Risk Management Authority for Scotland

Children, Young People and Transitions to Adult Offending:

Summary of Key Findings from Research Evidence

Dr John J Marshall
Consultant Forensic & Clinical Psychologist
johnj.marshall@nhs.net
Summary

(1) Family, parental and child risk factors are known to predict violent adult offending.
(2) Harsh and/or inconsistent parenting and negative family functioning is critical in the development of Conduct Disorder.
(3) The anti social lifestyle component of Youth Psychopathy may be predictive of male violence into adulthood but the other core aspects of Psychopathy (emotional deficit and deceitful interaction components) diminish in their ability to predict adult violence.
(4) Youth Psychopathy may not be predictive of violence in girls from adolescence into adulthood.
(5) Young People with backgrounds of physical and sexual abuse or neglect may have higher Psychopathy scores.
(6) Family and parental risk factors have been shown to predict high Psychopathy scores in adulthood.
(7) Children rated as callous and unemotional are more likely to develop Conduct Disorder in adolescence.
(8) Parent management style may be critical for children from areas of high deprivation and anti social neighbourhoods, increasing or decreasing the risk of violent adult criminality.
(9) Gang membership is associated with increases in offending during the period of membership.
(10) There is virtually no empirical evidence for long term positive outcomes for young people placed in residential units.
(11) There are promising developments in the field of prevention using multi level-total population approaches to parenting across service systems in preventing Conduct Disorder. The earlier the intervention the greater the effect.
(12) Structured Professional Judgement (SPJ) approaches to risk (e.g. Structured Assessment for Violence Risk in Youth) may be more relevant to the needs of adolescents given the balance of individual, family, parental and contextual risk factors included.
(13) The SAVRY is a modest predictor of short term violence in high risk Conduct Disordered adolescents and may be a better predictor than Youth Psychopathy.
(14) Treatment services for high risk violent adolescents using strategic behavioural approaches, functional family therapies and where the treatment is centred on foster and/or family setting (e.g. Multi Systemic Therapy and Multi-Dimensional Treatment Foster Care) are promising interventions for this group compared to residential or secure care.
(15) Structured Professional Judgement for Under 12’s (e.g. Early Risk List 20, Boys) predict adolescent violence.
Introduction

This paper provides a summary of key research evidence on risk factors in mainly male children at risk for future violent criminality. The review considers Youth Psychopathy, violence risk assessment of adolescents, new developments in the field of prevention and treatment of high risk violent adolescents focusing on the family context.

This paper does not cover sexual aggression in childhood or sexual offending in adolescence. This paper is designed for a wide range of front line professionals. It is not a systematic review but attention (for risk factors) is paid to large longitudinal research studies where children are followed up to adulthood. In the prevention and treatment section emphasis is on systematic reviews of randomised control outcome studies and meta-analysis (systematic reviews of research evidence). References are provided at the end of the document. This type of brief narrative review is likely to be replaced by systematic reviews which use more rigorous and explicit methods in reaching conclusions.

Terminology used

Front line professionals in Scotland often describe children involved in violent offending as emotionally and behaviourally disturbed or vulnerable. Researchers (often describing similar young people) use different terms. The key categories in this paper are described below:

(i) Conduct Disorder is a mental health category that is defined as a repetitive and persistent pattern of aggressive, defiant or antisocial behaviour. It is one of the commonest forms of mental health disorder in children and adolescents with an estimated prevalence of between 1.5% and 3.4% in adolescence. It affects three times as many boys as girls. Conduct Disorder at the more severe end often includes violence.

(ii) Delinquency as a term is often used in research from the USA. It is basically a sociological category referring to young people who break the law. Delinquency rates are highest in the middle teen years. A minority persist in offending ('recurrent juvenile delinquents') into adulthood and account for a disproportionately large percentage of legal referrals.

