

## Chapter 3

# Intervening early with children at risk

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## Intervening early with children at risk

### Propensity and triggers

WAVE Trust, conducted nine years of in-depth investigation into the root causes of violence and global best practices in addressing these roots, summarised in our 2005 report *Violence & What to Do about It*.<sup>1</sup> We found two components to violence: a personal factor residing inside the individual, which we call the propensity to violence, and external social factors, which trigger violence in people who have the propensity. Both *propensity* and *trigger* are needed for a violent act. Although adult trauma (arising for instance from natural disasters or combat) does lead to increases in violent behaviour, propensity to violence is very largely established in the earliest months and years of life.

The distinctions “propensity” and “triggers” may have some relevance in looking not just at violent offending, but at crime more generally.

### How people become offenders: adverse childhood experiences

The reasons people embark on a life of crime are multiple, but in searching for the most important causes the first set of reasons to look at are powerful links between certain adverse early life experiences and crime.

#### Neglect

Children who are initially reported for neglect are the most likely to be imprisoned.<sup>2</sup> Weatherburn, Lind and Ku<sup>3</sup> found neglect a highly significant factor in juvenile crime and the most powerful predictor of juvenile delinquency. A recent study suggested that neglect in the first two years of life is a more important precursor of childhood aggression than later neglect or physical abuse at any age.<sup>4</sup>

#### Physical abuse

The Nottingham research study on corporal punishment<sup>5</sup> found the two most frequent indicators of a criminal record before age 20 were, at age 11, having been hit once a week or more and having a mother strongly committed to corporal punishment.

Widom<sup>6</sup> found that physical abuse as a child led significantly to later violent criminal behaviour, when other demographic variables were constant.

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1 Hosking, GDC and Walsh, IR *The WAVE Report 2005: Violence & What to Do about It* (WAVE Trust, 2005)

2 Jonson-Reid, M and Barth, R “From Maltreatment to Juvenile Incarceration: The Role of Child Welfare Services” in *Child Abuse & Neglect* no 24 (2000), pp505–20

3 Weatherburn, D, Lind, B and Ku, S *Social & Economic Stress, Child Neglect & Juvenile Delinquency* (NSW Bureau of Crime Statistics & Research, 1997)

4 Kotch, JB, Lewis, T, Hussey, JM, English, D, Thompson, R, Litrownik, AJ, Runyan, DK, Bangdiwala, SI, Margolis, B and Dubowitz, H “Importance of Early Neglect for Childhood Aggression” in *Pediatrics* no 121 (2008), pp725-731

5 Newson, J and Newson, E *Patterns of Infant Care in an Urban Community* (Penguin, 1972)

6 Widom, CS “The Cycle of Violence” in *Science* no 244 (1989), pp160-166

## Sexual abuse

Being sexually abused increases the probability of aggressive and antisocial behaviour in boys<sup>7</sup> and of their becoming perpetrators of sexual abuse.<sup>8</sup> Between 56% and 57% of paedophiles reported adverse sexual experiences.<sup>9</sup> The victim-to-offender pattern is not limited to sexual offences: 50% of female adolescent fire-setters have a history of childhood sexual abuse.<sup>10</sup>

The above three factors relate to the development of a propensity. The following are social factors or triggering factors that arise much later in childhood:

## Delinquent peer group

Dishion and Patterson<sup>11</sup> found that while parenting practices are crucial to offending in early childhood, peer influence was a powerful cause of antisocial behaviour from middle childhood onwards. During their teens juveniles gradually break away from the control of their parents and become more influenced by their peers. In adverse circumstances (for instance, children clustered with others who are also vulnerable, for example by school exclusion or living in deprived areas) these peers can be a strong influence to encourage offending.<sup>12</sup>

## Alcohol

The Edinburgh study of youth transitions and crime found 10 times the volume of delinquency among 11- to 12-year-old children who drank once (or more) weekly than among those who never drank. A Manchester-based study found 25% of weekly drinkers had criminal records, compared with 6-7% of occasional drinkers and non-drinkers.<sup>13</sup> The fact that 44% of violent offenders in England and Wales were perceived to be under the influence of alcohol by their victims reflects a similar pattern.<sup>14</sup>

