on the OJJDP Model Programs Guide

4.3.4 Adolescent Girls

More adolescent girls are arrested and incarcerated in the US than ever before (National Mental Health Association, 2004). As such, the National Mental Health Association recommended that gender-specific programmes address relationship issues, coping strategies, co-occurring disorders, parenting, family, school and training issues, gender issues in society, domestic violence, victim empathy, surviving sexual abuse, communication skills, personal health (including healthy eating and exercise), independent living, and safety skills (2004, p. 11).

There is growing support for the use of DBT in adult forensic settings (Berzins & Trestman, 2004). Trupin et al. (2002) reviewed the effectiveness of a DBT programme on the behaviour of incarcerated female juvenile offenders and the use of punitive consequences by staff. While this pre-post pilot study yielded mixed results on the successfulness of such a programme, recommendations for "real-world settings" can be cautiously drawn from the findings, in particular ensuring a treatment: behaviour match (DBT may be more effective when matched with young women with suicidal, extreme aggression, and non-compliant behaviour) and ensuring provision of intensive training and support for staff (Berzins & Trestman, 2004; Trupin et al., 2002).

4.3.5 Cultural Competence

Cultural competence is an essential component of the system of care framework with a culturally competent system valuing diversity, possessing the capacity for self-assessment, conscious of the dynamics that result from cultural difference, expanding and institutionalising cultural knowledge, and adapting service delivery to reflect an understanding of diversity (Isaacs & Benjamin, 1991).

4.4 COLLABORATIVE INITIATIVES – YOUTH OFFENDING TEAMS (YOTS)

YOTs are interagency teams which consist of staff from education, probation, police, health and social services, and are developed to provide an integrated and appropriate response to youth offenders; reduce youth crime by helping young people to confront the consequences of offending behaviour; identify and address issues that may contribute to the initiation or maintenance of offending behaviour; and facilitate effective delivery of youth justice services (London Home Office, 2000).

Callaghan et al. (2003) employed a qualitative method to examining the views of professional's working in YOTs on a new model of utilising Primary Mental Health Workers (PMHWs), located in YOTs but supported by mental health services, to coordinate and provide mental health support within the context of an interagency setting. The role of the PMHW involves a combination of direct work with young people and consultation, liaison, training and joint work with other YOT professionals to improve their skills in identifying mental health issues, as well as utilising cognitive and behavioral management strategies, with youth offenders (Callaghan et al., 2003). Overall, the assessment and intervention component of the PMHW role and the accessibility and responsiveness of mental health staff were consistently valued, while there were mixed results on role definitions

within the team, consultation, and training. While the study didn't address how young people felt about the new model, or outcomes related to mental health and offending behaviour, the study concluded that there is value in providing mental health treatment and support directly within YOTs.

In findings closer to home, Harland and Borich (2007), in a mixed methods process evaluation of the effectiveness of YOTs in New Zealand, found that although YOTs are generally considered to be effective in facilitating inter-agency collaboration within the core youth justice agencies, there is a lack of clarity and understanding about the purpose, functions, and roles of YOTs in New Zealand, and confusion about the role of and relationship with community agencies. YOTs were formed in New Zealand in 2002 to ensure effective coordination and working relationships between the four core agencies intervening with youth offenders (Police; Child, Youth and Family; Education; and Health) – 32 teams currently operate throughout New Zealand. The Youth Justice Leadership Group (YJLG) has oversight for supporting and monitoring the performance of each YOT and the Ministry of Justice employ two full-time YOT Advisors to provide direct support to the teams and a link with the YJLG. The evaluation also found that there was a tendency for Child, Youth and Family, and Education agencies to be more positive about the success of YOTs, than Police and health agencies, leading to considerable variation in the measurable success of YOTs in New Zealand at this time (Harland & Borich, 2007, p. 13). Harland and Borich (2007, p. 14) provide a number of recommendations for improved collaboration and engagement, and improved effectiveness of YOTs, based on evaluation findings:

- A clearer mandate, leadership, and support from the Youth justice Leadership Group and senior management within the core youth justice agencies.
- Increased championing of YOTs by core agencies at a national level.
- Greater clarity of purpose, role, and expected outcomes of YOTs.
- Development of clear guidelines to assist YOTs with day-to-day tasks and functioning.
- Greater support in the development, management, and implementation of action plans.
- A higher level of reporting and information flow between the Youth justice Leadership Group, supported by the Ministry of Justice.
- Greater core agency commitment around clarification of the role of the agency representative ion the team, and the seniority and appropriateness of said representative.
- A review of funding.
- An increased level of enthusiasm for the potential of YOTs.

4.5 TRANSITION & AFTERCARE

Two models emerge from the literature as "promising practices" in successful transition and re-integration of young people with mental health issues back into the community following incarceration: The FIT Treatment Model (Family Integrated Transitions) and the Intensive Aftercare Model (IAP) (Altschuler & Armstrong, 1994).

The FIT Treatment Model is a model developed especially for re-integration of young offenders with mental health and substance dependency issues and aims to provide integrated individual and family support services during a young person's transition back into their community (Lee & De Robertis, 2006). Goals of the programme include lowering recidivism, connecting families with appropriate community based supports, abstinence from alcohol and other drugs, improving mental health, and increasing pro-social behaviour through the combination of three evidence based interventions: MST, DBT, and Motivational Enhancement Therapy (MET) (Miller & Rollnick, 1991). An outcome evaluation completed by Aos (2004) determined that at 18-months post release, engagement in the FIT programme lowered recidivism rates by 34%, and that for every US dollar spent on the FIT programme, $USD3.15 was saved in criminal justice expenses.

While well-evidenced as a successful model for supporting and re-integrating young people back into their communities following incarceration, the IAP Model is not specifically developed for young offenders with mental health issues. However the model, which is based on the five key principles (progressively increased responsibility and freedom, facilitating client-community interaction and involvement, working with both offenders and targeted community supports, developing new resources, supports and opportunities, and monitoring and testing), offers a number of strategies for ensuring that all young people are deliberately and effectively transitioned back into their families and communities.

Brown, Killian and Evans (2003) looked at the link between perceived familial functioning and post-detention success and found that young people who indicated a stronger sense of family functioning tended to have a greater likelihood of success.

4.6 WHAT'S HAPPENING IN NEW ZEALAND?

Curtis, Ronan, Heiblum, Reid, and Harris (2002) reviewed current treatment and intervention programmes (as opposed to evidence based) of anti-social youth in New Zealand:

- Individual treatment approaches – Problem solving skills training (PSST).
- Family approaches – Parent Management Training and MTFC.
- School-based interventions – Tu Tangata and the Eliminating Violence Programmes.
- Community approaches – For example, Family Group Conference, Police youth-At-Risk Programmes, Strengthening Families.

- Multi Systemic Treatment (MST).

Owen reviewed programmes and service offered in New Zealand to address Māori youth offending and concluded that many young people and their whanau do not receive appropriate programmes and services (2001, p. 182), with gaps identified in mental health services; counselling services; AoD counselling and programmes; alternative education opportunities; direct crisis support; intensive residential programmes; affordable accommodation for homeless young people; holistic services; affordable recreational activities; educational and vocational training; life skills programmes; opportunities for young people on remand to engage in programmes; legal and court support; and well resourced, Māori-developed and Māori-focused programmes. Additionally, Owen identified that there is limited research relating to what works to reduce Māori youth offending (2001, p. 185), although Singh and White (2000) and Oliver and Spee (2000) identify that a critical factor in the success of these programmes in whanau involvement and addressing issues of culture and identity, with Māori Community Initiatives for Youth-At-Risk of Offending, Police Youth-At-Risk of Offending Programmes, and Wraparound being identified as offering short term reductions in offending and improvement in life outcomes for young Māori offenders (Oliver & Spee, 2000; Singh & White, 2000; Warren, 2000). Owen (2001, p. 186) also recommends that successful programmes and services designed to address youth offending will include:

- Opportunities to re/discover identity, whakapapa, reo, tikanga, and history.
- Appropriate alternative opportunities for schooling and education.
- Vocational skills and training leading to employment.
- Access to services to address mental health, trauma, and substance abuse issues.
- A range of life skills training.
- Physical activities and opportunities for outdoor and recreational activities.

In 2000, the Ministry of Youth Affairs released “Tough is Not Enough – Getting Smart about Youth Crime” (McLaren, 2000), a review of the research on best practice for reducing offending by young people in New Zealand. Maclaren’s (2000) 100-page comprehensive review covers patterns and trends of offending among young people, the best targets for interventions, risks to address as a priority, processing of offenders, and responses to offenders with effective services, with the key messages being (p. 14):

- There is hope – offending by young people can be reduced.
- The worst cases need the most attention.
- Effective interventions address the known causes of offending.

- Maximum impact comes from targeting multiple causes of offending with multiple techniques.
- Effective interventions teach new skills in active ways.
- Good outcomes need good people.
- Effective interventions address the four cornerstones of a young person's life: Family, school/work, peers, and the neighbourhood.
- Good processing seems to make good outcomes more likely.
- Residential interventions need to work harder to succeed.

(McLaren, 2000, p. 14)

While focused on "what works" in reducing youth offending (as opposed to "what works" in the treatment of youth offenders with mental health issues), McLaren (2000) is cautious to name specific approaches as being successful or effective, focusing instead on the shared characteristics of successful programmes, and recommending a multifaceted approach which targets a number of needs or skill deficits, using a variety of techniques; cognitive behavioural techniques which actively teach new skills and attitudes; targeting the causes of offending; and teaching life skills to higher risk offenders. McLaren (2000) also includes a comprehensive review of the literature relating to effective approaches in residential and non-residential settings, with one of the key findings being that there is no longer conclusive evidence that residential approaches are more or less effective that community interventions, as "the specific nature of the approach is more important than the setting" (p. 58).

In general, findings drawn from the literature indicate that non-residential settings appear to be more successful with serious and violent young offenders with specific evidence based interventions, including interpersonal skills training, behavioural contracting, and individual counseling (which, interestingly, included MST, which is a family-based approach – thus highlighting the danger of referring to programme labels as opposed to specific characteristics) (McLaren, 2000, p. 59).

"Promising practices" in non-residential settings are multiple services and restitution on probation/ parole. Of note, more treatment (approximately 23 weeks) appears to be linked to better outcomes for youth in non-residential settings, although more than 5-10 hours of intervention/week appears to have a detrimental effect on positive outcomes (McLaren, 2000, p. 59). In residential settings, general programme characteristics (such as mental health professional staff) and length of service (more than 2 years) had the greatest impact on positive outcomes, followed by type of treatment and maintenance of treatment integrity, with teaching in family homes and interpersonal skills training deemed most effective.