(iii) Youth Psychopathy – can be broken down into three components: (1) deceitful style of interacting, (e.g. superficially charming, ego centric or grandiose, pathological lying, conning and manipulation). (2) Deficient affective (emotional) experience including low remorse, low guilt, little conscience, callous, low empathy, shallow or short lived emotions, and a failure to accept responsibility for actions (e.g. constant denials and excuses). (3) Impulsive or irresponsible behaviour, including high levels of boredom, seeking excitement, impulsiveness, failing to think before acting. All three clusters tend to co-occur in young people at high risk of psychopathy. Standard assessments for this problem can start from about 12 years up to 17 years of age.
Risk Factors

(i) Problems with Research Methods
There are few examples of systematic reviews of risk factors (Murray, J., Farrington, D.P., & Eisner, M.P., 2009). Often target areas being studied (called correlates, risk factors and causal factors) are confused. Correlates do not need to be causal; risk factors are predictive of an outcome and causal factors “are the ‘gold’ of risk estimation—they can be used both to identify those of high risk of an outcome and provide the bases for interventions to prevent the outcome” (Kraemer et al. 2005: 32–33). Conduct disorder and delinquency appear to have a number of associated risk factors, which include genetic, biological and environmental causes. When considering research studies that follow up a number of children (prospective studies) such as the Cambridge Study (400 males) and Pittsburgh Youth Study (about 1,500 boys) a number of risk factors are identified (for more detail see Farrington & Welsh 2007). The Denedin study from New Zealand has also been critical in identifying risk factors (Moffit et al 2001).

(ii) Genetic & Neuro-Developmental
Genetic and neuro-developmental studies have not been included in this paper. However it is becoming well established that genetic factors influence baby and toddler temperament which in turn “plays a contributing role in making it more or less likely that individuals will engage in antisocial behaviour” (p72, Rutter, 2006). In behavioural genetic studies intriguing findings point toward critical interactions between negative parenting, negative family functioning (e.g. hostile communication) and genetic risk (Caspi et al 2004).

(ii) Individual Child’s Risk Factors
The following risk factors have been identified in children as predictive of adult offending:

- Restless, impulsive, and ‘fussy’ temperament in young male children and perhaps fearfulness in girls (see Lahey et al 2008).

In a recent study temperamental problems aged 1 year predicted conduct problems at age 4 to 13 years of age (Lahey et al 2008). Other individual risk factors include:

- Lowered intelligence in early childhood
- Poor school achievement
- Low empathy in adolescents (low affective and cognitive empathy might be related to fighting and vandalism for adolescent males, Joliffe & Farrington, 2008)
- Hyperactivity – impulsiveness – attention problems
- Suffered from child physical, sexual, emotional abuse or neglect
- Self reported violence in adolescence
(iii) Family Risk Factors

- Large family size (for example 4 or more siblings in the Cambridge Study)
- Low parental supervision (low or no supervision of a child’s community activities)
- Harsh punishment (for example smacked or beaten)
- Inconsistent parenting (one parent or between parents)
- Cold rejecting style of parenting
- Low parental involvement in children's activities (e.g. leisure)
- Parental or family conflict (e.g. violence between parents)
- Parental substance abuse
- Parental criminality
- Parental antenatal and post natal depression
- Parental smoking

(iv) Childhood Psychopathy

There are significant genetic neuro-cognitive and developmental research findings increasing knowledge about the nature of psychopathy which are not covered in this summary (see Blair, Mitchell & Blair, 2005 for a readable synthesis)

There are a number of approaches for measuring psychopathy in young people all with the ability to make predictions about violent offending over the short term (typically months). The most widely used assessment is The Psychopathy Checklist: Youth Version (PCL:YV) (Forth, Kosson, & Hare, 2003). Violent offending is most prevalent in young people who are high on all three components of psychopathy: deceitful interactions, defective emotional and impulsivity constituents (Vincent et al 2008).

When adolescent males, high in psychopathy, are followed up into adulthood using the PCL:YV (at least that part measuring antisocial behaviour) is predictive of both non-violent and violent recidivism. However, “the relative importance of the construct of psychopathy in the prediction of risk for violence and recidivism may diminish over time during adolescent development, while the importance of antisocial and deviant lifestyle behaviors remains stable” (page 294, Vincent et al 2008). The PCL:YV did not significantly predict any type of recidivism or the time to re-offending for girls from adolescence into adulthood. There was even a trend for higher PCL:YV scores among girls to be associated with lower risk.

