wave TRUST

Tackling the roots of violence

The WAVE Report 2005

Violence and what to do about it

Authors: George Hosking
Ita Walsh

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WAVE Trust is an international charity dedicated to advancing public awareness of the root causes of violence, and the means to prevent and reduce it in our society. WAVE's particular focus is reducing child abuse and neglect because these are the major sources of the development of teenage and adult violence; they underlie much emotional suffering in adults who may never be violent; and violence and abuse are entirely preventable through implementing known, economically viable, and effective programmes to break the cycle of violence.

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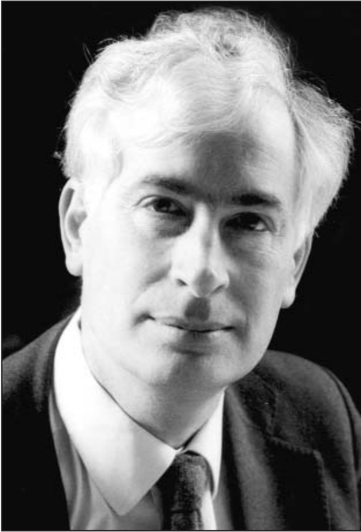
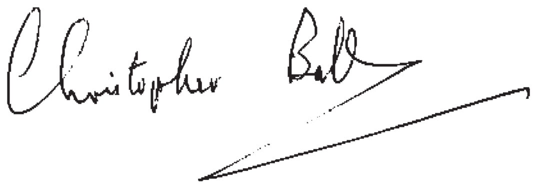
Introduction



This is an important and timely Report. What it tells us about an epidemic of violence in society today is deeply depressing and sad – and yet the Report also offers a message of hope for a better future. The rising tide of violence in the UK, and elsewhere, is neither inevitable nor universal. Violence is a preventable disease. While it is one that is difficult to cure, prevention is relatively simple. Children who are loved well in infancy do not become violent teenagers or adults. *Violence and what to do about it* offers specific solutions designed to foster parental attunement to the needs of children, and the development of empathy in children towards the feelings of others.

WAVE's research shows that the recommended interventions make a real and beneficial difference. A society that ignores such findings must be bent on self-destruction. The social costs of violence are some £20 billion a year – and countless damaged lives. This is a social evil that demands attention. This Report says what needs to be done, and who should do it. Read it, reflect on it, and join us in calling for effective action – now.



Sir Christopher Ball
Chairman of WAVE Trust, and author of Start Right: the Importance of Early Learning (RSA, 1994)

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Preface

WAVE Trust and the authors of this report

1. WAVE Trust (Worldwide Alternatives to ViolencE) is a charity dedicated to identifying and promoting the most effective methods known, worldwide, to address violence, especially in the form of abuse of children.

2. WAVE's findings result from an 8-year study of the root causes of violence.

3. Sir Christopher Ball, former warden of Keble College, Oxford, former government adviser on education policy for under-5s and author of "Start Right" on the importance of early learning is the Chairman of WAVE. Based in Croydon, it is supported by local MPs and councillors in Croydon, Carshalton and Sutton from all three main political parties.

4. WAVE is advised by a panel of experts, including leading international academics in such fields as anti-social behaviour (Sir Michael Rutter, Institute of Psychiatry), juvenile delinquency (Dr Gerry Patterson, Oregon Social Learning Center), family violence (Professor Kevin Browne, Birmingham University), child abuse (Dr Bruce Perry, Baylor College of Medicine), domestic violence (Professor Donald Dutton, University of British Columbia), criminal violence (Dr James Gilligan, Harvard Medical School) and the economics of interventions (Professor Martin Knapp, London School of Economics).

5. WAVE was founded in 1996 by George Hosking, who is a Quaker. He uses the same approach to this work as he did throughout his career as a business strategist: changing performance through identifying and understanding root causes, rather than operating on symptoms. This enabled his consultancy to transform profitability for clients, adding over £30 million per annum to business profitability.

6. In mid career George trained as a psychologist and, through focus on child development and child psychology, became especially concerned about child abuse. After founding WAVE, he improved his understanding of these issues by qualifying as a Clinical Criminologist, and doing therapeutic work with violent criminals both in prison and after their release. To date none of his clients have re-offended with violence and those still in prison have ceased to be violent in that setting.

7. Ita Walsh, the co-author of this report, is an experienced international strategy consultant who has conducted and led projects for blue chip clients all over the world. Her vision is a world devoid of all forms of cruelty, especially towards children or animals. She is a former trustee of WAVE Trust.

Terms of reference, key objectives & methodology

Terms of reference

To report WAVE's main findings since its inception in 1996, and recommend specific Government action to turn the rising tide of serious violence and reduce child abuse.

WAVE's key objectives

WAVE was formed to identify and disseminate world best practices for creating and fostering non-violence in society through a soundly-researched understanding of the root causes of violence.

Methodology

Research into root causes involved the identification and then study of thousands of academic papers and scores of books as well as attendance at numerous specialist conferences and seminars. The knowledge gained from the material studied and contacts made led to the formation of a panel of international expert advisers, with the participation of some of the world's leading authorities on violence, child abuse, domestic violence, antisocial behaviour and juvenile delinquency. These experts recommended further relevant written material as well as introducing WAVE to many other organisations and individuals with valuable insights and know-how. The approach was broad, deep and iterative. Over time, new dimensions of the problem of violence, including Post-Traumatic Stress Disorder and the importance of the first three years of life, emerged and became the subjects of more focused study and research.

In parallel with researching root causes, a business strategy technique was employed to identify global best practice in reducing child abuse and violence. Once the most promising approaches so identified had been evaluated, ways for the most effective of these to be adapted to the UK were explored. This process is ongoing.

Executive summary

1. Although violence is increasing alarmingly in our society, it is neither universal nor inevitable, but a behaviour that is caused and can be prevented. Many societies have existed without discernible inter-personal violence.

2. A violent act results from an interaction between two components: an individual's propensity (personal factors) and external triggers (social factors). Social factors alone, however undesirable, lead to violence only when the internal propensity is also present. In the absence of a weapon, a trigger is harmless.

3. The propensity to violence develops primarily from wrong treatment before age 3.

4. The structure of the developing infant human brain is a crucial factor in the creation (or not) of violent tendencies because early patterns are established not only psychologically but at the physiological level of brain formation.

5. Empathy is the single greatest inhibitor of the development of propensity to violence. Empathy fails to develop when parents or prime carers fail to attune with their infants. Absence of such parental attunement combined with harsh discipline is a recipe for violent, antisocial offspring.

6. Violence is triggered in high-propensity people by social factors such as unemployment, poor housing, over-crowding, economic inequality, declining moral values and stress. Alcohol plays a significant role in the timing of violence. Since these factors reflect long-term cultural trends that are difficult to reverse, investment in reducing the number of people with propensity to violence is a strategic imperative.

7. Violence costs the UK more than £20 billion per annum. A tiny fraction of this is spent on prevention, and most of that on the least effective age groups (e.g. 5-15). Early (0-3) intervention is fruitful and cost-effective. Negative cycles can be transformed and children given the opportunity to grow into contributing, personally fulfilled adults (and future parents).

8. The single most effective way to stop producing people with the propensity to violence is to ensure infants are reared in an environment that fosters their development of empathy. The surest way to achieve this is by supporting parents in developing attunement with their infants.

9. WAVE's search for global best practice in prevention of violence identified many effective early interventions. These include programmes which develop attunement and empathy in (i) tomorrow's parents while they are still in school, (ii) current parents and (iii) parents-to-be.

10. Recognition of the importance of Post-Traumatic Stress Disorder (PTSD) and investment in its diagnosis and treatment could play a major role in combating the cycle of violence.

11. WAVE recommends large-scale implementation of a series of pilot studies of approved early intervention programmes.

12. WAVE recommends the selection of one British town or city as a large-scale test area for simultaneous implementation of a full range of effective intervention strategies, to see if their combined effects might be cumulative.

13. WAVE invites debate on the merits of a focused, national crime prevention agency to coordinate, fund and drive effective early prevention strategies.

Section 1

Violence, the current situation

Although violence is increasing alarmingly in our society, it is neither universal nor inevitable, but a behaviour that is caused and can be prevented. Many societies have existed without discernible inter-personal violence.

Trends in Violence

The present situation in the western world, including the United Kingdom, is serious, with levels of violence rising alarmingly during the past fifty years.

Sadly, the trend to reducing inter-personal violence, which ran from the mid 19th to mid 20th Century, has reversed in recent decades. Recorded violence in England & Wales in 2003 was more than 25 times higher than in 1950 (after adjusting for the 1999 change in reporting method). While some of that 25-fold increase reflects more accurate reporting of domestic and other forms of violence, there has been an enormous increase in actual violence. The following chart and table summarise the situation:

Figure 1: Violent Offences per 100,000 population, England & Wales 1950-2004

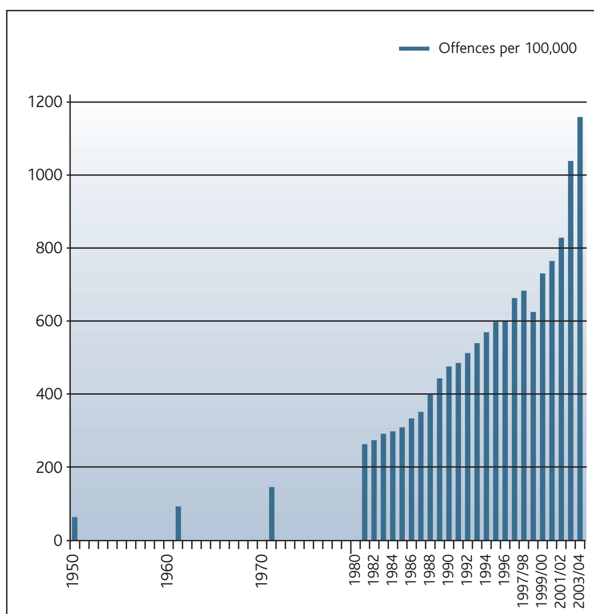


Table 1: Violent Offences per 100,000 population, England & Wales, 1950-2004

Time period	Violent offences per 100,000 population	Index (1950=100)
1950	47	100
1960	82	175
1970	146	311
1980	271	577
1990	494	1,051
2000 (old basis)	735	1,563
2003-4 (old basis)	1,158	2,463
2003-4 (new basis – not shown on graph)	2,113	4,496

The issue of whether UK violence levels are rising or falling is currently the subject of more heat than light. Each time new figures are published, one viewpoint refers to yet another sharp rise in recorded crime, while another points to falls in crime. The most recent Home Office publication (April 2005) records a further 9% rise in violent crime (not included in the figures in this report). This conflicts with the British Crime Survey's estimated reductions in total violent crime since 1995. However, comparing and contrasting the Home Office and BCS figures is rather like comparing apples and pears: the Home Office records actual statistics of reported crime while the British Crime Survey figures are extrapolated from a population sampling exercise and include unreported crime.

Those who prefer to interpret the figures as showing reductions in violence state that the police statistics (which continue to show alarming rises in violent crime) are distorted by methodological changes and better capture of crime statistics [the figure and table above have been adjusted to reflect the main change in methodology in the last 10 years]. Those who reject this argument point out that the British Crime Survey itself has had several methodological changes since 1995, and is also an unreliable trend indicator. Also it excludes crime experienced by under-16 year olds, an increasingly significant category.