Gray and Wilde (1999) concluded that effective residential interventions for offenders aged 15-20 will adopt a CBT based approach, have highly skilled staff, promote a positive peer culture, and

provide intensive community based supervision and reintegration services upon release. Whatever the setting, McLaren highlights the importance of including family in any interventions with young people, and cites MST and FFT as evidence based interventions for achieving better outcomes for young offenders and their families, with one caveat – family interventions that do not address risk factors will always fail (2000, p. 66).

An example of a programme specifically targeting youth offenders is the Reducing Youth Offending Programme (RYOP). An MST based programme for high-risk young offenders aged 10 to 16 piloted in Auckland Metropolitan Area (Harris & Wiki, 2007). The programme aimed to reduce the rate and severity of offences committed 12 months post-completion; reduce the number of incarcerations and out-of-home placements following programme completion; and increase school attendance rates. Independent evaluation of the programme in 2006, which aimed to determine the extent to which the programme met stated objectives and outcomes and the effectiveness of the programme as compared to cost, found issues with the fidelity of the programme in that adherence to the programme was generally difficult for caseworkers and adherence varied significantly between caseworkers (Harris & Wiki, 2007). In addition, the evaluation found that caseworkers spent less time with families than expected and generally lacked skills in family therapy, cognitive therapy, and core engagement which resulted in issues with the standard of delivery of MST. Despite these concerns, RYOP appeared effective with the target population and participation in school may have improved for RYOP clients, although a multi-method analysis of reoffending outcomes showed that no improvements could be linked to participation in the RYOP programme. Recommendations drawn from the evaluation include the provision of professional development opportunities for caseworkers and an improved model of cultural supervision; improved support from Multisystemic Therapy New Zealand (MST-NZ); improved monitoring of fieldwork adherence; development of competencies for caseworker recruitment; and an ongoing commitment to training investment – all of which were incorporated by the RYOP team (Harris & Wiki, 2007).

4.7 SUMMARY

Various service delivery models, supported by robust quality processes have been developed which allow a more systemic and targeted approach, and ensure that the young person's problems albeit behavioural (offending) together with mental health and/or AoD issues are dealt with in an ecologically comprehensive way. The notion of family inclusiveness and recognising the young person's problems and needs within a developmental and systemic concept has underpinned the development of what are effective interventions. Models such as MST, Wraparound and FFT provide a framework in which other treatment strategies can be applied such as CBT, or even Psychopharmacological treatment. In terms of substance misuse the literature suggests that no one treatment appears more superior than another. MDFT, FFT and group CBT do appear to be well established treatments while MST, Brief Strategic Family Therapy and Brief Family Therapy show promise as does individual CBT approaches. Enhancing parental competence has also been found to contribute to reduction in problematic behaviours and so parent management models such as

Incredible Years provide an intervention that can be applied as an early intervention but also throughout middle years may also mitigate behavioural and emotional problems escalating.

The management of risk (from others, toward others and self) for this population continues to pose a challenge for those working in the field. The limited research highlights that youth offenders, particularly those who are detained are up to four times more likely to complete a suicide. Unfortunately there is a lack of research on a the impact of safe care management either in the community or in purpose built facilities and/or the influence of a trained workforce which suggests that managing high risk, aggressive youth with concurrent acute psychiatric disturbance such as psychosis are responded to in varied ways which has precluded the development of parameters of best practice.

In terms of barriers to seeking intervention studies have highlighted that young people tend to under-report or do not acknowledge that they have mental health problems and that they need support. There is also a tendency for this age group to think their issues will resolve by themselves.

Recognising the value of a whole system approach to addressing the needs of youth who offend with mental health and/or AoD issues, recent research advocates for a System of Care framework. Intersector or inter-agency collaborative initiatives such as the YOTs in New Zealand has attempted to bridge sectors (Police, Child, Youth and Family, Health and Education) to ensure effective coordination and working relationships between this core agencies. A recent evaluation has identified that a clearer mandate and clarity of role may improve effectiveness of YOT's here in New Zealand. In the UK YOTs which have tended to have more focus on collaborative practice. New developments have resulted in the introduction of Primary Mental Health Workers on the team so increasing young offender's access to mental health services.

The research suggests that successful transition back into the community for youth offenders who have been detained in either a hospital, residential or institutional setting is achieved through the provision of integrated individual and family support services. Models such as the FIT Treatment Model (Family Integrated Transitions) and the Intensive Aftercare Model (IAP) have been identified as promising practices

Finally in New Zealand, the research on the treatment of youth who offend who have mental health and/or AoD issues is limited. The focuss on effective programmes and interventions has tended to focus on offending rather than their mental health issues. Further research is needed to increase the recognition of the mental health and/or AoD needs of youth offenders and to both inform intervention design and service development.

5.0 SERVICE DELIVERY & ACCESS

5.1 SERVICE CONFIGURATIONS

When entering the Youth or Juvenile Justice system the youth who offends is likely to have involvement with multiple agencies that will be assessing their needs and making decisions as to how they should be dealt with by the judicial process with the aim of reducing their risk of reoffending. The literature has indicated that information related to their general health, including mental health and AoD and their educational needs is necessary to mitigate risks and to ensure successful outcomes. Responding to this need, services have been established internationally and locally to serve the needs of this population. There have been some studies highlighting best practice in this area and the impact of service configurations on access and the benefits of integrated services as opposed to referral out. A general search was conducted and has included sourcing examples of service descriptions and components.

One of the key questions is should there be on-site integration of appropriative services or referral to community-based services? There is a recognised lack of agreement and evidence around which has better outcomes for young offenders with mental health issues, especially for those in secure care (Desai et al., 2006), or which mix of services or professionals should be prioritised for this population. There is also anecdotal evidence to suggest that there is a grave shortage of specialist mental health professionals directly involved in working with young offenders or supporting the staff involved in the day-to-day care of them as well as a potential mismatch between assessments made by specialists and the expectations of what is required by the referring agents (Kurtz, Thornes, & Bailey, 1998). Teplin, Abram, McClelland, Washburn and Pikus (2005) add that there is no point in detecting mental health needs in young offenders if there are no services available to meet these needs, with particular consideration required for young people transition out of secure care and back into their communities.

Table 10. Examples of Service Configurations (Sourced via Google)

Location	Service	Service Type	Service Components	Source
Auckland NZ	Kari Centre Youth Forensic Service	Young people with known or suspected Mental Health issues who engage in offending behaviours and are involved with the justice system	– Mental health assessments – MD Team	
British Columbia, CA	Youth Forensic Psychiatric Services	Clinical, educational and research services. Target population in youth aged 12-17 who have been charges and/or convicted of an offence; are legally mandated for assessment and treatment; are in need of services for mental health and /or behavioural problems.	– Inpatient Assessment Unit, – Outpatient clinics – Specialised treatment programmes (Youth Sexual Offence Treatment and Youth Violent Offence Treatment) – Psych-educational programmes – (Youth Substance Abuse Management and Youth Violence Intervention)	Annual Report (2005-2006)
Sonoma County, USA	Department of Health Services, Mental Health Division	Recovery based services provided in partnerships with clients, families, other agencies and community providers.	– Psychiatric Emergency and Crisis Stabilisation and Crisis Residential Services – Family Advocacy Support and Treatment Team (Wraparound services for 5-12 yo) – Intensive Enrollee Services for Youth (Full range of services) – Los Guilicos Juvenile Hall (secure care) – Sierra Youth Camp (Girls only) – Valley of the Moon Children's Home.	Summary of Programs and Services
Saskatoon, CA	Youth Resource Centre/ Youth Community Counselling Programme/YOT	Youth aged 13-18 and their families – YOT provides specialised and unique forensic services to youth convicted of a criminal offence, aged 12-18 and their families.	– YRC: Axt, counselling, therapy groups, recreation, day programme. – YCCP: Axt, ind. and family therapy, group therapy	

Table 10. Examples of Service Configurations (Sourced via Google) Continued.

Location	Service	Service Type	Service Components	Source
Nova Scotia, CA	Department of Health	Range of mental health services provided to youth and their families	– Mental Health Assessment and Treatment Services – Youth Navigator (advocacy) – Family Help Program – Intensive Community Based Treatment team – Crisis Intervention – Tele-psychiatry – Speciality Services (including forensic mental health) – Youth Forensic Mental Health Services – Court Ordered Assessment and Treatment – Treatment for sexual Aggression – Clinical Services at Youth Centre (MD team) – Addiction Services – The Choices Program	
	Department of Justice	Range of relevant services provided to youth and their families	– Youth Facility (secure care) – Reintegration/Rehab Planning and Case Management – Community Supervision and Support – Education Programs – Employment Placement – Life Skills, Anger Management, Substance Abuse and Other Programs – Leisure Activities (supervised) – Spiritual and Cultural Programs and Services – Youth Attendance Centre (range of day, evening, and weekend programmes including psycho-educational programmes and psychological and social work services) – Youth Resource Centre (psycho-educational, employment and leisure programmes) – Centre 24/7 (day school and psycho-educational programme)	Programs and Services for Children, Youth and Families (2007)

5.1.1 Access

Stiffman, Pescosolido and Cabassa (2004) suggest that the most significant contributor to access into mental health services for young people may be the knowledge and skills of the "gateway provider" (for example, family, friends, mental health specialists or professionals/staff working in health, welfare, justice, or education settings), and have developed a "gateway provider model" to understand how young people access such services. The model, based in the Network-Episode Model and Decision Theory, has been supported by four studies (Carise & Gurel, 2003; Stiffman, Foster, Hamburg, & Dore, 2003; Stiffman et al., 2000; Stiffman, Striley, Brown, Limb, & Ostmann, 2003) with key findings being that service provision is solely based on provider assessment and knowledge of services, and improved staff access to decision making support and information (in this case via PDA's and laptops) leads to better identification of youth and parent problems and increased referrals to appropriate services. Stiffman et al. (2004) conclude that any service configuration must consider the pivotal role that the gateway provider has in screening for or treating a young person's mental health issues and referring to appropriate services, with two pieces of information being deemed critical – knowledge of community resources and knowledge of brief, accurate screening tools.

5.1.2 Integration

The need for coordination and integration of services is a recurring theme in the literature. The National Health Services (NHS) Health Advisory Service (1995) published a thematic review of child and adolescent mental health services (Together We Stand) for commissioning and delivering services (http://www.everychildmatters.gov.uk/health/camhs/). The review proposed a four-tier strategic framework While there have been variations of the model implemented in the United Kingdom since this time, the final report of the National CAMHS Review (Department of Health, 2008) advocates for the continued use of the framework. An important note is that the term CAMHS refers to the nature of the service provision which may involve various providers and agencies. Practitioners working in the CAMHS arena will likely be employed by a range of agencies. The tiers are structured as follows:

Tier 1 – CAMHS are provided by practitioners who are not mental health specialists. This may include GPs health visitors, school nurses, teachers, social workers, youth justice workers, and voluntary agencies

Tier 2 – Practitioners at this level are likely to be CAMHS specialists in community and primary health care settings and can include mental health workers, psychologists and counselors working in GP practices, schools or youth services. These practitioners offer consultation to families and other practitioners identifying those needed that require more specialist intervention.