7 Summit, R "The Child Sexual Abuse Accommodation Syndrome" in *Child Abuse & Neglect* no 7 (1983), pp177-193

8 Cantwell, H "Child Sexual Abuse: Very Young Perpetrators" in *Child Abuse & Neglect* no 12 (1988), pp579-582; Watkins, B and Bentovim, A "Male Children and Adolescents as Victims: A Review of the Current Knowledge" in Mezey, GC and King, MB (eds) *Male Victims of Sexual Assault* (Oxford University Press, 1992), pp27-66

9 Pithers, WD, Kashima, KM, Cumming, GF, Beal, LS, Buell, MM "Relapse Prevention of Sexual Aggression" in *Annals of the New York Academy of Sciences* no 528 (1988), pp244-60; Seghorn, T, Prentky, R and Boucher, RJ "Childhood Sexual Abuse in the Lives of Sexually Aggressive Offenders" in *Journal of the American Academy of Child & Adolescent Psychiatry* no 26 (1987), pp262-267

10 Epps, KJ, Howarth, R and Swaffer, T "Attitudes toward Women and Rape among Male Adolescents Convicted of Sexual versus Nonsexual Crimes" in *Journal of Psychology* no 127 (1993), pp501-506

11 Patterson, GR, Reid, JR and Dishion, TJ *Antisocial Boys* (Eugene or Castalia, 1992)

12 Farrington, D "Psychosocial Predictors of Adult Antisocial Personality and Adult Convictions" in *Behavioural Sciences & the Law* no 18 (2000), pp605-622

13 Newcombe, R, Measham, F and Parker, H "A Survey of Drinking and Deviant Behaviour among 14/15 Year Olds in North West England" in *Addiction Research* vol 2, no 4 (1995)

14 Walker, A, Kershaw, C and Nicholas, S (eds) *Crime in England & Wales 2005-2006* (Home Office, 2006)

### **An epidemic of delinquency?**

There are important interactive factors in dysfunction: children who have suffered abuse and neglect are more likely to drink alcohol and choose deviant peers. Weatherburn and Lind<sup>15</sup> proposed an epidemic model of delinquency in which economic stress, poor parenting, undesirable peer influences and neighbourhood socioeconomic status all interact. Disruption to the parenting process renders juveniles more susceptible to delinquent peer influence. If such juveniles reside in “offender-prone” neighbourhoods they are then more likely to become involved in crime, because of greater exposure to delinquent peers, and this process may pass a neighbourhood “tipping point” after which it accelerates rapidly.

### **The role of domestic violence**

There are many factors along the road to criminality, and a typical cycle of dysfunctional behaviour often contains a theme of domestic violence. This not only wrecks marriages, it models violence as a valid and acceptable means to achieve ends. Also, family breakdowns in the form of divorce or separation frequently result in poverty and neglect – two factors consistently associated with higher rates of crime.

### **The adolescent factor**

Returning to my own specialisation of violence, while adolescents carry out most violence, male aggressive behaviour is highly stable as early as age two. This is not because of genetic factors, which are weak and only activated by adverse early life experience, but because of the interplay between the development process of the infant brain and how the infant is treated. The earlier aggression is established, the worse the long-term outcome tends to be. Any successful strategy to turn the growing tide of violence in society must have as a major component reducing the number of children in society with the propensity towards it.

### **The Dunedin long-term study**

Compelling evidence of how early the roots of violence are planted comes from the New Zealand Dunedin study, in which nurses identified “at-risk” three-year-olds on the basis of 90 minutes’ observation. These children were tracked and compared with all other children in Dunedin of their age. At age 21, 47% of the at-risk males abused their partners (compared with 9.5% of others); two-and-a-half times as many had two or more criminal convictions; and 55% of offences committed by the at-risk group were violent (compared with 18% for others). Offences by the at-risk group were much more severe, including robbery, rape and homicide.<sup>16</sup> The nurses had been able to predict future criminals 18 years in advance.

### **The infant brain**

To understand what causes this early creation of propensity towards violent crime, we must take a voyage through the infant brain.