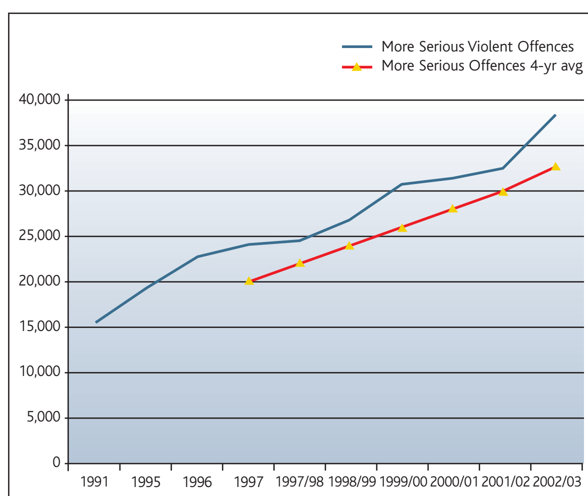
The reality is that the apparent falls in violence recorded by the British Crime Survey are falls in total incidents of violence – regardless of seriousness. The British Crime Survey treats events with no injury and punches on the nose as statistically equivalent to a homicide. Most of the methodological changes in police crime affect violent incidents at the minor end of the spectrum.

Differences between the British Crime Survey and police records are likely to be minimal in cases of serious violence. The most telling reason WAVE does not accept the claim that violence levels are falling is what has happened to serious forms of violence: in this category there is no doubt that there have been sharp rises in violence during the whole of the period since 1990. Even if there were some small decrease in overall violence since 1995 (which WAVE doubts) violence was already so high by then that the sensible timescale against which to measure the trend is the 1950s not the 1990s.

Trends in Serious Violence

The figures below are taken from the Home Office Statistical Bulletins: Crime in England & Wales 2002/03 (Table 3.04) and 2003/04 (Table 2.04).

Figure 2: More Serious Violent Offences, England & Wales 1991-2003



The number of offences of Serious Violence has risen from 15,829 in 1991, through 23,581 in 1997 to 43,850 in 2003/4. While the adoption of consistent reporting by police areas in the National Crime Recording Standard (NCRS) in 2002 has been estimated to increase overall crime reporting by 10%, it is unlikely that the effect on most of the offences recorded in the following section is significantly greater than that average.

Because of the possibility of random fluctuations in the figures for any one year, the graph also shows a moving average over a 4-year period. This shows a more reliable trend line.

The data for some of the component crimes of the graph above are shown in the Table below. Unlike the data for less serious offences, no downward trend in violence is visible. It should be borne in mind that in the base year of 1991 recorded violence (all violence) in England & Wales was already 11 times higher than in 1950.

Table 2: Serious Violent Offences, England & Wales, 1991-2004

	Homicide	Attempted Murder	Threat and Conspiracy to Murder	Wounding or other Acts Endangering Life
1991	725	555	4,712	9,408
1995	745	634	7,044	10,445
1999/00	766	750	13,434	15,135
2003/04	853	884	22,232	19,358
Rise since 1991:	**+18%**	**+59%**	**+372%**	**+106%**

The trend data on specific serious crimes give cause for serious concern. Most of these show no or minimal change in the 1998/99 reclassification process.

Serious sexual offences

The police classify sexual offences separately from violent offences, but some sexual offences are clearly of a serious, violent nature. No downward trend is visible. This is an area which could be affected by greater reporting than in past years, but it is doubtful that it would explain the very large increases recorded:

Table 3: Sexual Offences, England & Wales, 1991-2004

	Rape of a Female	Rape of a Male	Indecent Assault on a Female
1991	4,045	No data	15,792
1995	4,986	150	16,876
1999/00	7,809	600	20,664
2003/04	12,354	893	26,709
Rise since 1991:	+205%	+495% *	+69%

* Index for Male Rape based on 1995

There have also been dramatic increases in recorded offences for Arson, Violent Disorder and Kidnapping.

The final reason for lack of complacency about violence is that even if recent British Crime Survey trend reports were meaningful, and violence levels have fallen in recent years (which WAVE would doubt) levels of violence in Britain are still many, many times higher than they were in the 1950s.

This issue is further dealt with in Appendix 1.

Family Violence

"Family" violence is defined as violence between any family members as distinct from "Domestic" violence, the accepted term for fighting between adult partners or spouses

Because it is WAVE's contention that the roots of violence in society lie within the family, it is worth looking more closely at violence within the family.

Gelles and Cornell (1990) stated that "The greatest incidences of violence, sexual assault and murder in western society occur in the home, at the hands of other family members." While the current focus on reducing domestic violence is of course very important, the nature of its remit means violence against other vulnerable members of the family (children and the elderly) often goes undetected.

Despite decades of attention to this issue, child protection agencies report that the problem of family violence today is just as serious as it was 50 years ago. One factor cited by workers in the field as the cause of this persistence is the transmission of patterns from one generation to the next – the cycle of violence (Buchanan, 1996). The Cambridge University professor of psychological criminology, David Farrington, put it this way following his 1995 study of South London males from the age of 8 to 32:

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

Estimates of recent levels in family violence

British Crime Surveys from 1993 to 2003 estimated half a million domestic assaults annually.

Browne (1989) estimates 10% of elderly people in Britain are subjected to abuse and neglect.

42% of murder or manslaughter cases in Britain involve a domestic dispute; one third of domestic victims are children (Browne and Herbert, 1997).

The NSPCC estimates 3-4 children die at the hands of their parents or carers in the UK every week (NSPCC, 1985), 2 through abuse or neglect. In the US the figure is 3 per day (US Dept of Health and Human Services, 2003).

Surveys of domestic violence in the USA and UK show that at least one married woman in four has been hit by her husband (Straus, Gelles & Steinmentz, 1980, 1988; Painter 1991).

As many as one-third of women in the UK experience severe physical violence from a male partner at some time; one in ten report such violence annually (Mooney, 1993).

As an indication of trends in the western world, severe violence to wives on a regular basis is estimated to occur in 7% of USA families (Dutton, 1988). Pregnant women are especially prone to abuse (McFarlane, 1991; Newberger *et al*, 1992). In a study of 290 pregnant women Helton (1986) found 15.2% reported being beaten before their current pregnancy and 8.3% during their current pregnancy.

These figures are especially chilling in view of WAVE'S identification of early life experience within the family (harmful parenting) as the prime root cause of later violent behaviour. Harmful parenting can mean neglect or direct physical violence but also includes shouting, emotional abuse and violent discipline. It can be perpetrated by parents who mean well and believe they are doing what is best for their children, but whose parenting styles unwittingly cause lasting damage to the quality of lives their children are equipped to lead.

Violence against children

Domestic violence is intertwined with child abuse, as both a cause and a consequence (see Appendix 2 for a more detailed commentary on domestic violence and its relationship with child abuse). The dynamics carry some important messages:

1. Domestic violence between parents is seriously harmful to their children
2. Children who either witness or suffer domestic violence grow up with increased tendencies to become victims or perpetrators of it themselves
3. The presence of domestic violence in a family hampers the success of programmes to reduce child abuse and violence

Violent deaths of children in recent decades resulted in numerous Public Inquiries – WAVE counted 24 in the 1970s, 25 in the 1980s and 22 in the 1990s, yet no visible improvement ensued. [Please refer to "A Tale of 10 Children", in Appendix 3, for evidence of how little difference Public Enquiries have made to the continuing horror of child abuse since 1946.]

The reason these Inquiries failed to make a difference is that they generally addressed *symptoms*, not root causes. The result is that society now reacts to the symptoms more swiftly, intelligently and effectively than ever but, because we still do not address the root causes, the violence continues. It is as if we are standing at the bottom of a cliff where children's bodies fall, becoming ever more skilled at dealing with the broken bodies but never going to the top of the cliff to stem the flow. WAVE proposes moving to the top of the cliff where intervention can be effective.

The NSPCC Report *Child Maltreatment in the United Kingdom* (Cawson, Wattam, Brooker & Kelly, 2000) made the following estimates relating to UK children:

> 7% suffered serious physical abuse (defined as violent treatment by parents or carers regularly over years; or bruising, marks, soreness and pain lasting to the next day or longer on more than half the occasions; or suffering physical injury through parental treatment; or frequently and violently shaken)
>
> 14% suffered intermediate physical abuse (e.g. irregular violent treatment)
>
> 3% were in a "cause for concern" category (e.g. received physical discipline regularly over years, but the effects lasted until the next day on less than half the occasions)

Even the children in the cause for concern category will carry damaging emotional effects through their lives as a result of such discipline – even if (*especially* if) they have dealt with it by shutting off their feelings and denying it did them harm.

Across the definitions, the survey suggests 20-25% of UK children suffer physical abuse at some level; 6% experience serious absence of care and 9% intermediate absence of care.

So long as any physical punishment is condoned by society, it affords the opportunity for severe and brutal treatment to be presented linguistically as a "slap" or a "tap" by the perpetrators. NSPCC reports show frequent punishments by parents include shaking, throwing, freezing baths, pulling hair, biting, scalding and the "Chinese burn". Three quarters of babies are hit before they are one year old, and more than one third of children are hit with an implement.

Section 2
The nature of violence

Although violence is increasing alarmingly in our society, it is neither universal nor inevitable, but a behaviour that is caused and can be prevented. Many societies have existed without discernible inter-personal violence.

Is violence inevitable?

Perhaps the most encouraging finding is that violence is not an inevitable consequence of people living together: in a cross-cultural study of 90 different societies around the world, *Family Violence in Cross-cultural Perspective*, the anthropologist David Levinson (1989) found 6 communities where inter-personal violence such as wife- or husband-beating, physical punishment of children and sibling fighting was absent and 10 where it was rare. These 16 societies came from all geographical regions of the world, with four from South America. The only European society in his list, perhaps because we have been so culturally homogenised to violence over the centuries, was the Lapps.

The factors that predicted low or no family violence included monogamous marriage, economic equality between the sexes, equal access to divorce by men and women, the availability of alternative caretakers for children, frequent and regular intervention by neighbours and kin in domestic disputes, and norms that encourage the non-violent settlement of disputes outside the home.

> Levinson comments *"The central conclusion I reach from these findings is that family violence does not occur in societies in which family life is characterised by cooperation, commitment, sharing and equality. While these factors do not ensure that wives will not be beaten or children physically punished, it is clear that if they guide family relationships, family violence will be less frequent."* (p. 104)

Levinson concludes by examining the Central Thai, a group of some 10 million people in central and southern Thailand, which he describes as a society "free from family violence". Among features noted about this non-violent society are cultural norms of individualism, respect and recognition of the dignity of every human being. Also the society was not free of the emotions which elsewhere lead to violence – they were just dealt with in a non-violent manner.

There are also examples of religious communities such as Mennonites and Quakers who have co-existed without violence. Violence is a behaviour that is caused and can be prevented.

Once the behaviour is established in society, violence levels are influenced by many factors including disrupted upbringing, situational stress, economic inequality, deprivation of justice, extreme poverty, low wages, unemployment, social isolation, overcrowding and poor housing. Levels are increased by a culture of violence, absence of moral or spiritual teaching, exposure to violence in the media, and ready availability of weapons, including firearms. There is a powerful correlation between alcohol consumption and timing of violence, and growing, persuasive evidence that diet may sometimes act as a trigger for aggression, including in children. These social factors are covered in more depth in Section 4 – The role of social factors.