Tier 3 – Is generally a multi-disciplinary team or service working a community mental health clinic or out-patient service providing a more specialised service for young people with more severe, complex and persistent disorders.

Tier 4 – These are tertiary level services for young people with the most serious problems and may include day or residential units, highly specialised outpatient and inpatient units

Stathis, Letters, Doolan, and Whittingham (2006) describe an integrated substance use and mental health service (Mental Health, Tobacco, and Other Drugs Service) in a youth detention centre in Brisbane. The service, which represented a move away from a traditional separate mental health and AoD service, utilised mental health as the core paradigm with all mental health staff trained in drug and alcohol assessment and treatment, as well as a specialist AoD worker being employed to support the team. Additionally, an Indigenous health worker embedded in the service structure is strongly recommended (Stathis et al., 2006, p. 153). The service accepted automatic referrals for all youth-at-risk (following screening on admission), with all young people offered a single voluntary AoD appointment on acceptance, and those who accepted the initial AoD appointment were then offered a brief (4-session, individual intervention (based on reported evidence for brief interventions in AoD work), and a 5-week group-based relapse-prevention programme (which was not deemed successful based on reported and anecdotal evidence, supporting one-on-one work over group work with youth justice populations.

Myers and Farrell (2008) cite North Dakota's statewide programme to combat Hepatitis C in corrections settings as an example of a multi-tiered, coordinated public health initiative that could potentially be employed to better meet the health needs of young offenders. The North Dakota programme involves universal screening and vaccination, health education and heightened surveillance of high-risk inmates, treatment, and results monitoring. Unfortunately, the authors also conclude that there is no consensus about HOW mental health services should be provided to young offenders, and highlight the concern that evidence based practices in treating young offenders tend to have little effect when young people return to unchanged home and community situations following incarceration (Myers & Farrell, 2008, p. 1172).

Maschi, Hatcher, Schwalbe and Rosato (2008), in their comprehensive review of the social services pathways undertaken by youth to and through the juvenile justice system, found that the juvenile justice system is not adequately equipped to meet the needs of youth with mental health issues with the lack of coordination of services, the lack of integration of services, the lack of community support for success, the lack of effective services and a hierarchical leadership structure contributing to a "crisis of care" (2008, p. 6). As such, the authors' recommendations for system reform, based on the literature, include system integration, collaboration, information sharing, and the adoption of a collaborative leadership model, involving all stakeholders in decision making (Maschi et al., 2008, p. 7). Based on findings drawn from the literature reviewed, the authors have developed a social justice systems model, based on a "child's right to care', which incorporates the young person alongside universal services of health and education embedded in a community context. The

orientation of the model (a birds-eye view) is designed to minimise a "system-centric" approach to assessment and treatment, ensuring the development and improvement of services includes all stakeholders, including young people and their familles, professionals, and community members (Maschi et al., 2008, p. 8).

VanDenBerg (1993) advocates an Alaskan initiative which integrates individualised mental health services into a system of care as a more effective and less expensive option for treating children and adolescents with emotional problems. Disadvantages to the individualised model over a categorical service system are outlined (fewer clients; increased expense; resistance from service providers; reliance on interagency collaboration; flexible funding) as are a number of case examples detailing the advantages, and relative success, that come from combining the "best of both worlds", such as a system of care approach offering youth and families intensive diagnosis and evaluation, home-based services, case-management, therapeutic foster care, a group home, and a day treatment programme (VanDenBerg, 1993, p. 254).

5.1.3 Referring Out

Kurtz et al. (1998) in their review of how mental health needs are met for children in the criminal justice and secure care systems in England and Wales found that there is great variation in mental health expertise available to young people, with access being of primary concern. Relationship issues between youth justice and mental health services also tended to get in the way of service provision (for example, slow response times, exclusion criteria, and a perceived or real lack of expertise) as did the "assessment only" philosophy of a number of mental health services. A lack of working agreements and joint funding strategies between local services was a contributing factor, as was a lack of core staff in secure units with mental health expertise – while doctors and nurses were often attached to institutions, many did not have sufficient mental health knowledge, and guidelines provided in just over 50% of units did not provide sufficient support for recognising mental health issues in young offenders or referring to appropriate services, and as such, screening and assessment, liaison, work with families, follow-up, and continuing care were all limited. As such Kurtz et al (1998) recommend that the mental health needs of young offenders in secure care are met by the development of specialist resources offering consultation and training to institutions, and the provision of local community teams to better support effective intervention, especially after young people are returned to their communities.

5.1.4 New Developments

In 2001, the National Centre for Mental Health and Juvenile Justice working in partnership with the Council of Juvenile Correctional Administrators in the United States undertook a major project to develop a Comprehensive Model for providing a broad range of mental health services to youth in contact with the juvenile justice system (Skowyra & Cocozza, 2007). The project involved an extensive review of the research literature, a multi-site study of mental health needs and services for youth in different levels of juvenile justice care and identified existing promising practices and programmes within the United States. The results of this project have contributed to a Blueprint for

Change which outlines a conceptual and practical framework for juvenile justice and mental health systems to use to guide policy, strategies and services to improve services for this population. Key to the model proposed are a number of principles which acknowledge the issues and challenges which have been highlighted in the literature in this area. These principles are considered to lay the foundation to the four cornerstones of the model. Outlined below are the Principles and Cornerstones which underpin this model.

Table 11a. Core Principles: Comprehensive Model for the Identification and Treatment of Youth with Mental Health Need in Contact with the Juvenile Justice System (Skowyra & Cocozza, 2007)

Core Principles	
1. Youth should not have to enter the juvenile justice system solely in order to access mental health services or because of their mental illness	2. Whenever possible and when matters of public safety allow, youth with mental health needs should be diverted into evidence-based treatment in a community setting.
3. If diversion out of the juvenile justice system is not possible, youth should be placed in the least restrictive setting possible, with access to evidence based treatment	4. Information collected as part of a pre-adjudicatory mental health screen should not be used in any way that might jeopardize the legal interests of youth as defendants
5. All mental health services provided to youth in contact with the juvenile justice system should respond to issues of gender, ethnicity, race, age, sexual orientation, socio-economic status and faith.	6. Mental health services should meet the development realities of youth. Children and adolescents are not simply little adults.
7. Whenever possible, families and/or caregivers should be partners in the development of treatment decisions and plans made for their children	8. Multiple systems bear responsibility for these youth. While at different times, a single agency may have primary responsibility, these youth are the community's responsibility and all responses developed for these youth should be collaborative in nature, reflecting the input and involvement of the mental health, juvenile justice and other systems.
9. Services & strategies aimed at improving the identification and treatment of youth with mental health needs in the juvenile justice system should be routinely evaluated to determine their effectiveness in meeting the desired goals and outcomes.	

Table 11b. Cornerstones: Comprehensive Model for the Identification and Treatment of Youth with Mental Health Need in Contact with the Juvenile Justice System (Skowyra & Cocozza, 2007)

Cornerstones			
Collaboration The need for improved collaboration between the juvenile justice and mental health systems	**Identification** The need for improved and systemic strategies for identifying mental health needs among youth in contact with the juvenile justice system	**Diversion** The need for more opportunities for youth to be appropriately diverted into effective community based mental health treatment	**Treatment** The need for youth in contact with the juvenile justice system to have access to effective treatment to meet their needs

5.2 SUMMARY

There is still insufficient evidence to determine whether there should be on-site integration of appropriative services or referral to community-based services. A lack of services available to meet the needs of young people who offend is however a key concern, as is a shortage of specialist mental health professionals directly involved in working with young offenders or supporting the staff involved in the day-to-day care of them. Further to this is a potential mismatch between assessments made by specialists and the expectations of what is required by the referring agents. In improving access to mental health services for young people the "gateway provider model" provides a promising start. The gateway provider has a key role when screening for or treating a young person's mental health issues and then referring to appropriate services. Two pieces of information critical to this process are knowledge of community resources and knowledge of brief, accurate screening tools.

Integrated services represent a move away from a traditional separate mental health and AoD service, utilise mental health as the core paradigm with all mental health staff trained in drug and alcohol assessment and treatment, as well as a specialist AoD worker being employed to support the team. Additionally, an Indigenous health worker embedded in the service structure is strongly recommended. Within the literature, however, there is no consensus about how mental health services should be provided to young offenders, and highlight the concern that evidence based practices in treating young offenders in residential settings, without follow-up systemic interventions tend to have little effect when young people return to unchanged home and community situations. More investigation is needed with respect to effective service configurations.

A reoccurring theme in the literature is that the juvenile justice system is not adequately equipped to meet the needs of youth with mental health and/or AoD issues with the lack of coordination of services, the lack of integration of services, the lack of community support for success, the lack of effective services and a hierarchical leadership structure. The literature findings highlight a need for system reform, which include system integration, collaboration, information sharing, and the adoption of a collaborative leadership model, involving all stakeholders in decision making. A comprehensive framework of mental health service delivery would inform policy and strategic decisions. This framework if underpinned by explicit principles would embrace the key areas of need for the Youth Justice population. Foundation cornerstones necessary for effective service delivery would also likely ensure that key concerns for both practitioners and service users are not overlooked. The development of a social justice systems model, based on a "child's right to care', which incorporates the young person alongside universal services of health and education embedded in a community context would combine the "best of both worlds". The system of care approach if applied in the Juvenile Justice arena may offer youth and families a collaborative menu of relevant assessment and intervention options across agencies and within the community.

6.0 EMERGING ISSUES

Mental illness is less defined in adolescents than it is in adults. The key dilemma that has faced researchers, clinicians and other practitioners has been whether we are looking to treat the young person's offending behaviour or mental health issues or are the two extricable linked? The early literature in this area tended to focus on criminological approaches to treat youth who offend and seldom considered co-existing issues or the developmental context. Rates of mental health and AoD issues between 65% and 75% highlight that mental health and AoD issues are more pronounced in the youth offender than the general population, particularly those who are detained. Despite a lack of New Zealand studies focused specifically on youth offenders' prevalence studies in the general youth population this international finding suggests that mental health and AoD issues must be considered for those youth entering the Youth Justice Process. The prevalence of mental health issues for Māori in the general population unfortunately is almost double that of Non-Māori with Māori males in the 14-18 year age groups more likely than non-Māori to have major alcohol and drug problems and dependency states. As Māori are disproportionately represented in Youth Justice, the need for adequate assessment and effective and culturally sensitive treatment options is paramount.