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15 Weatherburn et al, op cit

16 Caspi, A et al “Behavioural Observations at Age Three Years Predict Adult Psychiatric Disorders” in Archives of General Psychiatry no 53 (American Medical Association, 1996), pp1,033-1,039

Intelligence is the key survival tool for humans. This intelligence, however, implies a large brain, and a large brain needs a large skull. To allow this skull to pass through the mother's hips, human infants are born prematurely by the standards of other species. Part of the package of evolving into such intelligent beings includes the need to complete the development of much of the brain after birth, crucially before the age of three.

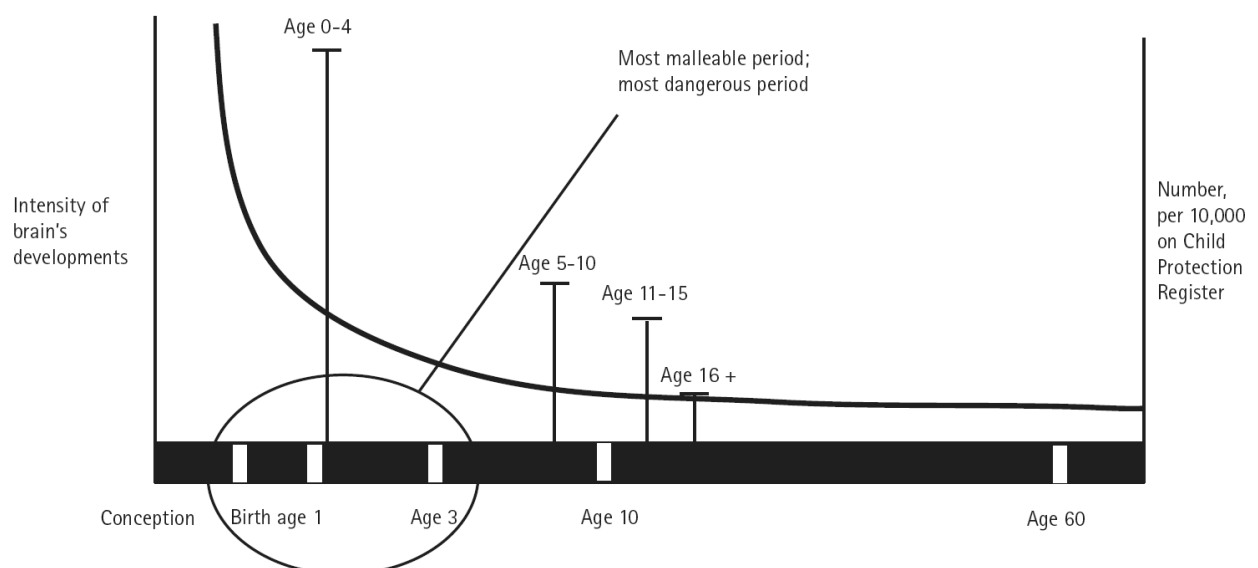
To put these percentages into perspective: at birth a baby's brain has 50 trillion synapses (connections). By age three, the number of synapses has increased 20-fold to 1,000 trillion. Since this is too large a number to be specified by genes alone, the new synapses are formed by early life experience. Synapses become hard-wired, or protected, by repeated use, making early learned behaviour resistant to change. Unused synapses simply wither away.

The experiences that serve to develop, hard-wire or prune different combinations of the trillions of synapses mean each baby's brain develops differently and is driven by the prevailing environment. Extreme examples of the possible variations can be seen in the neglected Romanian orphans, who lacked activity in large areas of their brains, and native American Indians, who develop acute hearing and balance skills. Current research indicates that emotional development largely takes place in the first 18 months of life.

A downside of the brain's great plasticity is that it is acutely vulnerable to trauma. If the early experience is fear and stress, especially if these are overwhelming and repeated, stress hormones such as cortisol wash over the brain, causing the brains of abused children to be significantly smaller than those of non-abused – 20-30% smaller in the part governing emotions.

Figure 1 shows how the malleability of the brain (the curving line) decreases sharply with age. The chart also shows how the likelihood of significant harm (the straight columns) is by far the greatest in precisely the period in which the brain is most malleable. The peak age for children to suffer abuse is in the first year of their life.

**Figure 1: Children in England are most at risk of maltreatment during the same period that their brains are most malleable**



## **Empathy and attunement**

Here I need to introduce two key words: empathy and attunement.

**Empathy:** where the observed experiences of others come to affect our own thoughts and feelings in a caring fashion. Empathy entails the ability to step outside oneself emotionally and suppress temporarily one's own perspective on events to take on the perspective of another.