A violent act results from an interaction between two components: an individual's *propensity* (personal factors) and external *triggers* (social factors). Social factors alone, however undesirable, lead to violence only when the internal propensity is also present. In the absence of a weapon, a trigger is harmless.

Two interactive components: *propensity* and *triggers*

Using the analogy of an exploding bomb for violence, we can distinguish between the internal propensity (the bomb) and the external trigger (the fuse to explode it). Both propensity and trigger are needed for a violent act. While numerous social factors can behave as triggers, it takes very particular circumstances in a short time-frame to produce the propensity.

Defining the propensity to be violent

In this report the word "propensity" refers to the tendency in a child, adolescent or adult to be more likely to respond to a given provoking trigger with violence, as distinct from "genetic propensity" – which may be so latent it would seldom if ever be acted out.

While the propensity to violence is very largely established in early childhood, there are exceptions: a child brought up in a stable, violence-free environment for the first few years of life and then cast into a harmful environment could develop the propensity to violence, albeit to a lesser degree than if the earlier environment had also been harmful. Teenage or adult war veterans exposed to excessive combat trauma frequently react by displaying increased tendencies to violence (Lewis, 1990, 1992); here again, the levels of increase are affected by the early childhood environment, veterans who were abused in childhood being much more likely to be influenced in this way. This later onset of propensity is covered in more depth in Section 9 on Post- Traumatic Stress Disorder.

Genetics/birth factors

Because the press often highlights claims about the genetic origins of violence, we want to address that issue directly. Although there are research studies suggesting genetic factors can act as precursors to aggression and/or antisocial behaviour, WAVE found some worrying issues in many of the studies reviewed, including (a) the treatment of "happened before adoption" as meaning "genetic"; (b) the assumption that a biological parent being antisocial implies a "genetic" impact on adoptees, when there are numerous ways any influence could operate non-genetically – e.g. there is growing evidence of damage being caused to children while in the womb (see Section 8); and/or (c) the assumption that differences in brain chemistry of aggressive individuals reflect a genetic factor (whereas there is compelling evidence that early abuse and neglect operate directly on formation of the infant brain, Bremner et al, 2003; Perry et al 1996; Teicher, 2000). The impact of early experience on the infant brain, as a factor in human development, is described in Section 3 – The roots of violence

Even accepting the idea that there could be genetic components to violence in some people, expert geneticists generally agree genetic factors do not act causally and alone, but rather act as an innate "potentiality", triggered into what WAVE calls "propensity to be violent" by specific types of environmental influence. For example, Raine, Brennan and Mednick (1994) found that birth complications and early maternal rejection interacted to predict violent offending at ages 17 and 19.

Sir Michael Rutter, at the end of the comprehensive review *The Genetics of Antisocial Behaviour*, concludes:

> *"The real interest, and value, of genetic findings does not lie in quantification of the genetic component but rather in understanding how the risk is mediated and how genetic factors combine with environmental influences to predispose to antisocial behaviour"* (Rutter, 1996, p.266).

Other comments in the same book include "... genetic influences seem weak in the liability to violent behaviour" (page 268), "... suggests a better than average rearing environment may serve to counter genetic risk" (page 9). Mednick, (page 135) states:

> *"The Swedish and Danish adoption studies are not finding violence to be heritable".*

Bohman (1996, p. 130) cites two studies showing adoption into appropriate families (i.e. favourable environment) annulled any genetic predisposition to antisocial behaviour.

WAVE concludes that although genetic influences may play a part in the propensity to violence, this is not large, and is typically activated by early-life experience (Rutter, 1996). Rutter's conclusions mirror those of WAVE and countless other reviewers:

> *"As we have seen, the roots of the most serious and persistent forms of antisocial behaviour lie in early childhood."* (Rutter, 1996, p.5)

Section 3
The roots of violence

Minus 1 to 3: the key period

The propensity to violence develops primarily from wrong treatment before age 3.

Early damage

The first year of life is the peak age for suffering abuse (NSPCC, 1985). In the United States infant homicide rates for under Ones rose from 4.3 per 100,000 in 1970 to 7.5 in 2002 (Child Trends Data Bank, 2003). In the UK the average for the 5 years 1993-97 was 3.6 per 100,000, rising to 5.2 for the 5 years 1998-2003 (NSPCC, 2004). The UK rates are over 3 times the average for Norway, Sweden and Denmark (1.4 per 1000,000) and ten times the reported average for Spain, Greece and Italy (WHO, 2003).

Because the early years are critically important to the child's later social development, pathways to crime are often laid down by the age of 2 or 3 (Hosking, 2001; Shaw et al, 2001). The result can be aggressive personalities for life; studies consistently show that aggression and violence are stable character traits (Huesmann et al, 1984). The earlier aggression is established, the worse the long-term outcome tends to be (Rutter, Giller & Hagell, 1998; van der Kolk et al, 1993). Male aggressive behaviour is highly stable as early as age 2 (Cummings, Iannotti & Zahn-Wexler, 1989).

After age 3, the habit of violence is increasingly difficult to shift. Three quarters of aggressive 2-year-olds are still aggressive at 5; thereafter it is an even more stable trait (Eron, 1997). Serious antisocial behaviour is highly resistant to change in school-age children (Kazdin, 1987; Tolan & Gorman-Smith, 1997). To succeed in discouraging aggression in schoolchildren, corrective action needs to begin long before they are in school.

The Dunedin Study

Compelling evidence of the early age at which the roots of violence are firmly planted comes from the New Zealand Dunedin Study, in which nurses could predict future criminal tendencies 18 years in advance (Caspi et al, 1996).

Every child born in Dunedin in 1972 has been monitored from birth, and assessed every two to three years on a variety of health, social, behavioural and environmental measures. In the course of this monitoring, nurses identified an "at risk" group of 3-year-olds on the basis of 90 minutes' observation; these children were restless and negative, and lacked persistence and attention.

At age 21, males in the "at risk" group were compared with other 21 year olds: 47% abused their partners (compared with 9.5% of others); three times as many had antisocial personality; two and a half times as many had two or more criminal convictions. 55% of "at risk" offences were violent (compared with 18% of others). The "at risk" group not only committed many more violent offences, but also much more severe ones, such as robbery, rape and homicide.

Fewer of the females became conduct-disordered but, where they did, 30% of the "at risk" group had teenage births (the others had none) and 43% were in violent, abusive relationships (Moffitt & Caspi, 1998). The authors conclude: "Immature mothers with no strong parenting skills, and violent partners, have already borne the next generation of 'at risk' children." Professor Farrington's famous remark is as true in South Island New Zealand as in South London.

UK Research: behaviour age 3 and adult criminality

The Dunedin findings are backed in recent UK research. Stevenson and Goodman (2001) found specific behaviour problems at age 3, especially non-compliance and temper tantrums (which may be consequences of lack of attunement, see pages 20-22, and harsh discipline, see pages 24-25), place a child at increased risk of adult criminal offences, especially violent offences. Family and social circumstances at age 3 did not predict later convictions. Stevenson and Goodman conclude:

> *"There is clearly some scope for extending prevention programmes into the pre-school period. Behaviours predictive of later criminality do not emerge only when the child enters school, but are identifiable before that stage."*

Pregnancy

In recent years WAVE has come across more and more research pointing to the importance of intervention beginning in pregnancy, rather than waiting until after birth. There is an excellent chapter on this in "Support From the Start" www.dfes.gov.uk/research/data/uploadfiles/RR524.pdf (Sutton and Glover, 2004).

The infant brain

The structure of the developing infant brain is a crucial factor in the creation (or not) of violent tendencies because early patterns are established not only psychologically but at the physiological level of brain formation.

To understand the roots of human violence requires some knowledge of how we have evolved as a species. Intelligence is our key survival tool. This intelligence, however, implies a large brain, and a large brain needs a large skull. To give birth to infants with large skulls requires wide hips, the reason women's hips are wider than men's. However, if hips are too wide running becomes difficult, another key consideration in the survival of our ancestors. A possible solution is for children to be born sooner and, hence, smaller, with the disadvantage of a long period of helplessness and need of adult attention.

Nature's optimal compromise included birth as prematurely as possible for viability; thus human infants are born premature by the standards of other mammals that produce single offspring. Part of the package of evolving into such intelligent beings includes the need to complete the development of much of the brain after birth, in early life, crucially before the age of 3.

The infant brain

These human characteristics mean that the physiological roots of violence lie in the same place as the roots of many other attributes of human ability or endeavour: the unique plasticity of the developing human brain. As well as being a necessity of our basic design, flexibility in sculpting the infant brain has enormous survival value, enabling infants to adapt to environment (Shore, 1997).

At birth there are 100 billion neurons (brain cells) and 50 trillion synapses (connections). By age 3, the number of synapses has increased twenty-fold to 1,000 trillion. Because this is too large a number to be specified by genes alone, the new synapses are formed by experience (Shore, 1997).

Because synapses are strengthened and reinforced by experience, associations in early life can define the choice of which of these live or die. Synapses become "hard-wired", or protected, by repeated use, implying very rapid learning via early life experience. Of course this process also has the effect of making early learned behaviour resistant to change. Conversely, just as a memory will fade if it is not accessed from time to time, unused synapses wither away in a process called pruning.

Synaptogenesis begins in the motor cortex at age 2 months, at the time infants lose their "startle" reflexes and begin to master purposeful movements. In the second half of the first year the prefrontal cortex, the seat of forethought and logic, forms synapses at such a rate it consumes double the energy used by an adult brain (Chugani, 1997).

The experiences that serve to develop, hard-wire or prune different combinations of the trillions of synapses mean each baby's brain develops differently in response to its particular environment. Extreme examples can be seen in children such as the neglected Romanian orphans, who lacked activity in large areas of their brains, native American Indians who grow up with acute hearing and balance skills – and modern children who find it difficult to function without TV background noise.

Infant trauma

The trade-off for superior ultimate capacity is initial vulnerability: the more immature the offspring, the greater the need for long-term parental support. These conditions mean the potential for an infant is defined by the quality of the support received in the very early, formative years.

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 occur repeatedly, then the neurochemical responses to fear and stress become the primary architects of the brain. Trauma elevates stress hormones, such as cortisol, that wash over the tender brain like acid (Perry, 1995; Shore, 1997; Gunnar, 1996). One result is significantly fewer synapses. Specialists viewing CAT scans of the key emotional areas in the brains of abused or neglected children have likened the experience to looking at a black hole. The brains of abused children are significantly smaller than those of non-abused. The limbic system (governing emotions) is 20-30% smaller and tends to have fewer synapses. The hippocampus (responsible for memory) is also smaller. Both of these stunted developments are thought to arise from the toxic effects of the cortisol (Bremner et al, 1995; Bremner et al, 2003; Teicher, 2000).

High cortisol levels during the vulnerable years of 0-3 increase activity in the brain structure involved in vigilance and arousal (the locus coeruleus, responsible for hair-trigger alert), as one might expect in a child under the permanent threat of sudden violence (Eisler & Levine, 2002; Perry et al, 1996). For such a child the slightest stress unleashes a new surge of stress hormones. This causes hyperactivity, anxiety and impulsive behaviour.