Over the last ten years promising practices have emerged with a growing body of evidence to support their efficacy with working with youth who offend and who may have some form of mental health and/or AoD issue. The key dilemma that has faced researchers, clinicians and other practitioners has been whether we are looking to treat the young person's offending behaviour or mental health issues or are the two extricable linked? The early literature in this area tended to focus on criminological approaches to treat youth who offend and seldom considered co-existing issues or the developmental context. More recent studies have moved beyond the psychopathology of the youth to consider intervention across several domains. These are Prevention; Social and Community; Family; and the Individual. The concept of a system of care which promotes interventions to be youth centred, family focussed, community based and culturally sensitive embraces this new thinking and the growing evidence that a systemic approach is more likely to achieve better outcomes for young offenders.

Recognising the value of a whole system approach to addressing the needs of youth who offend with mental health and/or AoD issues recent research advocates for a System of Care framework. Intersector or inter-agency collaborative initiatives such as the YOTs in New Zealand has attempted to bridge sectors (Police, Child, Youth & Family, Health & Education) to ensure effective coordination and working relationships between core agencies. In the UK this initiative has been developed to include collaborative practice moving toward a more integrative service delivery approach in ensuring youth offenders mental health and/or AoD needs are identified and where possible treated.

Conducting clinical assessment and provision of effective treatment in the Juvenile or Youth Justice arena has been identified as challenging and requires clinicians to have a comprehensive knowledge

of clinical, risk, cultural and legislative issues able to respond to variety of queries from whether the youth is at risk of becoming psychopathic adults, or whether their offending is an extreme demonstration of "normal adolescent behaviour and the contribution their mental health and/or AoD issues have had, as well as recommendations as to what might be the most appropriate treatment. The increasing awareness that interventions for young people are most effective when considerations is given to their wider systems (family, school, and peers) poses further demands on the clinicians to understand family and systemic approaches. This of course highlights that youth forensic professional training must include specialised clinical skills which adheres to best practice in assessment, is well informed around evidence based interventions and also provides a comprehensive orientation to contextual aspects of the young person's world.

6.1 RESEARCH GAPS

The most striking gap in the research is the lack of New Zealand studies on youth offenders, particularly with respect to mental health and AoD needs. This includes prevalence, assessment issues, effective treatments, and culturally sensitive best practice parameters. Although the review of international literature highlights the need for culturally responsive practices, little research has been done on addressing the mental health and AoD issues for young Māori, young Pacific and the increasing young Asian population in New Zealand.

Although there have been promising developments in service organization, the research on ideal service configurations in terms of staffing (specialists and disciplines, the wider Youth Justice workforce and likely roles and interface) is limited. Ongoing training and supervision for staff working in this area was embedded in many of the new evidence based interventions model but there was still few studies on the skills and training needed to work in challenging settings.

Little research was found in this review on the impact of, or the optimal configuration of secure and safe care inpatient facilities for youth presenting with aggressive, suicidal or acute psychiatric states.

In light of these clear gaps it is therefore recommended that any further developments in the area of Youth Forensic Mental Health also advocate for more research, guidelines for training and practice to provide a foundation for sustainable and effective service delivery in the future.

6.2 KEY FINDINGS

Although continued research is needed particularly within the New Zealand context the key findings from this review are as follows:

General

- Mental illness is less defined in adolescents than it is in adults. The notion of mental illness can be broad for this group and include issues such as suicidality, substance abuse, risk of violence, conduct issues, in addition to more obvious clinical disorders.

- Prevalence rates of between 40% and 60% highlight that mental health and AoD issues cannot be ignored in the Youth Offending population. The incidence of psychiatric disorders and AoD issues is even more pronounced among those youth who are detained or incarcerated.

- A reoccurring theme in the literature is that that juvenile justice system is not adequately equipped to meet the needs of youth with mental health and/or AoD issues. Improvement is needed in: coordination of services; availability of trained or specialist staff; integration of services; encouraging community support for success; effective services; and leadership structures.

Screening & Assessment

- There is a need to at least screen and, where necessary, comprehensively assess a young person involved in the Youth Justice process to inform treatment decisions, manage potential risk and enable community referrals.

- To aid decision making the right tool and process is vital. This should include the selection of evidence based, scientifically sound screens that are well-validated and reliable, and that assessment and screening processes in youth justice settings are standardised.

- Given that the young person may be presenting under coercion and may not recognise that they have problems or that they need help there is a need to: engage the youth; understand the developmental and contextual background; and understand their issues within a family system.

- Although no specific protocols for minority groups have been specified in the literature there is a clear need for culturally sensitive responses and certainly this is an area which needs development.

- Conducting screening and assessments in youth or juvenile justice settings is challenging and requires a working knowledge of clinical, cultural, risk and legislative issues. Specialised

training and appropriate supervision for clinicians and other practitioners is of key importance.

Intervention & Treatment

- Service delivery models such as Multisystemic Therapy (MST), Multidimensional Treatment Foster Care (MFTC), Functional Family Therapy (FFT) or Wraparound allow a more systemic and targeted approach, and ensure that the young person's problems albeit behavioural (offending) together with mental health and/or AoD issues are dealt with in an ecologically comprehensive way. These models provide a framework in which other treatment strategies can be applied.

- Enhancing parental competence has also been found to contribute to reduction in problematic behaviours and so parent management models such as Incredible Years provide an intervention that can be applied as an early intervention, but also throughout middle years may also mitigate behavioural and emotional problems escalating.

- There is still a lack of research on the impact of safe care management for at risk youth offenders either in the community or in purpose built facilities and/or the influence of a trained workforce. Risks requiring secure safe care may include from others, toward others and self and acute psychiatric states.

- Managing high risk, aggressive and psychiatrically disturbed youth is responded to in varied ways internationally which has precluded the development of parameters of best practice.

- Successful transition back into the community for youth offenders who have been detained in either a hospital, residential or institutional settings is achieved through the provision of integrated individual and family support services. Evidence based practices in treating young offenders in residential settings, without follow-up systemic interventions tend to have little effect when young people return to unchanged home and community situations.

Service Delivery

- To improve access to mental health services for young people the "gateway provider model" provides a promising start and may minimize the mismatch between assessments made by specialists and the expectations of what is required by the referring agents.

- Integrated services utilising mental health as the core paradigm with all mental health staff trained in drug and alcohol assessment and treatment is needed. Employment of a specialist AoD worker to support the team and an Indigenous health worker embedded in the service structure is strongly recommended.

- A need for system reform, which includes system integration, collaboration, information sharing, and the adoption of a collaborative leadership model, involving all stakeholders in decision making.

- A comprehensive framework of Mental Health Service delivery be adopted underpinned by explicit principles which embrace the key areas of need for the Youth Justice population and highlight foundation cornerstones necessary for effective service delivery

- A need for the development of a social justice systems model or System of Care, based on a "child's right to care" which incorporates the young person alongside universal services of health and education embedded in a community context.

REFERENCES

Aarons, G. A., Brown, S. A., Hough, R. L., Garland, A. F., & Wood, P. A. (2001). Prevalence of adolescent substance use disorders across five sectors of care. *Journal of the American Academy of Child & Adolescent Psychiatry, 40*(4), 419-426.

Abram, K. M., Choe, J. Y., Washburn, J. J., Teplin, L. A., King, D. C., & Dulcan, M. K. (2008). Suicidal Ideation and Behaviors Among Youths in Juvenile Detention. *Journal of the American Acadamy for Child and Adolescent Psychiatry, 47*(3), 291-300.

Abram, K. M., Paskar, L. D., Washburn, J. J., & Teplin, L. A. (2008). Perceived Barriers to Mental Health Services Among Youths in Detention. *Journal of the American Academy of Child and Adolescent Psychiatry, 47*(3), 301-308.

Abram, K. M., Teplin, L. A., Charles, D. R., Longworth, S. L., McClelland, G. M., & Dulcan, M. K. (2004). Posttraumatic Stress Disorder and Trauma in Youth in Juvenile Detention. *Archives of General Psychiatry, 61*, 403-410.

Abram, K. M., Teplin, L. A., McClelland, G. M., & Dulcan, M. K. (2003). Comorbid psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry, 60*(11), 1097-1108.

Achenbach, T. M. (1991). *Manual for the Youth Self-Report and 1991 Profile*. Burlington: University of Vermont, Department of Psychiatry.

Adolescent Health Research Group. (2002). *Alternative Education students health: From Northland and Auckland regions*. Auckland: University of Auckland.

Adolescent Health Research Group. (2003). *New Zealand youth: A profile of their health and wellbeing*. Auckland: University of Auckland.

Altschuler, D. M. (1998). Intermediate sanctions and community treatment for serious and violent juvenile offenders. In R. Loeber & D. Farrington (Eds.), *Serious and violent juvenile offenders: Risk factors and successful interventions* (pp. 367-386). Thousand Oaks, C.A.: Sage Publications Inc.

Altschuler, D. M., & Armstrong, T. L. (1994). Intensive Aftercare for High-Risk Juveniles: A Community Care Model. *Office of Juvenile Justice and Delinquency Prevention*.

Altschuler, D. M., Armstrong, T. L., & MacKenzie, D. L. (1999). Reintegration, Supervised Realease, and Intensive Aftercare. *Office of Juvenile Justice and Delinquency Prevention, Juvenile Justice Bulletin, July*.

American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* (Revised 4th ed.). Washington, D.C.: American Psychiatric Association.

Anderson, J., Williams, S., McGee, R., & Silva, P. A. (1987). DSM-III disorders in pre-adolescent children: prevalence in a large sample from the general population. *Archives of General Psychiatry, 44*(69-76).

Aos, S. (2004). *Washington State's Family Integrated Transitions Program for Juvenile Offenders: Outcome Evaluation and Benefit-Cost Analysis.* Olympia: Washington State Institute for Public Policy.

Associate Minister of Health. (2006). *The New Zealand Suicide Prevention Strategy 2006-2016*. Wellington, New Zealand: Ministry of Health.

Atkinson, M. (2007). *Screening children and young people for risk of re-offending: A Discussion of the Pilot of the Youth Offending Risk Screening Tool (YORST) with supporting documentation.* Paper presented at the 'Working Together' conference. Retrieved from http://www.yoc.org.nz/assets/melanie%20atkinson%201205%20c1.pdf.

Baker, K., Jones, S., Robers, C., & Merrington, S. (2003). *The evaluation of the validity and reliability of the youth justice board's assessment for young offenders: Findings from the first two years of the use of ASSET*. Oxford, University of Oxford: Youth Justice Board.