**Attunement:** where parent and child are emotionally functioning in tune with each other and the child learns from the parent that its emotional needs for love, acceptance and security are met and reciprocated.

When a parent fails to show empathy with a particular emotion, the child can drop this from its repertoire. Infants also “catch” emotions from their parents. Three-month-old babies of depressed mothers mirror their mothers' moods, displaying abnormally high feelings of anger and sadness, and far less curiosity and interest.

Sadly, for many parents attunement either does not come “naturally” or is disrupted by post-natal depression, domestic violence or the effects of drugs or alcohol. If the child does not experience attunement, its emotional development is retarded, and it may lack empathy altogether.

### **Empathy: a key to understanding violence**

Even in their first year, children already show signs of whether their reaction to the suffering of another is empathy, indifference or hostility. These reactions are shaped by parental reactions to suffering. Empathy can be well developed by the time children are toddlers.

In James Gilligan's 10 years as director of mental health in the Massachusetts prison service, he succeeded in reducing homicidal violence in the state's prisons almost to zero. In his book *Violence: Our Deadly Epidemic & Its Causes*,<sup>17</sup> he outlines his experience that there are certain essential preconditions for violence to take place. One is “that the person lacks the emotional capacities or the feelings that normally inhibit the violent impulses”.

Lack of empathy also has an impact on choice of parental discipline method. A plethora of studies indicate that:

- harsh or explosive discipline leads to violence and criminality in children;
- discipline styles run in families over many generations, as people tend to replicate the parenting styles of their own parents; and
- perhaps 30% of children who suffer abuse or neglect (compared with 2-3% overall) go on to abuse or neglect their own children.

Cambridge Professor of Psychological Criminology David Farrington, following a study of south Londoners between ages eight and 32, put it thus:

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<sup>17</sup> Gilligan, JMD *Violence – Our Deadly Epidemic & Its Causes* (Grosset/Putnam, 1996)

*Anti-social children grow up to become anti-social adults who go on to raise anti-social children.*

What needs to be grasped here is that these parents are not wicked, but are simply “doing what comes naturally” by following the pathways laid down in their own early learning. However, in light of what we now know about the enormous importance of the earliest years of life, it is particularly striking that childhood is such a dangerous period for many, with the crucial years between birth and age four being by far the most dangerous (50% of child abuse deaths are of children under age one).

Unicef reports that up to 1 million children in the UK suffer emotional abuse with “devastating impact on emotional and educational outcomes”. A report from the National Society for the Prevention of Cruelty to Children estimated that 7% of children in the UK experience serious physical abuse. Since the likelihood of significant harm is greatest in precisely the period when the brain is the most vulnerable, we conclude that a large number of our children are likely to be suffering enduring brain damage, manifesting in poor outcomes and eventual criminality.

### **Most at risk of becoming offenders**

Most of us find it difficult to visualise the true circumstances of actual children from a catalogue of statistics, but just such a picture was given to us at last November at the WAVE Trust conference on reducing serious youth violence, for the 33 London boroughs, hosted by the Metropolitan police.

Hands-on experience of dealing daily with children already on a path to criminal offending was provided in a powerful presentation by Camila Batmanghelidjh, founder of Kid’s Company. Her typical “client” is an 11- or 12-year-old boy or girl, who has been run as a drug courier or in prostitution, and has been out of school for a number of years.

Her analysis was that chronically abused and neglected children drive the culture of violence at street level. Their stores of horrific memories are compounded by the release of vast amounts of adrenalin and stress hormones. These “lone children” are not in the care of a responsible adult because often it is the adult in their lives who has caused them damage. They grow up understanding that they are solely responsible for their survival, and seeing human life as completely worthless. These are representative of the tiny minority of early-onset offenders who commit over half of all offences.

Batmanghelidjh described the model of street crime as three concentric circles: From the central circle the professional drug dealer/criminal looks into the community to recruit from the second circle, of these lone vulnerable children, who then run the drugs to the third circle. She calls those in the third circle the “imitator” children; although relatively well cared for, they have become aggressive to survive the conditions created by those in the two inner circles. The lone children are recruited as early as age eight.