Trauma also scrambles the neurotransmitter signals that play key roles in telling growing neurons where to go and what to connect to. Children exposed to chronic and unpredictable stress – a parent who lashes out in fury, an alcoholic who is kind one day and abusive the next – will suffer deficits in their ability to learn. IQ will be lower – in itself, another risk factor for conduct problems. Babies brought up in violent families are incubated in terror and their brains can be permanently damaged. Small wonder so many of the mentally ill – infants, children and adults – are found amongst those who suffered the wrong kind of early care-giving (Perry et al, 1996).

The significance of "sensitive windows"

During the first three years of life there are sensitive windows of time when specific learning takes place and the brain hones particular skills or functions. Certain elements of human capability, such as vision, language and emotional development, occur in spurts during these sensitive times. The size of the window is different depending on the skill.

Synapse formation in the visual cortex peaks at 3 months, the brain fine-tuning connections allowing eyes to focus on an object; visual synapse formation is finished at age 2. An infant's auditory map is formed by 12 months. If the chance to practise a skill is missed during the window relating to that skill, a child may either never learn it, or its learning may be impaired (Shore, 1997). For example, Japanese children who do not learn to distinguish between the sounds of the letters L and R by 12 months, by which time their auditory map is formed, have great difficulty in doing so ever afterwards.

To the best of current knowledge, the sensitive window for emotional sensitivity and empathy lies within the first 18 months of life, and these "skills" are shaped by the prime carer's interaction style. The wrong style can have disastrous results.

Early emotional experience

Because the infant's cortical and hippocampal emotional circuits require significant time and experience to mature, the child must regulate its inner world primarily through attachment relationships with primary caregivers. It accomplishes this by aligning its state of mind with that of the caregiver, by establishing a conduit of empathic attunement functioning as an emotional umbilical chord (Stern, 1985). Current thinking is that it is not until the age of eighteen months that a child can begin to develop an inner world through which symbolic representations of attachment figures may be invoked for self-regulatory purposes, such as calming and soothing. (Schore, 1994). Before this, the amygdala mediates the attuned transactions through emotional communications, particularly through eye gaze. The amygdala also mediates through a primitive form of appraisal and arousal. Enduring states of mind form through repeated experiences in which value-laden appraisals from the amygdala are generalised and encoded with emotional markers into implicit memory.

Alan Schore is a scientist with the remarkable ability to remember everything he reads. Following a 10-year immersion in thousands of scientific papers on neurobiology, psychology and infant development, he concluded:

"The child's first relationship, the one with the mother, acts as a template… [that] permanently moulds the individual's capacity to enter into all later emotional relationships" (Schore, 2000).

Studies have demonstrated how children look to the facial expressions and other nonverbal aspects of the parent's emotional signals, to determine how to feel and respond in an ambiguous situation.

Because of these developmental characteristics, children reared in a loving, supportive (and non-violent) way are highly unlikely to develop the propensity to be violent, in any social conditions. Sadly, the reverse is equally true.

Attunement and empathy, keys to non-violence

Empathy is the single greatest inhibitor of the development of propensity to violence. Empathy fails to develop when parents or prime carers fail to attune with their infants. Absence of such parental attunement combined with harsh discipline is a recipe for violent, antisocial offspring.

Attunement and empathy

As the terms attunement and empathy could be open to differing interpretations, it might be helpful to define and distinguish them:

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 be able to suppress temporarily one's own perspective on events to take another's.

Empathy is not confined to a simple grasp of the other's feelings or emotions. There is a more basic connotation: the other is perceived as another being as oneself (i.e. the other person is like I am) through an appreciation of similarity.

Empathy is a prime requirement for a citizen to be of the law-abiding, "self-regulator" type.

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

Attunement is a kind of imitation of a perceived affect (feeling) of the other. It is not a matching of the other's behaviour, but rather a correspondence of one's own behaviour to their feeling state:

> *"The performance of behaviours that express the quality of feeling of a shared affect state without imitating the exact behavioural expression of the inner state."* (Stern, 1985)

Attunement relates to the a) intensity b) timing and c) shape of a particular behaviour. For example: a 9-month-old girl becomes very excited about a toy and reaches for it. As she grabs for it she lets out an exuberant "aaaah!" and looks at her mother. Her mother looks back and scrunches up her shoulders and performs a shimmy with her upper body, lasting about as long as her baby's "aaaah!", and is equally excited, joyful and intense. (Stern, 1985, p140).

Unlike empathy, attunements occur mostly out of awareness and almost automatically. Stern describes how emotional resonance is converted into attunement behaviours which can lead to conscious empathic knowledge and to an empathic response.

To attune to a child means attempting to respond to his or her needs, particularly emotionally, resulting in the child's sense of being understood, cared for and valued.

Without satisfactory early attunement to the primary care-giver, empathy does not develop.

Attunement: the core of emotional understanding

Psychiatrist Daniel Stern has videotaped hours of interactions between mothers and babies, analysing minutely their interactions. He believes the basic lessons of emotional understanding are created in those interactions – and that the most critical are those in the attunement process which lets babies know their emotions are met with empathy, accepted and reciprocated (Stern, 1985). These micro-interactions with the mother give a reassuring feeling of being emotionally connected; in healthy relationships these occur about once a minute (Goleman, 1996). From repeated attunements babies develop a sense that other people can and will share their feelings.

Empathy begins with the realisation of a sense of oneness with the other. In this feeling of identification with the other, or "affect Attunement", the sense of oneness is accompanied by a positive evaluation of the other. These nourishing emotions develop only in the context of a warm, loving infant-caregiver interaction, and not in conditions of parental hostility or rejection.

Stern arranged for mothers deliberately to over- or under-respond to their babies. The babies reacted with immediate dismay and distress.

It is not only active abuse which can hamper the development of empathy in a child. Stern describes an infant, Molly, whose mother was over-controlling. She decided which toy Molly would play with, how she would play with it and when she was to finish playing with it. She forced her choices on Molly, without empathy for Molly's wishes or feelings. Molly adapted:

> *"She gradually became more compliant. Instead of actively avoiding or opposing these intrusions, she became one of those enigmatic gazers into space. She could stare through you, her eyes focused somewhere at infinity and her facial expression opaque enough to be just uninterpretable, and at the same time remain in good contingent contact and by and large do what she was invited or told to do. Watching her over the months was like watching her self-regulation of excitement slip away … When playing alone, she did not recover it, remaining somewhat aloof from exciting engagement with things. This general dampening of her affectivity … was still apparent at age three years."* (Stern, 1985)

When a parent consistently fails to show any empathy with particular emotions, the child can drop those emotions from its repertoire. They can also "catch" emotions from their parents. 3-month old babies of depressed mothers mirrored their mothers' moods, displaying more feelings of anger and sadness, and much less spontaneous curiosity and interest, than the children of non-depressed mothers (Pickens & Field, 1993).

Psychiatrist Felicity de Zulueta, in her book *From Pain to Violence* (1993) observes the role of infant-carer attachment in the development of empathy: children with "avoidant" attachment having low empathy scores, and prone to be aggressive, whereas securely attached children have internalised their parents' capacity to tune into the needs and feelings of others and have high empathy scores.

The benefits of attunement

Parents who attune with their infants and sensitively read and respond to their signals are less likely to abuse or neglect and more likely to read babies' developmental capabilities accurately, leading to fewer non-accidental injuries (Peterson & Gable, 1998).

Studies with primates have shown that neuro-endocrine systems are "tuned" by caregiver-infant interaction (Kraemer, 1992). Such systems emerge as a result of "give and take" between mother and child. Like the Romanian orphans, primate babies become socially dysfunctional if mothers are unresponsive to their needs (Kraemer, 1992).

Dr Myron Hofer, a psychiatrist at the New York State Psychiatric Institute in New York, has found numerous "hidden modulators" in the mother/infant relationship. For example, the licking of a mother rat influences the setting of her pup's heart rate, temperature, circadian rhythms, growth, immune system and other physiological states. If baby rats are deprived of maternal licking when they are between 7 and 14 days old, they develop fewer hormone receptors in their brains (Hofer, 1995).

Human mothers provide similar modulators. Premature babies who are touched and held on a regular basis gain weight more quickly, make greater gains in head circumference and show greater overall improvement (Als & Gilkerson, 1995). Human babies thrive from parenting which is warm and responsive to their rhythms, preferences and moods, in which the parents use rocking, holding, touching, feeding and gazing to create "attunement" with the baby, reinforcing positive emotional responses and developing empathy in the child (David et al, 2003).

Lack of attunement – beginning on the road to violence

Sadly, for many parents attunement either does not come "naturally" (because they did not receive the benefit of it themselves), or is disrupted by post-natal depression, domestic violence or other severe stresses. If the child does not experience attunement, its development is retarded, and it may lack empathy altogether (Sroufe, 1989). A baby knows when a mother is cold or distant, despite her ministrations to physical needs. Daily neglect conditions a baby to expect isolation – and a model for depression has been acquired from experience, handed down from one generation to the next. Studies show maternal depression is a prime factor in the pathway to behaviour problems for many children (Shaw et al, 2003).

Maternal depression impedes brain development (Ounce of Prevention Fund, 1996). Infants of severely depressed mothers show reduced left lobe activity (associated with being happy, joyful or interested) and increased right lobe activity (associated with negative feelings) (Dawson et al, 1994). These emotional deficits become harder to overcome once the sensitive "window" has passed.

The presence or absence of healthy emotional development has significant implications for the level of violent crime in society. A baby who is healthily attached to its carer can regulate its emotions as it grows older because the cortex, which exercises rational thought and control, has developed properly. But in the case of the child whose life has been badly impacted, the cortex is underdeveloped. The damaged child lacks an "emotional guardian". The result can be violence that emerges as domestic violence and child abuse in later life.

Studies have found a pathway from low maternal responsiveness at 10-12 months through aggression, non-compliance and temper tantrums at 18 months, lower compliance, attention getting and hitting at 2 years; problems with other children at 3 years; coercive behaviour at age 4 and fighting and stealing at 6 years (Shaw & Winslow, 1997).

Low maternal responsiveness at 18 months did not seem to have this effect (Martin, 1981), consistent with the hypothesis that "windows" for development make the timing of deprivation important.

Empathy: a key to understanding violence

Empathy is a learned response that begins to be established very, very early in life in line with observed parental reactions to suffering. Even in their first year, children already show signs of whether their reaction to the suffering of another is empathy, indifference or downright hostility. These reactions are shaped by whether or not the prime carer or parent has been able to attune to the infant.

Babies show empathy before they are a year old. By the time they are toddlers this can be well developed, as the following extract from a research diary shows:

> *"A neighbour's baby cries ... and Jenny approaches and tries to give him some cookies. She follows him around and begins to whimper herself. She then tries to stroke his hair, but he pulls away ... He calms down, but Jenny still looks worried. She continues to bring him toys and to pat his head and shoulders."* (Radke-Yarrow & Zahn-Waxler, 1984, cited in Goleman, 1996)

Not all children have this empathy. The psychologist Alan Sroufe (WAVE video "From Pain to Violence", Sir Richard Bowlby) tells of watching school children at play. One little girl complained of having a sore stomach. Most children expressed sympathy with her, but the response of one boy was to punch her hard in the stomach.