Beautrais, A. (1998). *A review of evidence: In our hands - the New Zealand Youth Suicide Prevention Strategy*. Wellington: Ministry of Health.

Berzins, L. G., & Trestman, R. L. (2004). The Development and Implementation of Dialectical Behavior Therapy in Forensic Settings. *International Journal of Forensic Mental Health, 3*(1), 93-103.

Bickel, R., & Campbell, A. (2002). Mental health of adolescents in custody: The use of the Adolescent Psychopathology Scale in a Tasmanian context. *Australian & New Zealand Journal of Psychiatry, 36*, 603-609.

Blechman, E. A., Maurice, A., Buecker, B., & Helberg, C. (2000). Can mentoring or skill training reduce recidivism? Observational study with propensity analysis. *Prevention Science, 1*(3), 139-155.

Block, J. (1978). Effects of a rational-emotive mental health program on poorly achieving, disruptive high school students. *Journal of Counselling Psychology, 25*, 61-65.

Brinded, P. M. J., Simpson, A. I. F., Laidlaw, T. M., Fairley, N., & Malcolm, F. (2001). Prevalence of psychiatric disorders in New Zealand prisons: A national study. *Australian & New Zealand Journal of Psychiatry, 35*, 166-173.

Brinded, P.J., Isobel Stevens, I., Mulder, R.T.,Fairley, N., Malcolm, F., & Wells, E. (1999). Christchurch Prisons Psychiatric Epidemiology Study: Methodology and Prevalance Rates for Psychiatric Disorder. New Zealand: Department of Corrections.

Brinkmeyer, M. Y., & Eyberg, S. M. (2003). Parent-child interaction therapy for oppositional children. In A. E. Kazdin & J. R. Weisz (Eds.), *Evidenced-based psychotherapies for children and adolescents* (pp. 204-223). New York: Guilford.

Bronfenbrenner, U. (1979). *The Ecology of Human Development*. Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology, 22*, 723-742.

Brown, R., Killian, E., & Evans, W. P. (2003). Familial Functioning as a Support System for Adolescents' Postdetention Success. *International Journal of Offender Therapy and Comparative Criminology, 47*(5), 529-541.

Bruns, E. J., Suter, J. C., Force, M. M., & Burchard, J. D. (2005). Adherence to Wraparound Principles and Association with Outcomes. *Journal of Child and Family Studies, 14*(4), 521-534.

Burchard, J. D., Burns, E. J., & Burchard, S. (2002). The wraparound approach. In B. J. Burns & K. Hoagwood (Eds.), *Community treatment for youth: Evidence-based interventions for severe emotional and behavioral disorders* (pp. 69-91). New York: Oxford University Press.

Bushnell, J. A., & Bakker, L. W. (1997). Substance use disorders among men in prison: A New Zealand study. *Australian & New Zealand Journal of Psychiatry, 31*(4), 577-581.

Cairney, J., Veldhuizen, S., Wade, T. J., Kurdyak, P., & Streiner, D. L. (2007). Evaluation of 2 Measures of Psychological Distress as Screeners for Depression in the General Population. *The Canadian Journal of Psychiatry, 52*(2), 111-120.

Callaghan, J., Young, B., Pace, F., & Vostanis, P. (2003). Mental health support for youth offending teams: a qualitative study. *Health and Social Care in the Community, 11*(1), 55-63.

Carise, D., & Gurel, O. (2003). Benefits of integrating technology with treatment: The DENS Project. In J. Sorenson, R. Rawson, J. Guydish & J. Zweben (Eds.), *Drug abuse treatment through collaboration: Practice and research partnerships at work* (pp. 181-195). Washington, DC: American Psychological Association (APA).

Cauffman, E., Feldman, S., Waterman, J., & Steiner, H. (1998). Posttraumatic stress disorder among female juvenile offenders. *Journal of the American Acadamy for Child and Adolescent Psychiatry, 37*(11), 1209-1216.

Cauffman, E., Frances, J. L., Goldweber, A., Shulman, E. P., & Grisso, T. (2007). Gender differences in mental health symptoms among delinquent and community youth. *Youth Violence and Juvenile Justice, 5*(3), 287-307.

Cauffman, E., Piquero, A. R., Broidy, L., Espelage, D. L., & Mazerolle, P. (2004). Heterogeneity in the association between social-emotional adjustment profiles and deviant behavior among male and female serious juvenile offenders. *International Journal of Offender Therapy & Comparative Criminology, 48*(2), 235-252.

Chamberlain, P., Leve, L. D., & DeGarmo, D. S. (2007). Multidimensional Treatment Foster Care for Girls in the Juvenile Justice System: 2-Year Follow-Up of a Randomized Clinical Trial. *Journal of Consulting and Clinical Psychology., 75*(1), 187-193.

Chamberlain, P., & Reid, J. B. (1998). Comparison of Two Community Alternatives to Incarceration for Chronic Juvenile Offenders. *Journal of Consulting and Clinical Psychology., 66*(4), 624-633.

Chamberlain, P., & Smith, D. K. (2003). Antisocial behavior in children and adolescents: The Oregon Multidimensional Treatment Foster Care Model. In A. E. Kazdin & J. R. Weisz (Eds.), *Evidenced based psychotherapies for children and adolescents* (pp. 282-300). New York: Guilford.

Child Youth and Family. (2000). *Towards well-being: Responding to the needs of young people*. Wellington: Department of Child, Youth and Family Services.

Chitsabesan, P., Kroll, L., Bailey, S., Kenning, C., Sneider, S., MacDonald, W., et al. (2006). Mental health needs of young offenders in custody and in the community. *British Journal of Psychiatry, 188*, 534-540.

Christie, G., Marsh, R., Sheridan, J., Wheeler, A., Suaalii-Sauni, T., Black, S., et al. (2007). The Substances and Choices Scale (SACS) - the development and testing of a new alcohol and other drug screening and outcome measurement instrument for young people. *Addiction, 102*(9), 1390-1399.

Cocozza, J., & Skowyra, K. (2000). Youth with mental health disorders: Issues and emerging responses. *Juvenile Justice, VII*(1), pp. 3-13.

Cohen, J. A., Berliner, L., & Mannarino, A. P. (2003). Psychosocial and Pharmacological Interventions for Child Crime Victims. *Journal of Traumatic Stress, 16*(2), 175-186.

Cuellar, A. E., McReynolds, L. S., & Wasserman, G. A. (2006). A Cure for Crime: Can Mental Health Treatment Diversion Reduce Crime among Youth? *Journal of Policy Analysis and Management, 25*(1), 197-214.

Curtis, N. M., Ronan, K. R., Heiblum, N., Reid, M., & Harris, J. (2002). Antisocial Behaviours in New Zealand Youth: Prevalence, Interventions and Promising New Directions. *New Zealand Journal of Psychology, 31*(2), 53-58.

David-Ferdon, C., & Kaslow, N. J. (2008). Evidence-Based Psychosocial Treatments for Child and Adolescent Depression. *Journal of Clinical Child & Adolescent Psychology, 37*(1), 62-104.

Deas, D., Riggs, P., Langenbucher, J., Goldman, M., & Brown, S. (2000). Adolescents Are Not Adults: developmental Considerations in Alcohol Users. *Alcoholism: clinical and Experimental research, 24*(2), 232-237.

Dembo, R., Williams, L., & Schmeidler, J. (1993). Gender differences in mental health service needs among youths entering a juvenile detention center. *Journal of Prison and Jail Health, 12*(2), 73-101.

Department of Corrections. (2007). *Over-representation of Maori in the criminal justice system. An exploratory report*. Wellington: Department of Corrections.

Department of Health - Health Care Partnerships Directorate and Home Office - Youth Justice and Children Team. (2006). *The needs and effective treatment of young people who sexually abuse: current evidence*. London: The joint Department of Health and National Institute for Mental Health.

Department of Health. (2008). *Children and young people in mind: the final report of the National CAMHS Review*. London: National CAMHS Review.

Derogatis, L. R. (1977). *SCL-90-R: Administration, scoring and procedures manual I.* Baltimore, M.D.: Clinical Psychometrics Research.

Derogatis, L. R. (1993). *Brief Symptom Inventory: Administration Scoring and Procedures Manual, 3rd edn.* Minneapolis, M.N.: National Computer Systems.

Desai, R. A., Goulet, J. L., Robbins, J., Chapman, J. F., Migdole, S. J., & Hoge, M. A. (2006). Mental Health Care in Juvenile Detention Facilities: A Review. *The Journal of the American Academy of Psychiatry and the Law, 34*, 204-214.

Eddy, M., & Chamberlain, P. (2000). Family management and deviant association as mediators of the impact of treatment condition on youth antisocial behavior. *Journal of Consulting and Clinical Psychology., 68*(5), 857-863.

Ellis, D., & Smith, P. (2006). Surveying social workers. *Social Work Now, 34*, 4-10.

Eppright, T. D., Kashani, J. H., Robison, B. D., & Reid, J. C. (1993). Comorbidity of conduct disorder and personality disorders in an incarcerated juvenile population. *American Journal of Psychiatry, 150*, 1233-1236.

Erickson, P. G., & Butters, J. E. (2005). How Does the Canadian Juvenile Justice System Respond to Detained Youth with Substance use Associated Problems? Gaps, Challenges, and Emerging Issues. *Substance Use & Misuse, 40*, 953-973.

Eyberg, S. M., Nelson, M. M., & Boggs, S. R. (2008). Evidence-Based Psychosocial Treatments for Children and Adolescents With Disruptive Behavior. *Journal of Clinical Child & Adolescent Psychology, 37*(1), 215-237.

Feehan, M., McGee, R., Raja, S. N., & Williams, S. M. (1994). DSM-111-R disorders in New Zealand 18 year olds. *Australian and New Zealand Journal of Psychiatry, 28*(1), 87-99.

Fergusson, D. M., & Horwood, L. J. (2001). The Christchurch Health and Development study: review of findings on child and adolescent mental health. *Australian and New Zealand Journal of Psychiatry, 35*(3), 287-296.

Fergusson, D. M., Horwood, L. J., & Lynskey, M. T. (1993). Prevalence and comorbidity of DSM-III-R diagnoses in a birth cohort of 15 year olds. *Journal of the American Academy of Child & Adolescent Psychiatry, 32*(6), 1127-1134.

Fergusson, D. M., Horwood, L. J., & Lynskey, M. T. (1997). Children and adolescents. In P. M. Ellis & S. C. D. Collins (Eds.), *Mental Health in New Zealand from a public health perspective*. Wellington, New Zealand: Ministry of Health.