### **Pathways to criminality**

Nationally, 30% of children in need through abuse or neglect are eventually taken into care. The future for many of these children is bleak.

Research in 2003 showed that 68% of children in residential care and 39% of those placed with foster carers were identified as having a mental disorder. In England in 2004 only 6% of children leaving care had achieved “good” (A-C) grades at GCSE level or equivalent, compared with 53% of pupils overall; only one in 100 went on to university that autumn, compared with 43% of people (aged 30 and below) in the population as a whole – or 60% of children in one of the really successful Danish care homes. These children have a 10 times greater risk of school exclusion than the average.

If the prospects for those in care are poor, there is another group of vulnerable children who suffer even worse outcomes, according to a recent study.<sup>18</sup> These are the children permanently excluded from school. The study compares outcomes between a five-year cohort of 438 looked-after children (meaning those in local authority care) and 215 adolescent males permanently excluded from school (of whom 22 were also looked-after children). While both groups had similar socioeconomic backgrounds, a number of salient differences emerged:

- The group who had been permanently excluded from school were significantly more likely to have criminal records (64% compared with 44%).
- The group permanently excluded from school had a suicide rate 133 times that of the general population.
- The criminality of those permanently excluded from school was significantly more violent (with a murder rate 1,073 times that of population-peers).

Putting it another way, to find one potential murderer, we need to consider just 72 of those who have been permanently excluded from school, compared with 78,000 of their age group in the population.

A retrospective study<sup>19</sup> of young people who had been excluded across a 10-year period from 1988 to 1998 found that 44% of youths had no recorded offences prior to permanent exclusion but had a record of offending following permanent exclusion, with 11% of them committing their first offence in the same month they were excluded. Nearly half of all offences of “theft and handling” by juveniles are committed during school hours.

The Audit Commission’s survey of young offenders found that 42% had been excluded from school while a further 23% “truanted significantly”.

The plight of “at-risk” children (and the risks they present to society) is a national issue we need to tackle proactively, not reactively. An early intervention strategy needs to translate into significant reductions in truancy and school exclusion. There are interventions that deliver this, such as Dorset Healthy Alliance and Toronto Regents Park, while examples from countries such as Denmark demonstrate that much-improved outcomes are possible for children in care.

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18 Williams and Pritchard (pending publication)

19 Berridge, D, Brodie, I, Pitts, J, Porteous, D and Tarling, R (eds) *The Independent Effects of Permanent Exclusion from School on the Offending Careers of Young People* (Home Office, 2001)

## The role of post-traumatic stress disorder

The link between adverse childhood experience and criminality follows through to our prison population: a third of our prisoners have been in local authority care as children, yet only 0.6% of the nation's children are in care at any one time; and prisoners are 10 times more likely than the general population to have been habitual truants. It is not difficult to infer – and my own experience and that of others in the prison system shows – that a high percentage of prisoners were traumatised during childhood.

Research shows that a high proportion of violent offenders in prisons and young offender institutes suffer from post-traumatic stress disorder (PTSD).<sup>20</sup> In addition, Steiner et al<sup>21</sup> found very high rates of PTSD among violent juvenile prisoners, and Fullilove et al<sup>22</sup> found that 59% of those attending a drug rehabilitation unit had an association with PTSD.

Illegal drug usage itself may have its origins in childhood neglect or abuse. Felitti et al<sup>23</sup> found that people who had suffered four types of adverse childhood experiences (such as neglect, domestic violence, or alcoholism in the family) were 11 times more likely to be intravenous drug users than those with no such childhood experiences.

## Need for a new approach

If the bad news is that inadequate parenting feeds into a vicious cycle of dysfunction and crime, the good news is that we now understand how these pathways to crime are laid down in childhood. Sound scientific evidence shows that if we care properly for children they will grow into pro-social citizens who are able to give their own children the type of positive parenting that feeds into a virtuous cycle.

Starting such a virtuous cycle implies changes in how we respond to the problem of crime. To effect this transformation, we need a proactive strategy – because intervening after abuse and neglect have taken place is both more expensive and less successful than taking preventive action before they occur.