Radke-Yarrow and Zahn-Waxler found that a large part of the difference in the empathic concern children develop comes from how they were disciplined. Children were more empathic when discipline included drawing strong attention to the

distress their behaviour caused to someone else, rather than stressing that they had been "naughty". They also found that empathy is shaped by how children see others responding to distress. By imitating the adult response, children develop a repertoire of empathy – or its absence.

Main and George (1985) found that abused toddlers responded negatively or even aggressively to signs of distress in their peers, whereas non-abused children of the same age showed interest and sadness.

In the chapter on the roots of empathy in his book *Emotional Intelligence* (1996), Daniel Goleman states that empathy builds on a person's self-awareness, and that the more aware we are of our own feelings the more skilled we will be at reading emotions in others. People who do not understand their own feelings are unable to be responsive to the feelings of others:

> *"For all rapport, the root of caring, stems from emotional attunement, from the capacity for empathy"* (p.96). *"That capacity – the ability to know how another feels – comes into play in a vast array of life arenas, from sales and management to romance and parenting, to compassion and political action. The absence of empathy is also telling. Its lack is seen in criminal psychopaths, rapists, and child molesters."*

Lack of empathy – further on the road to violence

Professor Donald Dutton, of the University of British Columbia, has worked with over 400 wife-batterers. He writes of their lack of feelings in his book *The Abusive Personality: Violence and control in intimate relationships*:

> *"When I started running treatment groups I was struck by this same aspect of the men's descriptions. The emotional poverty of their thought and speech, the flat affect, the noncommittal responses about their parents. They described actions that people performed, but those descriptions rarely entered the inner realm. My colleagues and I would talk facetiously of the men being in "emotional kindergarten" but it was not really a joke."* (Dutton, 1998)

In James Gilligan's 10 years as director of mental health in the Massachusetts Prison Service he succeeded in reducing the level of homicidal violence in the state's prisons almost to zero. In his book *Violence: Our Deadly Epidemic and its Causes*, 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..."* (Gilligan, 1996).

He cites numerous examples of the absence of empathy – sometimes absence of any feeling at all – in violent offenders. Ralph W, after murdering a 14-year old girl, described his feelings immediately before the act thus: *"I had no feelings. I just felt empty – no love, hate, sadness, remorse"* and after the act *"I felt nothing"*. Gilligan observes:

> *"He had no capacity for empathy, remorse, and guilt. This absence of feelings is described consistently by murderers throughout the world and throughout history. Moreover, the more violent the criminal, the more notable the lack of feelings. The most violent men already feel numb and dead by the time they begin killing."*

After a particularly brutal and apparently senseless killing, Gilligan interviewed the killer at length, and found a complete absence of any feelings of remorse or guilt, and wrote:

> *"Children who fail to receive sufficient love from others fail to build those reserves of self-love, and the capacity for self-love, which enable them to survive the inevitable rejections and humiliations which even the most fortunate of people cannot avoid. Without feelings of love, the self feels numb, empty, and dead...The kind of man I am describing protects himself from the risk of being deprived of love by emptying his soul of love for others to an unimaginable degree...."*

Felicity de Zulueta (1993) also describes the key role of lack of empathy on the route to violence, explaining the contribution of abuse:

"The mother of an abused child shows her little empathy: in other words she cannot identify with her child's feelings and needs…As a result her child develops a poor sense of self-esteem and, not surprisingly, since empathy is in part an extension of the self to others, such children also show little empathy and an inverse amount of aggression towards their peers."

Parental dicipline methods

The prime cause of a child developing propensity to violence is absence of empathy, itself a result of the failure of parents or prime carers to attune with infants. Absence of such parental attunement combined with harsh discipline is a recipe for violent, antisocial offspring.

Behavioural effects

The above findings on the development of the human brain and the importance of empathy are mirrored in overwhelming research evidence tracing violent behaviour to parental competence and methods of family discipline (Cohen *et al*, 1990), poor child rearing (Farrington, 1991), "unskilled parenting" (McCord, 1990) and lack of parenting skills (Kazdin, 1985; Loeber & Stouthamer-Loeber, 1986; Rutter & Giller, 1983). What has perhaps been missed in the equation is the significance of the role early influences play in the physical formation and development of the child's brain, and it is this that makes later correction so difficult.

Parents unwittingly train violence

According to the eminent psychologist Dr Jerry Patterson (who carried out pioneering work on the contribution of coercive family processes to child behaviour problems) and his colleagues (Patterson et al, 1989), the cycle of violence persists because violent family members directly train their children in antisocial behaviours. Such parents use little positive reinforcement, while effective punishment for deviant behaviours is missing or erratic, and "dozens of daily interactions" reinforce coercive behaviour.

Some reinforcement is positive (for instance laughing and paying attention), but the most important is escape-conditioning: the child uses aversive behaviours to terminate unwelcome intrusions. Examples include toddler temper tantrums, screaming fits and hitting siblings or the mother. These behaviours are reinforced whenever they produce the desired result for the child. Unfortunately, unskilled parents often themselves respond by shouting or hitting. Children and parents gradually escalate the intensity of their coercive behaviours, in an upward spiral of aggressive interactions, often leading to high-amplitude behaviours such as mutual hitting and other physical attacks. The net result is that the child learns both the techniques and the moral justification for violence from the parents.

Professor Richard Tremblay of the University of Montreal, one of the leading North American experts on early intervention, points out that almost all 2-year olds are aggressive, and the problem can be approached from the perspective of what makes them desist. His analysis does not invalidate WAVE's conclusions – the concern and risk still lies largely with toddlers with the highest levels of aggression. Among pre-birth factors Tremblay found to be predictive of high levels of aggression were having an anti-social mother, a mother who smoked, mothers who had children early, and low family income. He also finds that post-birth factors predicting aggression are coercive parenting and family dysfunction (Tremblay, 2004).

Damaging discipline

The predictor of future violence that stands out most strongly is harsh family discipline. A plethora of studies indicate that harsh or explosive discipline leads to violence and criminality in children (Farrington, 1991) and that discipline styles typically run in families over many generations (Buchanan, 1996) as people tend, consciously or unconsciously, to copy the parenting styles of their own parents. Perhaps 30% of children who suffer abuse or neglect go on to abuse or neglect

their own children (England, 1993; Kaufman & Zigler, 1993; Oliver, 1993). These same child victims are the most likely to grow up and perpetrate domestic violence, commit violent crimes and suffer mental health problems, both as children and as adults. This process helps explain the truth of the famous remark by Professor David Farrington, quoted on page 13:

> *"Anti-social children grow up to become anti-social adults who go on to raise anti-social children" (Farrington, 1995).*

The harmful effects of receiving harsh discipline are not confined to future criminal behaviour. Harsh parenting is also associated with mental illness (Smith et al, 1973) and parental mental illness is itself a potent factor in the development of antisocial behaviour in children (Cohen et al, 1990).

Parents justify severe punishment as being "for the child's own good" (Alice Miller, 1987). Analysis of parents' thought patterns when inflicting cruel or violent punishment shows frequent unrealistic expectations, expecting children to show understanding at a level 12 months or more beyond that appropriate to their age. These parents also make mistaken interpretations – for example, that the child deliberately seeks to annoy (Trickett & Kuczynski, 1986). What needs to be grasped here is that these parents are simply "doing what comes naturally" by following the pathways laid down in their own early learning, which is how the cycle of violence is perpetuated from generation to generation.

Section 4
The role of social factors

Violence is triggered in high-propensity people by social factors such as unemployment, poor housing, over-crowding, economic inequality, declining moral values and stress. Alcohol plays a significant role in the timing of violence. Since these factors reflect long-term cultural trends that are difficult to reverse, investment in reducing the number of people with propensity to violence is a strategic imperative.

The contribution of social factors

Many studies have found correlations between levels of violence and social factors such as low income levels, poor housing, high alcohol consumption, economic inequality or situational stress. WAVE recognises that many of these factors contribute to levels of violence, as well as being social evils which deserve to be tackled in their own right. However, the majority of people who go through life coping with these adverse social factors do so, thankfully, without resorting to violence. The large numbers of such violence-free lives are evidence that adverse social factors, on their own, are not enough to create violent behaviour. The fuse does not create an explosion without the "bomb" of propensity to violence.

Moreover, studies looking at the interactive influences of family and social factors (e.g. Cohen, 1990) suggest the prime causes of violence lie in family behaviour patterns, rather than in social context. Put simply, a child with an adverse family environment, in favourable social surroundings, is more likely to be violent than one in adverse social surroundings but with a favourable family environment.

Nonetheless society, as it currently operates, allows massive levels of child abuse and neglect to occur, without effective intervention. This results in turning out large numbers of unexploded bombs, year after year (nursery teachers have been reporting this for the past decade or more) and it is to the impact of changing social factors on these unexploded bombs that we must look to understand the huge rise in violence since 1950.

Adolescents: the source of rising violence

Most violence is carried out by adolescents, and part of the huge rise in violence in recent decades related to a change in triggering factors affecting this group. Research on the topic is scant (Smith 1995 and Polk 1999 are the best examples found) but, based on what is available, the most likely contributory causes include:

1. Less social control of adolescents due to such factors as a longer gestation period between adolescent males achieving puberty and beginning work.
2. A dramatic rise in teenage alcohol consumption.
3. Growth of television viewing, modelling violent behaviour.
4. Huge expansion in the territory young males can cover, far beyond areas where they are known, accompanied by much reduced supervision of their leisure behaviour.
5. A reduction in stable marital relationships to provide consistent parenting.
6. Growing drug consumption.

These "fuses" are social issues, and solutions to social issues are challenging, to put it mildly. We may change diet, but its impact is unlikely to be major. Without massive political will and commitment, it is unlikely we will successfully prevent alcohol consumption by under-18s, remove violence from television, send youngsters to work as soon as they finish their education, restrict their movements to areas where they are known, or return parental supervision to that more typical of the 1930s. Removing poverty is a challenge society could meet, but has so far been unwilling to pay for.

Many people get drunk, watch violent television, eat fast food, own a car, and socialise in areas where they are not personally known, but do not turn to violence. In the absence of a bomb, fuses are not dangerous. WAVE's key question has been "What is it that causes those who do so to become violent?" What turns people into unexploded bombs? Our answers to this question were provided in Section 3.

While WAVE's recommended long-term strategy gives priority to stopping the creation of the bombs rather than reducing the number of fuses, the best way forward would be to tackle the issue from both sides. Let us look in a little more detail at some of the social changes which may have contributed to rising levels of violence.

1. Diminished social control of adolescents

Sampson and Laub (1993) suggest that a major factor inhibiting crime in society is informal social control by parents, school and employers. Smith (1995) suggests that one factor explaining the large rise in levels of violence between 1950 and the 1990s could be a strong trend of reduced social control of adolescents.

Smith suggests a key factor in the reduction in social control of adolescents could be the longer gestation period between adolescent males achieving puberty (prior to which there is social control by their parents) and beginning work (after which there is social control through their desire to stay in work). The former has been getting earlier, while the latter has been getting later.

A development on the theme of lesser (and later) social control through employment has been persuasively stated by Kenneth Polk, Professor of Criminology at the University of Melbourne, who notes that the rising violence in western society, including Britain, is largely a function of unprecedented levels of violence by young males (Polk, 1999).