Other factors in girls such as child abuse have substantial effects on future violence and criminality in adulthood (Widom & Aimes 1994). Lang, Klinteberg, and Alm (2002) reported that boys who were abused or neglected had higher psychopathy scores as adults. In the prospective study of 400 London boys, Farrington (in press) discovered that physical neglect, poor parental supervision, a disrupted family, large family size, a convicted parent, a depressed mother, and low family income at age 8–10 all predicted high Psychopathy scores at age 48.

For young people who offend context and situational factors are critical. When adolescents are not living at home their birth family exerts influence over behaviour (Eddie and Chamberlain, 2000). How psychopathy and anti social behaviour generally develops or is dampened, perhaps needs to be viewed in this family context.
In terms of the development of one potential pre-psychopathy component namely callous and unemotional traits, there may be some consistency through childhood. The views of parents and teachers of children with high levels of callous and unemotional developing traits tend to be concordant (Vincent, Grisso and Corrado 2003). The Dunedin longitudinal study (Caspi, 2000) found that children under-controlled (requiring constant attention, emotionally labile, irritable) at age 3 tended to be more reckless and careless, and enjoyed dangerous and exciting activities, at age of 18.

Children with high levels of callous unemotional traits are more likely to develop Conduct Disorder. The severity of Conduct Disorder for children with low callousness-unemotional ratings increases with poor parenting practices such as low levels of praise, low parental supervision, inconsistent and harsh discipline. Whereas, children with high callousness unemotionally ('hard-to-socialize temperament'), conduct problems were high at all levels of parenting.

The effectiveness of prevention and treatment methods for child and adolescent psychopathy is an empirical question that needs to be investigated. In particular, determining any effects of parenting interventions on younger children, with high callous-unemotional traits.

(v) Attachment
Attachment theory emphasises the early reciprocal relationship babies and toddlers have with parents or caregivers. Bowlby's behavioural approach led to the development of a theory that if a young child fails to develop a healthy secure attachment then adult relationship instability could follow (Bowlby 1982). Following these theoretical ideas it was suggested that empathy levels could be adversely affected in children with disrupted attachment and subsequently be a risk factor for offending. It has also been proposed that attachment difficulties underlie the development of psychopathy, for example cold, rejecting parents or disrupted families produce cold, callous children, incapable of developing warm relationships, with low empathy, and likely to offend.

One challenge with attachment disruption research is the hypothesised role in a range of disorders from Autism to Borderline Personality Disorder. In addition, attachment measures at a young age are more robust than older children and adolescents making prospective studies challenging. Nevertheless, young people with developing psychopathy may have attachment problems. The question is whether the underlying problem leading to psychopathy is causal of attachment disruption or attachment problems lead to psychopathy. Blair, Mitchell & Blair (2005) suggest that attachment problems faced by children with their parents are unlikely to lead to psychopathy. There is evidence for example of neuro-cognitive and genetic factors in emotional disturbance that may in turn interfere with the attachment process then subsequently affect parenting styles. Interestingly a lack of interest in faces, eye contact and recognising emotions has been found in 8 to 15 year olds high in Psychopathy (Dadds et al 2006).

Attachment is likely to be important in other areas as securely attached children may develop more behavioural restraint in a resistance to temptation experiments. Attachment relevant interactions may be important in the development of delinquency but the evidence is based on theory and not on systematic experimental and longitudinal
research. Parental harshness in turn affects attachment relationships (Guttmann-Steinmetz and Crowal 2006).

(viii) Situational Factors

The following factors are associated or predict future violence:

- Low socio economic status or family dependence on benefits

Some studies have shown that the link between socio economic status and delinquency vanishes when family and parental factors are controlled for (e.g. Swain Campbell & Horwood 2004)

- Having an anti social peer or friend
- Having a sibling involved in delinquency
- In a gang

Although fleeting, gang membership had a tremendous impact on the lives of young people. Gang members—both male and female—accounted for the lion’s share of all delinquency. This included gang violence and selling drugs (Thornberry et al 2003).

- School Culture & Climate

There is some suggestion that being in a school that has good classroom management, judicious use of praise used strategically and academic emphasis may be a protective factor (e.g. New York State Longitudinal Study).