Fergusson, D. M., Poulton, R., Horwood, L. J., Milne, B., Swain-Campbell, N., & Baxter, J. (2003). *Comorbidity and Coincidence in the Christchurch and Dunedin Longitudinal Studies: A report for the New Zealand Ministry of Social Development, Department of labour and the Treasury*. Wellington: Ministry of Social Development/ Department of Labour/ the Treasury.

Fisher, P. A., & Chamberlain, P. (2000). Multidimensional Treatment Foster Care: A Program for Intensive Parenting, Family Support, and Skill Building. *Journal of Emotional and Behavioral Disorders, 8*(3), 155-165.

Fleming, T. M., Watson, P. D., Robinson, E., Ameratunga, S., Dixon, R., Clark, T. C., et al. (2007). *Violence and New Zealand young people: Findings of Youth2000-A National secondary school youth health and wellbeing survey*. Auckland: University of Auckland.

Fonagy, P., Target, M., Cottrell, D., Phillips, J., & Kurtz, Z. (2000). *A review of the outcomes of all treatments of psychiatric disorder in childhood. Final Report to the National Service Executive.* USA: Author.

Forgatch, M. S., Bullock, B. M., & Patterson, G. R. (2004). From Theory to Practice: Increasing effective parenting through role-play; The Oregon Model of Parent Management Training (PMTO). In H. Steiner (Ed.), *Handbook of Mental Health Interventions in Children and Adolescents: An Integrated Developmental Approach* (pp. 782-812). San Francisco: Jossey-Bass.

Forgatch, M. S., Patterson, G. R., & DeGarmo, D. S. (2005). Evaluating Fidelity: Predictive Validity for a Measure of Competent Adherence to the Oregon Model of Parent Management Training. *Behavior Therapy, 36*, 3-13.

Frick, P. J. (2000). A Comprehensive and Individualized Treatment Approach for Children and Adolescents With Conduct Disorders. *Cognitive and Behavioral Practice, 7*, 30-37.

Gallagher, C. A., & Dobrin, A. (2006). Deaths in juvenile justice residential facilities. *Journal of Adolescent Health, 38*(6), 662-668.

Garland, A. F., Hough, R. L., McCabe, K. M., Yeh, M., Wood, P. A., & Aarons, G. A. (2001). Prevalence of psychiatric disorders in youths across five sectors of care. *Journal of the American Academy of Child & Adolescent Psychiatry, 40*(4), 409-418.

Goldstein, N. E., Arnold, D. H., Weil, J., Mesiarik, C. M., Peuschold, D., Grisso, T., et al. (2003). Comorbid symptom patterns in female juvenile offenders. *Law & Psychiatry, 26*, 565-582.

Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A Research Note. *Journal of Child Psychology and Psychiatry, 38*, 581-586.

Goodwin, R. D., Fergusson, D. M., & Horwood, L. J. (2004). Association between anxiety disorders and substance use disorders among young persons: Results of a 21-year longitudinal study. *Journal of Psychiatric Research, 38*, 295-304.

Gray, A., & Wilde, V. (1999). *Key Characteristics of Successful Programmes for Preventing Youth Offending and Re-offending: A Scoping Report*. Wellington, New Zealand: Social Policy Agency, Department of Social Welfare.

Greenbaum, P. E., Foster-Johnson, L., & Petrila, A. (1996). Co-occurring addictive and mental health disorders among adolescents: Prevalence, research and future directions. *American Journal of Orthopsychiatry, 66*(1), 52-60.

Greenwood, P. (1994). What works with juvenile offenders: a synthesis of the literature and experience. *Federal Probation, 58*(4), 63-67.

Grisso, T. (1999). Juvenile offenders and mental illness. *Psychiatry, Psychology & Law, 6*(2), 143-151.

Grisso, T. (2000). Law & psychiatry: the changing face of juvenile justice. *Psychiatric Services, 51*(4), 425-426.

Grisso, T. (2007). Progress and Perils in the Juvenile Justice and Mental Health Movement. *The Journal of the American Academy of Psychiatry and the Law, 35*, 158-167.

Grisso, T., & Barnum, R. (1998). *Massachusetts Youth Screening Instrument (MAYSI): Preliminary manual and technical report*. Worcester, M.A.: University of Massachusetts Medical School.

Grisso, T., Barnum, R., Fletcher, K. E., Cauffman, E., & Peuschold, D. (2001). Massachusetts Youth Screening Instrument for Mental Health Needs of Juvenile Justice Youths. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*(5), 541-548.

Grisso, T., & Underwood, L. A. (2004). *Screening and assessing mental health and substance use disorders among youth in the juveniles justice system: A resource guide for practitioners*. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Hagell, A. (2002). *The mental health of young offenders. Bright futures: Working with vulnerable young people.* London: The Mental Health Foundation.

Harland, A., & Borich, A. (2007). *Evaluation of Youth Offending Teams in New Zealand*. Wellington: Ministry of Justice.

Harrington, R., Bailey, S., Chitsabesan, P., Kroll, L., Macdonald, W., Sneider, S., et al. (2005). *Mental Health Needs and Effectiveness of Provision for Young Offenders in Custody and in the Community.* London: Youth Justice Board for England and Wales,.

Harris, J., & Wiki, P. (2007). *Reducing Youth Offending (RYOP): Pilot Programme*. Paper presented at the Working together: A practical conference on offending by young people in New Zealand. from http://www.yoc.org.nz/assets/justine%20harris%20-%20tue%201205%20l2.pdf.

Harwood, H. J., Kowalski, J., & Ameen, A. (2004). The need for substance abuse training among mental health professionals. *Administration and Policy in Mental Health and Mental Health Services Research, 32*(2), 189-205.

Heaston, C., Jenuwine, M., Walsh, D. N., & Griffin, G. (2003). Mental Health Assessment of Minors in the Juvenile Justice System. *Washington University Journal of Law and Policy, 11*, 141-156.

Henggeler, S. W., & Lee, T. (2003). Multisystemic treatment of serious clinical problems. In A. E. Kazdin & J. R. Weisz (Eds.), *Evidence based psychotherapies for children and adolescents* (pp. 301-322). New York: Guilford.

Hodges, K., & Wong, M. M. (1996). Psychometric characteristics of a multidimensional measure to assess impairment: The Child and Adolescent Functional Assessment Scale. *Journal of Child and Family Studies, 5*(4), 445-467.

Hollis, C. (200). Adult outcomes of child and adollescent onset schizophrenia: diagnostic stability and predictive validity. *American Journal of Psychiatry, 157,* 1652-1659.

Howell, J. (2003). *Preventing and reducing juvenile delinquency: A comprehensive framework.* California: Sage Publications.

Huey, W. C., & Rank, R. C. (1984). Effects of counselor and peer-led group asseritve training on black-adolescent aggression. *Journal of Counselling Psychology, 31*, 95-98.

Huizinga, D., & Jakob-Chien, C. (1998). The contemporaneous co-occurrence of serious and violent juvenile offending and other problem behaviors. In R. Loeber & D. P. Farrington (Eds.), *Serious & violent juvenile offenders: Risk factors and successful interventions*. Thousand Oaks, C.A. : Sage.

Inch, H., Rowlands, P., & Soliman, A. (1995). Deliberate self-harm in a young offenders' institution. *Journal of Forensic Psychiatry & Psychology, 6*(1), 161-171.

Isaacs, M. R., & Benjamin, M. P. (1991). *Towards a Culturally Competent System of Care*. Washington, D.C.: National Technical Assistance Center for Children's Mental Health, Georgetown University Child Development Center.

James, A. (2003) . Schizophrenia. In S. Baily & M. Dolan (Eds.). *Adolescent Forensic Psychiatry*. New York: Oxford University Press.

Karnik, N. S., & Steiner, H. (2007). Evidence for Interventions for Young Offenders. *Child and Adolescent Mental Health, 12*(4), 154-159.

Kayatekin, Z. E. (2000). *Psychiatric Services in Jails and Prisons: A Task Force Report of the American Psychiatric Association*. Washington, D.C.: American Psychiatric Association (APA).

Kazdin, A. E. (2002). The state of child and adolescent psychotherapy research. *Child and Adolescent Mental Health, 7*, 53-59.

Kazdin, A. E. (2003). Problem-solving skills training and parent management training for conduct disorder. In A. E. Kazdin & J. R. Weisz (Eds.), *Evidence-based psychotherapies for children and adolescents* (pp. 241-262). New York: Guilford.

Kim, J. Y. S., & Fendrich, M. (2002). Gender differences in juvenile arrestees' drug use, self-reported dependence, and perceived need for treatment. *Psychiatric Services, 53*, 70-75.

Kroll, L., Rothwell, J., Bradley, D., Shah, D., Bailey, S., & Harrington, R. C. (2002). Mental health needs of boys in secure care for serious or persistent offending: A prospectice longitudunal study. *The Lancet, 359*(9322), 1975-1979.

Kurtz, Z., Thornes, R., & Bailey, S. (1998). Children in the criminal justice and secure care systems: how their mental health needs are met. *Journal of Adolescence, 21*(543-553).

Lee, T., & De Robertis, M. (2006). Overview of the FIT Treatment Model. *Focal Point, 20*(2), 17-19.

Lennings, C. (2003). *Assessment of Mental Health Issues With Young Offenders*. Paper presented at the Juvenile Justice: From Lessons of the Past to a Road for the Future Conference. from www.aic.gov.au/conferences/2003-juvenile/lennings.pdf.

Lennings, C., & Pritchard, M. (1999). Prevalence of drug use prior to detention among residents of youth detention centres in Queensland. *Drug and Alcohol Review, 18*(145-152).

Leve, L. D., Chamberlain, P., & Reid, J. B. (2005). Intervention Outcomes for Girls Referred From Juvenile Justice: Effects on Delinquency. *Journal of Consulting and Clinical Psychology., 73*(6), 1181-1184.

Lipsey, M. W., Wilson, D. B., & Cothern, L. (2000). Effective Intervention for Serious Juvenile Offenders. *Office of Juvenile Justice and Delinquency Prevention, Juvenile Justice Bulletin, April,* 1-8.

Littell, J. H., Winsvold, A., Bjorndal, A., & Hammerstrom, K. T. (2007). *Functional Family Therapy for families of youth (age 11-18) with behaviour problems* (Protocol): Chochrane database of Systematic Reviews, Issue 2.

Lochman, J. E., Barry, T. D., & Pardini, D. A. (2003). Anger control training for aggressive youth. In A. E. Kazdin & J. R. Weisz (Eds.), *Evidenced-based psychotherapies for children and adolescents* (pp. 263-281). New York: Guilford.

London Home Office. (2000). *Crime reduction: The government's crime reduction strategy*. London: Crown Copyright.

Lopez, V. A. (2003). Perceived need for substance abuse treatment among white, hispanic, and black juvenile arrestees. *Journal of Ethnicity in Substance Abuse, 2*, 1-17.