A summary of Polk's Hypothesis of Youth Abandonment is presented in Appendix 4. Essentially it suggests society can expect problems when young people who leave school early, with limited qualifications, skills or experience, are excluded from full-time, career-oriented work (Polk, 1984; Duster, 1995; Dwyer, 1996). Work trends in recent decades have contributed to a large segment of the youth population leaving school with little hope of ever finding full-time, career-oriented work. Further, this 'hopelessness' occurs in a winner/loser culture with profound disparities between the economic "winners" and the "losers", who are left stranded at the bottom of the economic heap (James, 1995).

As young people move from pre-puberty to adulthood they follow different developmental trajectories. Built into these trajectories are a variety of definitions of "Self" which provide basic supports for masculine or feminine identities.

Most males are not violent, even when confronted with situations where their masculinity might be challenged. They have many solid bases upon which they can ground their self-image as a "man" coming from their job, income, friendship networks, role as head of a family, etc. Their sense of who they are is not likely to feel challenged by an insult or jibe.

For other young males, for whom the normal supports for identity as a man (such as movement upward in work, economic independence, establishment of sexual relationships, focusing on an exclusive partner, marriage, and then a family) are not available, violence can play the role of a central pillar around which a masculine identity is constructed. It has chillingly compelling qualities: it costs no money, is immediately at hand, and can be highly efficacious in establishing dominance. Violence provides highly visible, tangible evidence of masculine prowess (Polk, 1999).

Young adolescents with the propensity to violence firmly implanted in them through adverse early life experience are also the most likely to perform poorly at school. There is a clear correlation between emotional distress in early childhood and subsequent poor performance in school. To those youths, the selection of violence as a way of life has obvious attractions.

2. Rising teenage alcohol consumption

A report by the Criminal Registrar, published in 1901, noted that the period had "witnessed a great change in manners: the substitution of words…for blows…an approximation in the manners of different classes; a decline in the spirit of lawlessness" (Public Record Office web site, Pathways to the Past, 1901). Research confirms that the dramatic improvement in social behaviour between the mid 19th and mid 20th Centuries was brought about by a massive reduction in alcohol consumption, resulting from the concerted efforts of religious and temperance movements. Quite simply, alcohol, one of the major triggers to violence, was not the general fashion of the era.

Sadly, that hard-won positive trend has reversed in recent decades. Offences of drunkenness amongst young males in England and Wales were 949 in 1959. By 1977 the level had risen to 4,920 – an increase of 518%. Female teenage drunkenness rose 749% in the same period. Levels of drunkenness are now so high police have given up treating it as a recordable offence. Average weekly consumption among 11-15 year olds in England & Wales more than doubled from 0.8 units in 1990 to 1.8 units in 1996.

The link to crime is demonstrated in a Manchester-based study of the associations between alcohol and deviancy in young people: 25% of weekly drinkers had a criminal record compared with 6-7% of occasional and non-drinkers (Newcombe et al, 1995). A 12-month Home Office Study (Richardson & Budd, 2003) found the following levels of violent crime among 18-24 year olds:

Table 4: Violence levels, binge drinkers and drug users

Not binge drinker or drug user:	2%
Drug user, not binge drinker:	6%
Binge Drinker, not drug user:	13%
Binge drinker and drug user:	19%

In the United States at least half of violent crimes are committed when the offender is under the influence of alcohol, drugs or both (Miller et al, 1996).

3. Growth of television viewing, modelling violence

Criminologist Bob Johnson conducted a fascinating analysis showing a correlation between the timing of rises in violence in various countries and the spread of television viewing. Countries such as South Africa, which delayed the introduction of TV, experienced a matching delay in the rise of violence (Johnson, 1996).

In 1995, the extensive US Cable industry National Television Violence Study (NTVS, 1995) stated as its key finding: "there are substantial risks of harmful effects from viewing violence throughout the television environment".

Wartella (1995), after an in-depth review, summarises: "More than a thousand studies in the United States and dozens within Europe have been devoted to this topic … Distilling decades of laboratory, survey and field experimental studies, the current reviews conclude that there is a correlation between violence viewing and aggressive behaviour, a relationship that holds even when a variety of controls are imposed (for example age of subject, social class, education level, parental behaviour, attitudes towards aggression) and tends to hold across national boundaries."

In 1993 the National Research Council cautioned that correlations do not prove cause, and could reflect poor parental supervision causing both greater exposure to television violence and a heightened potential for violent behaviour, or children with a high potential for violent behaviour selecting violent material to watch.

One of the largest European studies, (Belson, 1978), found a relationship between viewing media violence and serious, criminal behaviour by adolescent boys. Belson concluded the evidence was "very strongly supportive of the hypothesis that high exposure to TV violence increases the degree to which boys engage in serious violence".

Wartella asserts Belson has not proved a causal link, but is convinced by Eron and colleagues' longitudinal study findings (Eron, 1982; Huesmann, Lagerspetz & Eron,

1984) that boys' viewing of television violence at age 8 predicted aggressive behaviour at age 18, and serious criminal behaviour at age 30. She found it particularly convincing that similar longitudinal studies in four other countries (Australia, Finland, Poland and Israel) supported the conclusion that "viewing televised violence leads to aggressive behaviour and not vice versa".

Jo and Berkowitz (1994) conclude: "there is no longer a question as to whether the portrayal of violence in the mass media can increase the chances that some people in the audience will act aggressively themselves. Such an effect can occur and often does ...".

Caprara and Rutter (1995) and Geen (1994) point to the robustness of evidence from laboratory experiments, field experiments, longitudinal studies and archival studies, all supporting the conclusion that observing television violence facilitates subsequent aggression. Geen summarises: "These studies have involved children, adolescents and young adults, and a wide range of constrained and unconstrained behaviours ... the large number of studies reporting the effect and the convergence of data from so many types of investigation indicates that the effect is a real one".

One of the most revealing studies was conducted for the Home Office, and compared the viewing preferences of violent offenders, non-violent offenders and non-offenders: 64% of violent offenders had a preference for violent films, compared with 11% of non-offenders and 25% of non-violent offenders. Violent offenders had experienced the highest levels of family violence, and non-offenders the lowest levels. The authors conclude: "This research confirms that video film violence is seen differently by young offenders, especially those from violent homes. Offenders were more likely to prefer actors who typically play characters whose use of severe violence appears positive and successful – a particularly dangerous role model for young people, particularly those predisposed to crime and delinquency." (Browne & Pennell, 1995). It appears that youngsters brought up in a violent home can be sucked into a reinforcing spiral in which they watch more violence on television, view the violence more favourably, and then use those role models to validate their own developing violent behaviour.

4. Huge expansion in the territory young males can cover, much reduced supervision

Another social trend is the change in territory young males cover. In the 1950s most teenage males roamed within walking, or at most cycling, distance of their homes. Within these areas they tended to be recognised, and aggressive or illegal activities could be reported back to their extended families. Their choice of drinking establishment was limited and local. Parents were more aware of what their sons were getting up to, and perhaps less tolerant of bad behaviour. Police tended to know the main troublemakers within their patch, and could keep an eye on them – or know where to look when trouble had occurred.

In the 2000s youngsters roam far away from their home bases. They can commit crimes in areas where no one knows them, drink in pubs and clubs where no one knows their parents, and commit crimes where no policeman knows their family or recognises who they are. Parents pay less attention to what their children are up to. As the behaviour of each generation worsens, so its level of concern about the behaviour of the following generation is less particular.

5. Reduction in stable marital relationships to provide consistent parenting

Polk (1999) comments in his Hypothesis of Youth Alienation that another western social issue lies in the recent dramatic trend away from marriage, creating a cycle in which lower proportions of young males undergo the "settling" effect of marriage than at any time in recorded history.

Major changes in family structure have taken place in the post-war period, including large increases in the rate of divorce, the number of single parents, and cohabitation as an alternative to marriage. Also, a growing number of women are having children without having had a stable marriage or cohabiting partner (Hess, 1995). All of these could contribute to reduced social control of children.

More and more people are re-marrying, or living with partners who are not the parents of their children. In particular many more children are growing up with formal or informal step-parents. Some of these step-parents make exceptional efforts to contribute to their step-children, but for others the relationships may be difficult, or characterised by jealousy. It is notable that many of the public enquiries into the worst child abuse cases involved severe abuse by step-parents.

6. Growing drug consumption

Drugs and violence are said to be related in three separate ways: (1) violence arising from the acute effect of the drug on the user; (2) violence committed to generate money to get drugs; (3) violence associated with marketing illicit drugs. The first category is much more common with alcohol than with illicit drugs, including in cases of homicide. The second category is relatively rare (most drug-related crime is petty thieving) but growing. The third category is common, fuelled especially by turf wars (International Narcotics Control Board, 2003).

WAVE suspects many of the early childhood factors which create mental health problems and anti-social behaviour in children also contribute to drug-taking. There is evidence that sexual abuse of girls is related to later drug abuse (Kendler, 2000). Drug-taking in turn contributes to higher levels of neglect, child abuse and violence, setting up its own self-perpetuating cycle. The link between drugs and violence presents a very distinctive problem. There is no shortage of reviews on the topic, and for reasons of time and space it is not addressed further within this report.

POUND

Section 5
The cost of violence in the UK

Violence costs the UK more than £20 billion per annum. A tiny fraction of this is spent on prevention, and most of that on the least effective age groups (e.g. 5-15).

Estimate of the cost of violence in the UK

In a House of Lords debate on 31 January 2001 the Home Office Minister, Lord Bassam, gave the cost of violent crime in the UK as £21 billion per annum.

The UK's 1996 National Commission of Enquiry into Child Abuse put the cost of this to statutory and voluntary agencies alone at £1 billion per annum, mostly spent dealing with the consequences rather than on prevention.

The following table compares these UK with US and Canadian estimates. The North American figures have been adjusted for currency exchange rate at October 2004, and population difference to produce a £ billion estimate for the UK.

Table 5: Annual costs of violence

	US or Canada		UK	
	All violence $ billion	Child abuse $ billion	All violence £ billion	Child abuse £ billion
UK Sources				
Lord Bassam 2001			21	
1996 Enquiry into Child Abuse				1
Michigan (10m popn.)				
Caldwell, 1992		0.8		2.7
US Sources				
Mandel 1993 (inc property)	425		48	
Miller 1996	426		48	
Miller (+ criminal justice etc)	655		75	
Attorney General of California (victim costs only)	178		20	
Canada				
National Crime Prevention Council	46		38	

Sources: Caldwell (1992); Mandel et al (1993); Miller at al (1996); working party of the Attorney General of California (1994); The National Crime Prevention Council (1996); The dollars and sense of a comprehensive crime prevention strategy for Canada, A Report of a Seminar on the Effectiveness of Crime Prevention through Social Development (July 2000).

The UK figure compares credibly with North American estimates taking account of the relative population figures and may even be low.

Institute of Psychiatry report

A report by the Institute of Psychiatry (Scott, Knapp et al, 2001) contrasted their estimated £70,000 per head direct cost to the public of children with severe conduct disorder with a £600 per child cost of parent training programmes. The £70,000 does not include the cost impact of crimes or the costs to victims, only direct expenditure on the child. The true "all-in" cost to society of a disordered child will be far, far higher: in the Perry Preschool evaluation cited on page 36 it was more than 7 times higher.