- Neighbourhood Disorganisation

It is possible that the presence of authoritative parents who are willing to intervene in their communities is a protective factor decreasing delinquency in a community (community efficacy). In the Pittsburgh Youth Study living in a neighbourhood with many problem families, violent peers, public housing and welfare dependency was a strong predictor of homicides (Pittsburgh Youth Study). However the relationship may be more complex. If individual and family risk factors are low then the effect of a challenging neighbourhood on children is greater. If individual and/or family risk factors are high, the effect of a neighbourhood is negligible (Pittsburgh Youth Study, Wilktrom & Loeber 2003). Parental supervision becomes weakened in these areas. However, parental management style may be a critical mediating factor.

- Group Homes

In Scotland often children or adolescents involved in offending behaviour may be looked after and accommodated in group residential units usually following a decision by the Children Hearing. Placing children in a residential or secure accommodation (unless the child has been sentenced by a court under section 208, Criminal Procedures (Scotland) Act 1995) is a last resort following family support attempts and/or fostering placements.
In the US, the report ‘Institutions vs. Foster Homes: The Empirical Base for a Century of Action’ concludes that there is “virtually no evidence to support the use of group care in child welfare” (Barth, 2002, 2005). In this US study group homes are described as unsafe, unable to support healthy development, unstable, and costly. Moreover, children in group care settings report seeing family members less often as compared with children in kinship care, and are less likely to experience reunification with biological caregivers. There are risks of negative social contagion (young people influencing each other in negative ways).

Knorth et al (2008) carried out a meta-analysis (which includes data from the UK) of outcomes in residential care and also concluded that there is very little evidence of long term beneficial outcomes of residential care. Many studies lack a clear description of the residential intervention program. Some studies did show that residential programs applying behaviour-therapeutic methods and focusing on family involvement show the most promising short term outcomes. However Multi Dimensional Treatment Foster Care (MTFC) was shown to have better outcomes than residential group care. This is critical as number of placement failures may also be related to future re-offending and placement stability.

**Risk Assessment**

The Structured Assessment of Violence Risk in Youth (SAVRY) and Youth Level of Service Case Management Inventory “stand out for their utility and depth of empirical support” (page 435, Andrate 2009). The Youth Level of Service Case Management Inventory (YLS/CMI) may be comparable in predictive validity for general and violent re-offending to the Psychopathy Checklist Youth Version (Edens, Campbell & Weir, 2007). Measures such as the SAVRY or YLS:CMI take account of important individual factors such as callousness and also family factors such as parenting styles or contextual factors such as pro criminal neighbourhoods. The YLS:CMI as a first line tool for risk assessment for adolescents can be followed up with a specialist and comprehensive SAVRY assessment, for example for ‘High’ or ‘Very High’ risk. The SAVRY may be modest but better predictor of violent recidivism than Youth Psychopathy, or PCL:YV (Dolan and Rennie, 2008).

For children under 12 year Structured Clinical approaches such as the Early Risk List – B (EARL-Boys) and Early Risk List – Girls (EARL-G) have good levels of predictive validity (Augimeri et al 2005). Although ‘What Works’ evidence has emphasised the importance of individually based cognitive behavioural programmes, young people at high or very high risk or at risk of being placed in secure or residential settings perhaps require more intensive interventions aimed at addressing combined individual, family and contextual risk factors.
Prevention

Population approach to Parenting

Few parents are exposed to evidence based parenting programmes (Sanders 1999), despite the effectiveness of social learning based parenting approaches (Prinz & Jones 2003, Prinz et al 2009). When small numbers of families benefit from the available evidence based programmes the value of programmes is limited (Prinz et al 2009). One example of a parenting programme is the Triple PPP (Positive Parenting Programme). This is a comprehensive multi level approach to parenting with an extensive evidence base (8 randomised control trials in varied delivery contexts, 13 randomised control trials with specific high risk and clinical populations, replication and control studies, (Sanders 2008, Plant and Sanders 2007) and promising economic analysis (Mihalopulous et al 2007).