MacKinnon-Lewis, C., Kaufman, M. C., & Frabutt, J. M. (2002). Juvenile justice and mental health: Youth and families in the middle. *Aggression and Violent Behavior, 7*, 353-363.

Mann, J. J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., et al. (2005). Suicide Prevention Strategies: A Systematic Review. *The Journal of the American Medical Association, 294*(16), 2064-2074.

Martens, W. H. J. (1997). *Psychopathy and remission*. Tilburg University, Maastricht, The Netherlands: Shaker Publishing.

Martens, W. H. J. (2004). Multisystemic Therapy for Antisocial Juveniles: Suggestions for Improvement. *International Journal of Offender Therapy and Comparative Criminology, 48*(3), 389-394.

Maschi, T., Hatcher, S. S., Schwalbe, C. S., & Rosato, N. S. (2008). Mapping the social service pathways of youth to and through the juvenile justice system: A comprehensive review. *Children and Youth Services Review., (In Press)*.

Mathai, J., Anderson, P., & Bourne, A. (2002). The Strengths and Difficulties Questionnaire (SDQ) as a screening measure prior to admission to a Child and Adolescent Mental Health Service (CAMHS). *Australian e-Journal for the Advancement of Mental Health (AeJAMH), 1*(3), 1-12.

McBride, D., VanderWaal, C., VanBuren, H., & Terry, Y. (1997). *Breaking the Cycle of Drug Use Among Juvenile Offenders*. Washington, D.C.: National Institute of Justice.

McCabe, K. M., Lansing, A. E., Garland, A., & Hough, R. (2002). Gender differences in psychopathology, functional impairment, and familial risk factors among adjudicated delinquents. *Journal of the American Academy of Child & Adolescent Psychiatry, 41*(7), 860-867.

McGee, R., Feehan, M., Williamns, S., Partridge, F., Silva, P. A., & Kelly, J. (1990). DSM-III Disorders in a large sample of adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 29*(4), 611-619.

McLaren, K. L. (2000). *Tough is not Enough - Getting Smart about Youth Crime: A review of research on what works to reduce offending by young people*. Wellington: Ministry of Youth Affairs.

Memory, J. M. (1989). Juvenile suicides in secure detention facilities: Correction of published rates. *Death Studies, 13*(5), 455-463.

Mila-Schaaf, K., Robinson, E., Schaaf, D., Denny, S., & Watson, P. D. (2008). *A health profile of Pacific youth: Findings of Youth2000. A National secondary school youth health survey*. Auckland: University of Auckland.

Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior*. New York: Guilford Press.

Ministry of Health. (2001). *Services for people with mental illness in the justice system: Framework for forensic mental health services.* Wellington, New Zealand: Ministry of Health,.

Mulvey, E., Arthur, M., & Repucci, D. (1993). The prevention and treatment of juvenile delinquents: A review of the research. *Clinical Psychology Review, 13*, 133-167.

Myers, D. M., & Farrell, A. F. (2008). Reclaiming lost opportunities: Applying public health models in juvenile justice. *Children and Youth Services Review., 30*, 1159-1177.

National Child Traumatic Stress Network Juvenile Justice Working Group. (2004). *Trauma-Focused Interventions for Youth in the Juvenile Justice System*. Los Angeles: National Child Traumatic Stress Network.

National Mental Health Association. (2000). *Justice for Juveniles: How communities respond to mental health and substance abuse needs of youth in the juvenile justice system (Executive summary)*. Alexandria, V.A.: National Mental Health Association.

National Mental Health Association. (2004). *Mental Health Treatment for Youth In the Juvenile Justice System: A Compencium of Promising Practices*. Alexandria, V.A.: National Mental Health Association.

New Zealand Guidelines Group. (1999). *Detection and Management of Young People at Risk of Suicide: Guidelines for Primary Care Providers*. Wellington, New Zealand: Ministry of Youth Affairs.

NSW Department of Juvenile Justice. (2003). *2003 NSW young people in custody health survey. Key findings report.* NSW: Department of Juvenile Justice.

O'Leary-Tevyaw, T., & Monti, P. M. (2004). Motivational enhancement and other brief interventions for adolescent substance abuse: foundations, applications and evaluations. *Addiction, 99*(2), 63-75.

Oakely-Browne, M. A., Joyce, P. R., Wells, J. E., Bushnell, J. A., & Hornblow, A. R. (1989). Christchurch psychiatric epidemiology study, part II: Six month and other period prevalences of specific psychiatric disorders. *Australian & New Zealand Journal of Psychiatry, 23*(3), 327-340.

Oliver, P., & Spee, K. (2000). *Maori Community Initiatives for Youth-at-risk of Offending: Report on the Evaluation*. Wellington: Department of Child, Youth and Family Services.

Ortega, A. N., & Algria, A. M. (2005). Denial and its association with mental health care use: A study of island Puerto Ricans. *Journal of Behavioral Health Services & Research, 32*(3), 320-331.

Osher, D. M., Quinn, M. M., Poirier, J. M., & Rutherford, R. B. (2003). Deconstructing the pipeline: Using efficacy, effectiveness, and cost-benefit data to reduce minority youth incarceration. *New Directions for Youth Development, 99*(Fall), 91-120.

Otto, R. K., Greenstein, J. J., Johnson, M. K., & Friedman, R. M. (1992). Prevalence of mental disorders among youth in the juvenile justice system. In J. J. Cocozza (Ed.), *Responding to the Mental Health Needs of Youth in Juvenile Justice Systems*. Seatlle, W.A.: The National Coalition for the Mentally Ill in the Criminal Justice System.

Owen, V. (2001). Whanake rangatahi: Programmes and services to address Maori youth offending. *Social Policy Journal of New Zealand, 16*, 175-190.

Palmer, T. (1996). Programmatic and non-programmatic aspects of successful intervention. In A. Harland (Ed.), *Choosing Correctional Options That Work*. Thousand Oaks, C.A.: Sage Publications.

Patterson, G. R., Reid, J. B., Jones, R. R., & Conger, R. E. (1975). *A social learning approach to family intervention: Families with aggressive children* (Vol. 1). Eugene, O.R.: Castalia.

Penn, J. V., Thomas, C., & Work Group on Quality Issues. (2004). *Practice Parameter for the Assessment and Treatment of Youth in Juvenile Detention and Correctional Facilities*. Washington, D.C.: American Academy of Child and Adolescent Psychiatry.

Pliszka, S. R., Sherman, J. O., Barrow, M. V., & Irick, S. (2000). Affective Disorder in Juvenile Offenders: A Preliminary Study. *American Journal of Psychiatry, 157*, 130-132.

Prentky, R., Harris, B., Frizzell, K., & Righthand, S. (2000). An actuarial procedure for assessing risk with juvenile sex offenders. *Sexual Abuse: Journal of Research & Treatment, 12*(2), 71-93.

Rahdert, E. R. (1991). *The adolescent assessment/referral system manual*. Rockville, M.D.: National Institute on Drug Abuse.

Ramage, C., Bir, J., Towns, A., Vague, R., Cargo, T., & Niumata-Faleafa, M. (2005). *Stocktake of Child and Adolescent Mental Health Services in New Zealand*. Auckland: The Werry Centre.

Randall, J., Henggeler, S. W., Cunningham, P. B., Rowland, M. D., & Swenson, C. C. (2001). Adapting Multisystemic therapy to Treat Adolescent Substance Abuse More Effectively. *Congitive and Behavioral Practice, 8*, 359-366.

Rasanathan, K., Ameratunga, S., Chen, J., Robinson, E., Young, W., Wong, G., et al. (2006). *A health profile of young Asian New Zealanders who attend secondary school: Findings from Youth2000*. Auckland: University of Auckland.

Reich, W. (2000). Diagnostic Interview for Children and Adolescents (DICA). *Journal of the American Acadamy for Child and Adolescent Psychiatry, 39*, 59-66.

Richards, I. (1996). Psychiatric disorder among adolescents in custody. *Australian & New Zealand Journal of Psychiatry, 30*(6), 788-793.

Sanders, M. R. (1999). Triple p-positive parenting program: Towards an empirically validated multilevel parenting and family support strategy for the prevention of behavior and emotional problems in children. *Clinical Child and Family Psychology Review, 2*, 71-90.

Sanders, M. R. (2003). TheoreticaL, Scientific and Clinical Foundations of the Triple P-Positive Parenting Programme: A Population Approach to the Promotion of Parenting Competence. *Parenting Research and Practice Monograph No.1.* The University of Queensland: he Parenting and Family Support Centre.

Seagrave, D., & Grisso, T. (2002). Adolescent Development and the Measurement of Juvenile Psychopathy. *Law and Human Behavior, 26*(2), 219-239.

Sexton, T. L., & Alexander, J. F. (2000). Functional Family Therapy. *Office of Juvenile Justice and Delinquency Prevention, Juvenile Justice Bulletin, December,* 1-8.

Sexton, T. L., & Alexander, J. F. (2002). Family-based empirically supported interventions. *The Counselling Psychologist, 30*(2), 238-261.

Shaffer, D., Fisher, P. A., Lucas, C., Dulcan, M., & Schwab-Stone, M. (2000). NIMH Diagnostic Interview Schedule for Children, Version IV (NIMH DISC-IV): description, differences from previous versions, and reliability of some common diagnoses. *Journal of the American Acadamy for Child and Adolescent Psychiatry, 39*(28-38).

Shaw, J. A., & Work Group on Quality Issues. (1999). *Practice Parameters for the assessment and treatment of children and adolescents who are sexually abusive of others*. Washington, D.C.: American Academy of Child and Adolescent Psychiatry.

Shelton, D. (2001). Emotional disorders in young offenders. *Journal of Nursing Scholarship, 33*(3), 259-263.

Shorr, L. (1997). *Common purpose: strengthening families and neighborhoods to rebuild America*. New York, NY: Anchor Book Place.

Silverman, W. K., Ortiz, C. D., Viswesvaran, C., Burns, B. J., Kolko, D. J., Putnam, F. W., et al. (2008). Evidence-Based Psychosocial Treatments for Children and Adolescents Exposed to Traumatic Events. *Journal of Clinical Child & Adolescent Psychology, 37*(1), 156-183.

Simpson, A. I. F., Brinded, P. M. J., Fairley, N., Laidlaw, T. M., & Malcolm, F. (2003). Does ethnicity affect need for mental health service amonng New Zealand prisoners? *Australian & New Zealand Journal of Psychiatry, 37*, 278-734.

Simpson, A. I. F., Brinded, P. M. J., Laidlaw, T. M., Fairley, N., & Malcolm, F. (1999). *The National Study of Psychiatric Morbidity in New Zealand Prisons: An Investigation of the Prevalence of Psychiatric Disorders among New Zealand Inmates*. Wellington, New Zealand: Department of Corrections.