Ratio of government expenditure

How much is government spending on prevention, compared to this hugely expensive consequence? At a 1999 Society of Medicine Conference on Children and Violence a Cabinet Office spokesman quoted the ratio of government spending on prevention of crime, compared with expenditure on its consequences, as being in the ratio 1:300 (Bright, 1999). The ratio has improved since then, but attempts to find a more recent figure foundered on absence of available data. Suffice to say preventative expenditure remains very small compared to the total annual cost.

WAVE recommends the tracking and annual publication of this statistic, in sufficient detail (a) to distinguish truly early (age 0-3) from fake early (e.g. age 5-8) interventions, and (b) to allow academic scrutiny and prevent accusations of statistical massage. At the very least this would provide a measure of the genuine nature of any shift in strategy.

Section 6

Early intervention is cost effective

Early (0-3) intervention is fruitful and cost-effective. Negative cycles can be transformed and children given the opportunity to grow into contributing, personally fulfilled adults (and future parents).

Early intervention is cost-effective and saves resources for society

There is compelling research evidence that early intervention works at the level of health, social effectiveness and preventing the development of propensity to violence. The financial benefits of early intervention far outweigh the costs. The earlier this intervention takes place, the more effective (and therefore cost-effective) it is. A shift to higher priority for very early (onset of pregnancy to 3 years) intervention would save money from the public purse.

Farrington and Coid

David Farrington is Professor of Psychological Criminology at Cambridge University and winner of a prize for distinguished scholarship from the American Sociological Association for his book Understanding and Controlling Crime (1986). Jeremy Coid is Professor of Forensic Psychiatry at St Bartholomew's and Queen Mary College, University of London. His specialisation is the epidemiology of antisocial and high risk behaviour. Their book *Early prevention of adult antisocial behaviour* (2003) presents a comprehensive summary of how adult crime, antisocial behaviour and antisocial personality disorder can be prevented by interventions applied early in life. They conclude:

> *"A number of promising methods of preventing types of antisocial behaviour have been identified, including intensive home visiting in pregnancy and infancy, preschool intellectual enrichment programmes, parent training, interpersonal skills training, peer influence resistance strategies and anti-bullying programmes in schools. Multiple component programmes that include several of these elements seem particularly promising." (p.358)*

MacLeod and Nelson studies

MacLeod and Nelson (2000) studied 56 separate programmes designed to promote family wellness and prevent abuse. The programmes worked, and the earlier the intervention the better. They describe three approaches to preventing child abuse:

- Proactive and universal.
- Proactive and selective (high-risk families).
- Reactive to prevent recurrence.

Proactive programmes begin pre-natally, at birth or in infancy. They include home visiting, social support (often based on mutual aid and building networks), media interventions (e.g. newsletters focussing on developmental stages and parenting strategies) and "multi-components".

Reactive programmes tend to begin at school age and focus on teaching parenting strategies and helping parents improve their management skills. These programmes are usually taught in groups, based on a model such as social learning or Adlerian.

MacLeod and Nelson based their assessment on two outcome measures:

1. reduced child maltreatment (e.g. injury, sexual abuse, severe punishment, neglect)
2. increased family wellness (e.g. supportive, affectionate parent-child relationships and a stimulating home environment conducive to positive child development)

Their conclusions were:

- Most interventions to promote family wellness, and prevent child maltreatment, are successful.
- The overall effect size compares favourably with effect sizes in many other intervention programmes.
- The earlier the intervention the better.
- Proactive interventions had greater effect sizes at follow-up (i.e. they are sustained and even grow in effect).
- Reactive interventions tend to fade in effect, and relapse is a common problem.

They speculate that proactive interventions initiate a positive chain of events to break the downward spiral for those exposed to adverse conditions.

Barnett studies

Professor Steven Barnett of Rutgers University (1995) evaluated the benefits of 36 early childhood programmes. While his focus was educational rather than social or emotional benefits (the best programmes deliver both), he found early interventions consistently generated value exceeding their cost.

The Perry Preschool Programme had an estimated cost of $12,356 (in 1992 US$) for each participant. Total public benefits, at $88,433 per participant were at a ratio of 7:1 compared with the costs (Barnett, 1993, 1996). Benefits per child included $12,796 from criminal justice savings, $57,585 from victim savings, $6,287 from school savings, $8,847 from higher tax revenue, and $2,918 from reduced welfare costs. Barnet concluded:

"... the nation needs to move ahead with public support for Early Childhood Care and Education. Current policies are penny wise and pound foolish, inexcusably costly in human and financial terms."

Tremblay and Japel experiments

Professor Richard Tremblay and Japel reviewed 28 early prevention experiments in 2003, in which the average age of the child at intervention was 18 months. Every single study showed positive effects on the child and/or parent. They concluded:

"Early childhood interventions can have a positive impact on the three most important risk factors for juvenile delinquency: disruptive behaviour, cognitive skills and parenting. Furthermore, experiments with long-term follow-ups which have targeted at least two of these risk factors in childhood have shown a significant impact on criminal behaviour. From these results it can be concluded that early and intensive preventive interventions can have the desirable impact which it appears to be so difficult to achieve with disruptive elementary schoolchildren and juvenile delinquents."

The power of the impact of these interventions is all the more impressive since not one of the 28 experiments was designed to reduce violence, criminality or anti-social behaviour. These just happened to be beneficial side-effects of early intervention programmes with other goals. How much more might be achieved with programmes designed with these results in mind?

Rand corporation economic evaluations

The RAND Corporation (Greenwood et al, 1996) studied the comparative cost effectiveness of five approaches to reducing crime, including prison and training for parents of 5-7 year olds.

The evaluation took a narrow view of the financial benefits of parent training, putting no financial value on the prevention of child abuse (which it did not treat as a crime) and ignoring benefits other than crime reduction (e.g. better educational achievements, employment history, emotional development and mental health).

Even with this restricted view, parent training emerged as highly cost-effective for preventing serious crime at only £4,000 per serious crime prevented compared with £9,000 for both teenage supervision and prison. Since parent training has more impact when carried out well before children reach the age of 5, earlier training can be expected to compare still more favourably.

The RAND economic evaluation of the Nurse-Family Partnership Nurse Home Visiting programme for at risk mothers, which WAVE recommends to be piloted in the UK, showed savings (reduced welfare and criminal justice expenditures and increased tax revenues) exceeding programme costs by a factor of four over the life of the child. The original investment was returned well before the child's

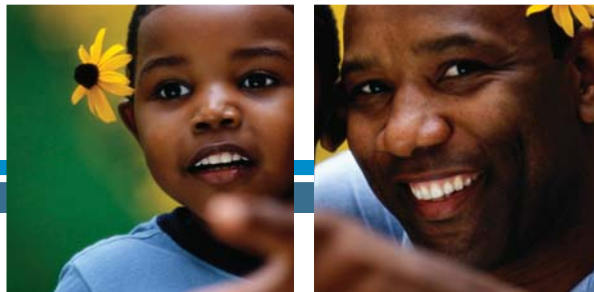
fourth birthday (Karoly et al, 1998); from then until age 15 the scheme was delivering net economic benefits to society – in addition to lower crime, much reduced child abuse and conduct disorder, and more successful life outcomes for mothers and children.

Syracuse study

A Syracuse University study (Lally et al, 1988) estimated the costs to the criminal justice system alone of children who had, and had not, received enriched child care support while their mothers received home visits. The cost per programme child to the justice system was $186. The cost per child in a comparison group was $1,985, excluding the cost impact of their crimes and education and welfare costs; based on the Perry evaluation this could be more than 4 times the criminal justice cost.

Other studies

Favourable cost-benefit ratios were also found in other studies such as the Participate and Learn Skills Programme in Ontario (Jones & Offord, 1989) and the American Quantum Opportunities Program (Hahn, 1994, 1999). A Michigan Children's Trust Fund study found a 19:1 ratio of benefits to costs from a preventative strategy (Caldwell, 1992).



Section 7

Interventions that work

The single most effective way to stop producing people with the propensity to violence is to ensure infants are reared in an environment that fosters their development of empathy. The surest way to achieve this is by supporting parents in developing attunement with their infants.

The core of WAVE's message

Following in-depth study of the root causes of violent behaviour, WAVE concluded no child should leave school without receiving fundamental training in how to parent in a non-violent manner and, crucially, how to "attune" with babies and ensure they develop empathy.

Before the birth of the first child is the ideal time to provide support, so that new enriching habits can be established before bad habits have begun and become embedded. WAVE recommends that parents-to-be who have not received appropriate preparation at school should receive focused support through ante-natal classes during the first pregnancy.

In addition, it is crucial that those families with the greatest risk of abuse receive extra support, both during pregnancy and after birth, and that their children's progress be monitored until the age of 3.

Evaluation matrix

In the course of the research for this report over 400 interventions which might reduce violence, or the root causes of violence, were examined. Sadly, most have not been evaluated, meaning their effectiveness cannot be objectively determined.

WAVE then reviewed and established a set of criteria by which to judge how any programme would fit with a strategic approach to reducing violence. This contained 8 components:

1. Are they **early** interventions?

   The Sure Start report "What works in promoting children's mental health" (Kurtz, 2004) states in its Summary: "The earlier in the child's life the prevention commences, the more likely it is to be effective". This underpins the advice of MacLeod and Nelson (see Section 6) following their meta-analysis of 56 separate programmes: "The earlier the intervention the better".

2. Are they **pro-active**, preventative interventions?

   "Some of the strongest evidence for preventive, and for early, intervention comes from the recent discoveries concerning "sensitive periods" in the development of the central nervous system (CNS). This has now been demonstrated in a number of areas, including emotional reactivity, self-organisation, motivation, relationships, and the irreversible damaging impact of certain types of early sensory experience (more specifically, the overwhelming destructive effect of early emotional stress)." (Kurtz, 2004).

   Proactive interventions take place before abuse and damage occur. Reactive interventions occur afterwards. Section 6 above saw MacLeod and Nelson (2000) conclude: "Proactive interventions had greater effect sizes at follow-up (i.e. they are sustained and even grow in effect); Reactive interventions tend to fade in effect, and relapse is a common problem" (page 36).

3. Can they be seen to foster **empathy**?

   As seen on pp 22-24, "the key role of lack of empathy on the route to violence" (Goleman, 1996; Gilligan, 1996; Dutton, 1998; de Zulueta, 1993), abused toddlers responded negatively or even aggressively to signs of distress in their peers, whereas non-abused children of the same age showed interest and sadness (Main and George, 1985).

4. Can they be seen to foster **attunement**?

   As seen in pp 21-22, "Parents who attune with their infants and sensitively read and respond to their signals are less likely to abuse or neglect" (Peterson & Gable, 1998), and that children who receive attunement are more likely to thrive (David et al, 2003).

5. Do they foster **secure attachment**?

   Although this report has not focused on the benefits of an infant achieving secure attachment with its carer, the international literature is full of evidence for its beneficial effects, and both Support from the Start and Sure Start reviews comment on this – e.g. "Adverse outcomes are not commonly found in association with secure attachment, which may indicate it is a protective mechanism." (Kurtz, 2004). "A warm, affectionate bond of attachment between a child and its parents from infancy is ... an important protective factor capable of attenuating exposure to risk and later anti-social behaviour (McCord, 1982; Garmezy, 1993).