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20 Collins, JJ and Bailey, SL "Traumatic Stress Disorder and Violent Behavior" in *Journal of Traumatic Stress* (ISSN: 0894-9867) vol 3, no 2 (1990), pp203-220; Long, CD *Posttraumatic Stress Disorder Symptomatology in Incarcerated & Nonincarcerated Adolescent Males*, dissertation (California School of Professional Psychology, Fresno, 1991); Raeside, CW *Posttraumatic Stress Disorder in a Female Prison Population*, dissertation (Royal Australian & New Zealand College of Psychiatrists, 1994); McFarlane, A "The Longitudinal Course of Trauma" in *Baillière's Psychiatry* vol 2, no 2 (May 1996)

21 Steiner, H, Garcia, I and Matthews, J "Posttraumatic Stress Disorder in Incarcerated Juvenile Delinquents" in *Journal of the American Academy of Child & Adolescent Psychiatry* (ISSN 0890-8567) vol 36, no 3 (1997), pp357-365

22 Fullilove, MT, Fullilove, RE, Smith, M, Michael, C, Panzer, PG and Wallace, R "Violence, Trauma and Post-traumatic Stress Disorder among Women Drug Users" in *Journal of Traumatic Stress* no 6 (1993), pp533-543

23 Felitti, VJ, Anda, RF, Nordenberg, D, Williamson, DF, Spitz, AM, Edwards, V, Koss, MP and Marks, JS "Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study" in *American Journal of Preventive Medicine* vol 14, no 4 (1998), pp245-258; Anda, RF, Felitti, VJ, Walker, J, Whitfield, CL, Bremner, JD, Perry, BD, Dube, SR and Giles, WH "The Enduring Effects of Abuse and Related Adverse Experiences in Childhood: A Convergence of Evidence from Neurobiology and Epidemiology" in *European Archives of Psychiatry & Clinical Neurosciences* vol 56, no 3 (2006), pp174-86

**Potential solutions**

MacLeod and Nelson<sup>24</sup> studied 56 separate programmes designed to promote family wellness and prevent abuse. They distinguish between proactive and reactive approaches:

*Proactive* programmes begin prenatally, at birth or in infancy. They include home visiting and social support. They take place before abuse occurs.

*Reactive* programmes tend to begin at school age and focus on teaching parenting strategies and methods. They take place after problems have developed with children. They concluded:

- Most interventions to promote family wellness, and prevent child maltreatment, are successful.
- The earlier the intervention, the better.
- The benefits of proactive interventions are sustained and even grow in effect over time.
- Reactive interventions tend to fade in effect, and relapse is a common problem.

Numerous effective early prevention interventions have been identified, such as Nurse Family Partnership and Circle of Security. Cost-benefit analyses of early interventions have repeatedly shown that the financial benefits far outweigh the costs.<sup>25</sup> A shift to higher priority for very early (pregnancy to three years) intervention would save money from the public purse by reducing future dysfunction and offending.

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24 MacLeod, J and Nelson, G "Programs for the Promotion of Family Wellness and the Prevention of Child Maltreatment: A Meta-analytic Review" in *Child Abuse & Neglect* vol 24, no 9 (2000), pp1,127-1,149

25 Hosking and Walsh, *op cit*

**A comprehensive programme**

We need to work at all levels, and a comprehensive programme would make health and education agencies rather than criminal justice the first two ports of call in a strategy focused on the causes of crime and disrupting pathways to crime. Our programme would include:

- ensuring that no child should leave school without fundamental training in how to parent in a non-violent manner and, crucially, how to attune with babies so that they develop empathy (the programme Roots of Empathy would deliver this);
- early identification and subsequent monitoring of children at risk – at present children can disappear off the radar between early home visits and entry to school, or when removed from school, as witness the child who recently starved to death in Birmingham;
- sound evaluated programmes to support “at-risk” families (see WAVE report for examples);
- parent training programmes to support good parenting, with tax breaks for those who achieve “good parenting” certificates;
- giving schools more resource and a broader role in fostering the emotional development of children and teenagers, especially those at risk;
- providing more wholesome outlets for youthful energy; and
- assessing all children for post-traumatic stress disorder and, when found, treating that effectively as a matter of priority.

Post-traumatic stress disorder can be diagnosed and treated, and delivering this treatment on a large scale would make an enormous difference to reoffending. Other forms of effective rehabilitation would also reduce crime. I know – in 10 years of treating violent offenders, not one of the many people with whom I have worked has reoffended with a violent offence.