Singh, D., & White, C. (2000). *Rapua te Huarahi Tika - Searching for Solutions: A Review of Research about Effective Interventions for Reducing Offfending by Indigenous and Ethnic Minority Youth*. Wellington: Ministry of Youth Affairs.

Skowyra, K., & Cocozza, J. J. (2006). A Blueprint for Change: Improving the System Response to Youth with Mental Health Needs Involved with the Juvenile Justice System. *Research and Program Brief, June,* 1-12.

Skowyra, K., & Cocozza, J. J. (2007). A Blueprint for Change: A Comprehensive Model for the Identification and Treatment of Youth with Mental Health Needs in Contact with the Juvenile Justice System. *Office of Juvenile Justice and Delinquency Prevention,* U.S. Department of Justice.

Slack, A., Chandler, N., Nana, G., & Jameson, B. (2006). *Interventions by specialised AOD Clinicians in Justice Settings: A Review of Literature*. Wellington, New Zealand: Alcohol Advisory Council of New Zealand (ALAC).

Southam-Gerow, M. A., & Kendall, P. C. (2000). Congitive-Behaviour Therapy with Youth: Advances, Challenges, and Future Directions. *Clinical Psychology and Psychotherapy, 7*, 343-366.

Stambaugh, L. F., Mustillo, S. A., Burns, B. J., Stephens, R. L., Baxter, B., Edwards, D., et al. (2007). Outcomes From Wraparound and Multisystemic Therapy in a Center for Mental Health Services System-of-Care Demonstration Site. *Journal of Emotional and Behavioral Disorders, 15*(3), 143-155.

Stathis, S. L., Letters, P., Doolan, I., & Whittingham, D. (2006). Developing an integrated substance use and mental health service in the specialised setting of a youth detention centre. *Drug and Alcohol Review, 25*, 149-155.

Stathis, S. L., & Martin, G. (2004). A transdisciplinary approach to adolescent forensic mental health. *Australian and New Zealand Journal of Psychiatry, 38*, 746-752.

Steiner, H., Garcia, I., & Matthews, Z. (1997). Posttraumatic stress disorder in incarcerated juvenile delinquents. *Child and Adolescent Psychiatry, 36*(3), 357-365.

Steiner, H., Remsing, L., & Work Group on Quality Issues. (2006). Practice parameter for the assessment and treatment of children with oppositional defiant disorder. Retrieved 15 October 2008, from http://www.aacap.org/galleries/PracticeParameters/PP_ODD_2006_v2.pdf

Stiffman, A. R., Foster, K., Hamburg, K., & Dore, P. (2003). *IMPROVE: A software program to improve assessments and multisector referrals*. Paper presented at the The Annual Research Conference of The Research and Training Center for Children's Mental Health.

Stiffman, A. R., Hadley-Ives, E., Dore, P., Polgar, M., Horvath, V. E., Striley, C. W., et al. (2000). Youths' Access to Mental Health Services: The Role of Providers' Training, Resource Connectivity, and Assessment of Need. *Mental Health Services Research, 2*(3), 141-154.

Stiffman, A. R., Pescosolido, B., & Cabassa, L. J. (2004). Building a Model to Understand youth Service Access: The Gateway Provider Model. *Mental Health Services Research, 6*(4), 189-198.

Stiffman, A. R., Striley, C. W., Brown, E., Limb, G., & Ostmann, E. (2003). American Indian youth: Southwestern urban and reservation youth's need for services and whom they turn to for help. *Journal of Child and Family Studies, 12*, 319-333.

Sullivan, C. J., Veysey, B. M., Hamilton, Z. K., & Grillo, M. (2007). Reducing Out-of-Community Placement and Recidivism; Diversion of Delinquent Youth With Mental Health and Substance Use Problems From the Justice System. *International Journal of Offender Therapy and Comparative Criminology, 51*(5), 555-577.

Te Rau Matatini. (2006). *Kia puawai te ararau national maori mental health workforce development strategic plan 2006-2010*. Palmerston North, New Zealand: Te Rau Matatini.

Tengstrom, A., Hodgins, S. & Kullgren, G. (2001). Men with schizophrenia who behave violently; the usefulness of an early versus late start offender typology. *Schizophrenia Bulletin, 27*, 205-218.

Teplin, L. A. (1990). The prevalence of severe mental disorder among male urban jail detainees: Comparison with Epidemiologic Catchment Area Program. *American Journal of Public Health, 80*(6), 663-669.

Teplin, L. A. (1994). Psychiatric and substance abuse disorders among male urban jail detainees. *American Journal of Public Health, 84*(2), 290-293.

Teplin, L. A., Abram, K. M., McClelland, G. M., Dulcan, M. K., & Mericle, A. A. (2002). Psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry, 59*(12), 1133-1143.

Teplin, L. A., Abram, K. M., McClelland, G. M., Mericle, A. A., Dulcan, M. K., & Washburn, J. J. (2006). Psychiatric Disorders of Youth in Detention. *Office of Juvenile Justice and Delinquency Prevention, Juvenile Justice Bulletin*.

Teplin, L. A., Abram, K. M., McClelland, G. M., Washburn, J. J., & Pikus, A. K. (2005). Detecting mental disorder in juvenile detainees: who receives services. *American Journal of Public Health, 95*(10), 1773-1780.

Timmons-Mitchell, J., Bender, M. B., Kishna, M. A., & Mitchell, C. C. (2006). An Independent Effectiveness Trial of Multisystemic therapy With Juvenile Justice Youth. *Journal of Clinical Child and Adolescent Psychology, 35*(2), 227-236.

Timmons-Mitchell, J., Brown, C., Schulz, S. C., Webster, S. E., Underwood, L. A., & Semple, W. E. (1997). Comparing the mental health needs of female and male incarcerated juvenile delinquents. *Behavioral Sciences & the Law, 15*(2), 195-202.

Trupin, E. W., Stewart, D. G., Beach, B., & Boesky, L. (2002). Effectiveness of a Dialectical Behaviour Therapy Program for Incarcerated Female Juvenile Offenders. *Child and Adolescent Mental Health, 7*(3), 121-127.

Ulzen, T. P. M., & Hamilton, H. (1998). The nature and characteristics of psychiatric comorbidity in incarcerated adolescents. *Canadian Journal of Psychiatry, 43*, 57-63.

Ungar, M. (2005a). Pathways to Resilience Among Children in Child Welfare, Corrections, Mental Health and Educational settings: Navigation and Negotiation. *Child & Youth Care Forum, 34*(6), 423-444.

Ungar, M. (2005b). Resilience among Children in Child Welfare, Corrections, Mental Health and Educational Settings: Recommendations for Service. *Child & Youth Care Forum, 34*(6), 445-464.

Ungar, M. (2006). Nurturing Hidden Resilience in At-Risk Youth in Different Cultures. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 15*(2), 53-58.

VanDenBerg, J. E. (1993). Integration of individualized mental health services into the system of care for children and adolescents. *Administration and Policy in Mental Health, 20*(4), 247-257.

Veysey, B. (2003). *Adolescent Girls with Mental Health Disorders Involved with the Juvenile Justice System*. Delmar, NY: National Center for Mental Health and Juvenile Justice.

Waldron, H. B., & Turner, C. W. (2008). Evidence-Based Psychosocial Treatments for Adolescent Substance Abuse. *Journal of Clinical Child & Adolescent Psychology, 37*(1), 238-261.

Warren, J. (2000). *The Wraparound Evaluation: Final report*. Wellington: Centre for Research Evaluation and Social Assessment.

Wasserman, G. A., Jensen, P. S., Ko, S. J., Cocozza, J., Trupin, E., Angold, A., et al. (2003). Mental Health Assessments in Juvenile Justice: Report on the Consensus Conference. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*(7), 752 - 761.

Wasserman, G. A., Ko, S. J., & McReynolds, L. S. (2004). Assessing the Mental Health Status of Youth in Juvenile Justice Settings. *Office of Juvenile Justice and Delinquency Prevention, Juvenile Justice Bulletin, August,* 1-8.

Wasserman, G. A., McReynolds, L. S., Lucas, C. P., Fisher, P., & Santos, L. (2002). The voice DISC-IV with incarcerated male youths: prevalence of disorder. *Journal of the American Academy of Child & Adolescent Psychiatry, 41*(3), 314-321.

Webster-Stratton, C. (2000). The Incredible Years Training Series. *Office of Juvenile Justice and Delinquency Prevention, Juvenile Justice Bulletin, June*.

Webster-Stratton, C., & Reid, M. (2003). The incredible years parents, teachers, and children training series: A multifaceted treatment approach for young children with conduct problems. In A. E. Kazdin & J. R. Weisz (Eds.), *Evidenced-based psychotherapies for children and adolescents* (pp. 224-240). New York: Guilford.

Wells, J. E., Horwood, L. J., & Fergusson, D. M. (2007). Reasons why young adults do or do not seek help for alcohol problems. *Australian and New Zealand Journal of Psychiatry, 41*, 1005-1012.

Westermark, P. K., Hansson, K., & Vinnerljung, B. (2007). Foster parents in Multidimensional Treatment Foster Care: How do they deal with implementing sandardized treatment components? *Children and Youth Services Review., 29*, 442-459.

Wille, A. (2006). *Whakamarama the Huarahi - To Light the Pathways: A Strategic Framework for Child and Adolescent Mental Health Workforce Development 2006-2016*. Auckland: The Werry Centre for Child & Adolescent Mental Health Workforce Development, University of Auckland.

Winters, K. (1999). *Screening and Assessing Adolescents for Substance Use Disorders Treatment Improvement Protocol (TIP) Series 31*. Rockville, M.D.: Public Health Service, Substance Abuse and Mental Health Services Administration, US Department of Health and Human Services.

Woolfenden, S. R., Williams, K., & Peat, J. K. (2002). Family and parenting interventions for conduct disorder and delinquency: A meta-analysis of randomised controlled trials. *Archives of Disease in Childhood, 86*, 251-256.

Worling, J. R., & Curwen, T. (2001). Estimate of Risk of Adolescent Sexual Offense Recidivism (ERASOR; Version 2.0). In M. C. Calder (Ed.), *Juveniles and children who sexually abuse: Frameworks for assessments* (2nd ed., pp. 372-397). Dorset: Russell House Publishing Ltd.

Youth Justice Board. (2006). The common assessment framework, Asset and Onset: Guidance for youth justice practitioners. Retrieved from http://www.yjb.gov.uk/Publications/Resources/Downloads/Common%20Assessment%20Framework%20Asset%20and%20Onset%20%20Guidance%20for%20youth%20justice%20practitioners.pdf