Triple PPP has recently (and uniquely) been evaluated as a universal, whole population strategy, with the aim of reducing risk factors for child maltreatment and children’s emotional and behavioural problems (Prinz et al 2009). The Triple PPP whole population approach is delivered via the media, directly into community facilities, through health and social care services. Total population approaches also include making Triple PPP available to employers to professionals delivering treatment, for their own children. This type of large scale parenting intervention would feasibly target early risk factors for violent criminality. In Scotland for the first time, Greater Glasgow & Clyde Health Board is implementing a total population approach to parenting.

Treatment or Interventions for High Risk Adolescents

A robust method of identifying promising or effective treatments is meta-analysis of treatment outcome studies focusing on randomised control design. Outcome measures include arrest rates and time spent incarcerated, less often measured are school attendance rates and family functioning. Cochrane reviews of delinquency and conduct disorder has shown the following service interventions demonstrate potentially promising results. Cochrane reviews provide systematic reviews of research outcomes for treatment interventions (www.cochrane.co.uk).

(i) Multi Systemic Therapy

Multi Systemic Therapy Services are for children living at home with their families. There have been 8 randomised control trials studies with children aged 10 to 17 years involved in offending, violence offending and delinquency. MST uses social learning approaches focusing on families and young people with cognitive behavioural interventions and family therapy at high intensity (can be daily). Cochrane reviews show significant variation in the results of the 8 randomised control trials. This may be due to the research methods used in the different randomised studies. More outcome studies are required before firm conclusions can be drawn on the effectiveness of this intervention. However, Cochrane reviews conclude that MST is a “comprehensive intervention based on current knowledge and theory about the problems and prospects of youths and families” (Littell et al 2009, p15).
Multi Dimensional Treatment Foster Care

Multi Dimensional Treatment Foster Care (adolescent version) is designed for juvenile offenders aged 12-17 years who are hard to place. There are preventive 6-12 versions and under 6 year old versions.

MTFC significantly decreased the amount of time spent by juvenile delinquents in institutions at follow up compared to those who received group care (in US psychiatric facilities or children's homes) or probation. A randomised control trial is ongoing in the UK (the Care Placement Evaluation CaPe see www.mtfce.org ). There is one MTFC and one MST site in Glasgow, the first of its kind in Scotland. In England the Department for Children Schools and Families (DCFS) are nationally coordinating implementation of MTFC sites (Every Child Matters, DCFS, 2008).

A Cochrane Review of Treatment Foster Care concludes that Treatment Foster Care leads to “clinically meaningful decreases in anti social behaviour, number of days running away from placements, number of criminal referrals and time spent in locked settings” (McDonald 2009)

Both MST and MTFC place birth families (and foster families in the case of MTFC) at the centre of the interventions.

Transitions to Adulthood

Male children with early onset of conduct problems are at greater risk for adult criminality. There is another group of individuals involved in violent offending called ‘late starters’ (i.e. start offending in adulthood). This group may be less likely to have criminal parents and poor child-rearing experiences but are significantly more likely to be nervous, anxious and to have few or no friends at ages 8–10 years (Zara and Farrington 2009). Caspi and Silva's (1995) highlighted shy and fearful children from age 3 who had difficulty in concentrating on tasks in novel settings. In adulthood these children were characterized by an over-controlled, restrained behavioral style, and a nonassertive personality, in contrast to the late starters of the (Zara and Farrington 2008) study. However early parenting interventions have also been shown to reduce anxiety and nervousness in children. For the early onset group, between the ages of 16 to 18 years the most important predictors were self-reported violence, gambling, involvement in antisocial groups (gangs), and having high debts.

Conduct Disorder is a strong prognostic indicator for both Antisocial Personality disorder and chronic substance use disorders in adulthood. In a prospective longitudinal survey Farrington (1991) found there is continuity in Anti Social Personality (less so between 10 and 17) but more so between 17 and 32 years. The concept of 'Equi-finality' suggests that children present with many different combinations of risk factors leading to the same anti social outcome. Also, identical experiences do not necessarily lead to the same outcome ('Multi-finality'). One common mediator or risk factor across the literature is the
role of parenting style. It is the child and adolescent years where greatest change is possible in preventing violent trajectories.
References


Barth, R.P. (2005) Foster home care is more cost-effective than shelter care: Serious questions continue to be raised about the utility of group care in child welfare services, Child Abuse & Neglect 29 (6), pp. 623–625