   "In view of the significant long-term [adverse] effect of insecure attachment on child development, and the importance of ... engendering secure attachment ... Programmes targeting the modification of the type of attachment in high-risk groups show promise." (Kurtz, 2004).

6. Have they demonstrated an impact in reducing violence?
7. Have they demonstrated an impact in reducing child abuse and/or neglect?
8. What is the research strength underpinning the intervention?

   Each of items 1-7 had a potential score of 1. Item 8, research strength, had a potential score of 2. Thus an ideal programme could score a maximum of 9.

Global search for highly effective, practicable programmes

WAVE has been engaged for several years in a search for global best practice in terms of highly-effective, practicable programmes which address the root causes of violent behaviour. WAVE is not alone in this search. Other international organisations have also reviewed "what works", in tackling violence, delinquency, mental health problems, or other aspects of a cluster of closely-related problems. In this report the findings from 5 such reviews are particularly drawn upon:

- "What works in promoting children's mental health" by Sure Start in the UK (2004)*.
- "Blueprints" by the US-based Center for the Study and Prevention of Violence.
- "Support from the Start" (2004), a review commissioned by the DfES.
- "A guide to Promising Approaches, second edition" (2005), Communities that Care.
- "Emerging Practices in the Prevention of Child Abuse and Neglect" by The Children's Bureau's Office on Child Abuse and Neglect, US Department of Health & Human Services.

Specific programme suggestions were also put forward by Sure Start, the NSPCC, Young Minds and the Children's Commissioner for England. Others were identified from a research project on teaching empathy to schoolchildren.

Using the 8 factors on the above evaluation matrix, WAVE narrowed down its list of potential interventions to a short-list of the 42 most promising programmes. These were then evaluated and ranked by reference to the established criteria. The findings are summarised in Section 8.

* *The Summary advice on what works in primary prevention from the Sure Start review is very helpful, and is captured in Appendix 5.*

Section 8
An early prevention strategy

WAVE's search for global best practice in prevention of violence identified many effective early interventions. These include programmes which develop attunement and empathy in (i) tomorrow's parents while they are still in school, (ii) current parents and (iii) parents-to-be

WAVE's early intervention recommendations

From the evaluation process, 4 programmes stood out as being of particular interest:

- Nurse-Family Partnership (supporting first time parents from pregnancy onwards).
- PIPPIN (preparing parents-to-be during the first pregnancy).
- The Circle of Security (a programme to increase sensitivity between parents and children).
- Roots of Empathy (preparing parents-to-be while still children).

Three of these programmes were known to WAVE before this review began. They had attracted our attention because they combined three qualities: 1) they addressed the core issues of developing both empathy and attunement; 2) they intervened at optimum times (i.e. before birth of the first child, continuing after birth in the case of the Nurse-Family Partnership); 3) they had research evidence to support their effectiveness. In addition, there was an impressive depth of understanding of the "root cause" issues as well as rigorous commitment to quality and programme integrity evident in each of the three guiding figures behind these programmes – in Canada Mary Gordon, founder of Roots of Empathy; in the UK Mel Parr, founder of PIPPIN; and in the USA Professor David Olds, originator of the Nurse-Family Partnership.

Circle of Security was not known to WAVE, but scores highly on the adopted rating system.

Roots of Empathy (www.rootsofempathy.org)

Roots of Empathy (ROE) is a proven Canadian parenting programme for school children aged 3 to 14, currently being delivered with great success to over 12,000 children in Canada and now also in Japan and Australia. Its fundamental goal is to break the intergenerational cycle of violence and poor parenting.

Within that focus the goals are to foster the development of empathy; to develop emotional literacy; to reduce levels of bullying, aggression and violence; to promote children's pro-social behaviours; and to prepare students for responsible and responsive parenting.

The programme may appear to lie outside the age range WAVE has indicated as an intervention priority (i.e. before the third birthday); but the most powerful reason for including ROE is that it actually prepares schoolchildren for parenthood. It emphasises, models, and provides literal hands-on experience of how to handle and interact with a real-life baby. Given the number of children who now become parents by ages 12-15, this can be seen as a pre-pregnancy programme. This emphasis is captured in the programme's purpose: "*Roots of Empathy teaches the crucial role of parenting for optimal early childhood development leading to healthy human development. The children of today are the parents and citizens of tomorrow.*" There is a strong focus on abuse prevention, the view being children are never too young to learn about Shaken Baby Syndrome, Sudden Infant Death Syndrome, Fetal Alcohol Spectrum Disorder and the dangers of second-hand smoke.

As their name suggests, ROE fosters the development of empathy. They state *"the ability to see and feel things as others see and feel them is central to competent parenting and successful social relationships in all stages of life"*. Students learn emotional literacy, human development, infant safety and how to identify with another person's feelings. Children prone to developing violent behaviour patterns are connected with emotionally satisfying parenting, through interaction with visiting parents and their babies.

Roots of Empathy has also been identified as an anti-bullying programme. Because children are taught to understand how others feel and are encouraged to take responsibility for their actions and inactions, pro-social behaviours rise and incidents of bullying and aggression fall.

In a classroom setting, children share in 9 monthly visits with a neighbourhood parent, infant, and trained ROE Instructor. The Instructors conduct 18 further visits without the family.

Babies are aged 2-4 months at the beginning of the ROE programme and about 1 year at the conclusion, a period of enormous growth and development. Over this time, the students learn how to see and feel things as others see and feel them, and understand how babies develop.

As the programme progresses, the students become attached to "their" baby as they observe the continuum of the infant's development, celebrate milestones, interact with the baby, learn about an infant's needs and witness its development.

The programme also has links to the school academic curriculum. Students use maths skills to measure, weigh and chart the development of their baby. They write poems for the baby, and read stories that tap emotions, such as fear, sadness, anger, shyness. School children on the programme learn to relate to their own feelings, as well as recognise these same emotions in others.

Research evaluation shows reduced bullying and violence, and more responsible attitudes to pregnancy and marriage, in children who have been through the ROE programme. When children understand how others feel, they are less likely to victimise them through bullying. Ultimately, they become more competent parents who will be less likely to abuse their children.

Research findings

Clyde Hertzman and Kimberly Schonert-Reichl at The University of British Columbia (UBC) have conducted a number of projects to evaluate the Roots of Empathy programme (Schonert-Reichl, 2002; Schonert-Reichl et al, 2004).

The 2000-2001 evaluation included 132 first-, second-, and third-grade children drawn from 10 classrooms (5 Roots of Empathy, 5 matched comparison classes). Children were individually interviewed at both pre-test and post-test on a series of instruments designed to assess: (1) emotional understanding, (2) strategy knowledge about helping a distressed infant; and (3) developmental level of social perspective coordination. Teachers rated participating children pre-test and post-test on 9 dimensions of aggressive and prosocial behaviours: Aggressive with Peers; Pro-social with Peers; Antisocial with Peers; Excluded by Peers; Anxious-Fearful; Hyperactive/Distractable; Proactive Aggression; Reactive Aggression; Relational Aggression.

Findings from this evaluation yielded empirical support for the efficacy of the Roots of Empathy curriculum. Specifically, Roots of Empathy children, relative to comparison children, demonstrated significant improvements from pre-test to post-test in the following areas:

- Increased emotional knowledge.
- Increased social understanding.
- Increased pro-social behaviour with peers.
- Decreased aggression with peers.
- Decreased proactive aggression (e.g. bullying).

At **pre-test** children displaying an average score above zero on proactive aggression (bullying) were identified. Looking at the same group of children at **post-test** , the average rating showed:

- Children in ROE classes showed a decrease in average rating of proactive aggression.
- Children in comparison classes showed an increase in average rating of proactive aggression.

In Roots of Empathy classrooms 88% of students who demonstrated some proactive aggression at pre-test showed a reduction at post-test.

Statistical analyses indicate the effects of Roots of Empathy on participating children are large (effect size = .322, effect sizes greater than .137 are considered large) (Cohen, 1988).

In 2001-2002 a second evaluation of the Roots of Empathy programme was undertaken with 585 intermediate grade children (grades 4-7) from classrooms in Vancouver and Toronto. Utilising a pre-test, post-test quasi-experimental design, results revealed that children who had the Roots of Empathy programme, compared to children who did not experience it, showed:

- Increased emotional understanding.
- Increased pro-social behaviours as rated by their peers, including sharing, cooperativeness, fairness, trustworthiness, and kindness.
- Decreased teacher-rated proactive (bullying) aggression.
- Decreased teacher-rated relational (social) aggression.

Comparison children *significantly increased* in teacher-rated proactive and relational aggression across the school year.

Roots of Empathy is spreading internationally, and pilot projects are now running in 32 classrooms in states in Australia. There is also a pilot project in Japan.

WAVE has carried out an in-depth review of Roots of Empathy in the past 2 years, and been highly impressed by the findings. In addition it was strongly recommended by the Children's Commissioner for England, Professor Al Ainsley Green, who has visited Roots of Empathy sites in Canada and formed a highly favourable impression based on this experience.

PIPPIN (www.pippin.org.uk)

Focusing on ante-natal preparation for parenting, PIPPIN is a British charity providing around 50 hours of training to midwives, health visitors, social workers, childbirth counsellors, parenting educators, nursery nurses and childcare workers to help prospective fathers and mothers build strong, nurturing relationships with their infants. In a 4-stage preventative model of preparation and support for early parenting, PIPPIN coaches on how to optimise emotions and relationships in early parenting, fostering secure attachment and resilience. Each new family receives 35 hours of support, delivered in groups of 4-6 couples.

Typical antenatal and postnatal classes for new parents focus on the birth and the physical side of looking after a baby. Most take little or no account of the emotional aspects. Studies show this approach is ineffectual in assisting emotional adjustment to parenthood (Parr, 1996, 1998; Buist, Westley and Hill, 1999).

PIPPIN addresses this gap, helping parents recognise and develop their listening skills, and to develop healthy ways of communicating with their partners and babies. It focuses on the emotional and psychological needs of the family as a whole, on all the relationships, not just looking after baby. The insights families gain can help with problems often seen as mainly physical, such as crying, feeding and sleeping.

The approach also helps cement the father-mother bond during this sensitive and often stressful period. Very few fathers attend conventional Parentcraft classes; those who do frequently feel out of place. In contrast, PIPPIN programmes welcome fathers as a vital element in the new family, and make them feel very much at home. PIPPIN's courses are designed to help both parents understand and communicate better with their baby and between themselves; to ensure that fathers become more confident and more involved, and do not feel isolated or excluded.

PIPPIN is operating in a number of NHS trusts in the UK, and also with Sure Start.

Research evidence shows children whose parents have attended PIPPIN classes are more likely to enjoy "secure attachment" to their parents. Children who have secure attachments are less likely to be disruptive and anti-social, and this saves extraordinary expenses in the long term from the heavy social costs related to children who are not securely attached: in human and financial terms to their families, social services, schools, healthcare and sometimes the prison service.

Research (Parr, 1996, 1998) shows that, compared with parents who did not attend PIPPIN classes, mothers and fathers who have attended PIPPIN classes were:

- Less anxious.
- Less vulnerable to depression.
- Able to enjoy more satisfaction in their relationship with their baby.

- Able to enjoy more satisfaction in their relationship with their partner.
- More confident as parents.
- More child-centred in their attitudes.
- Able to use a wider repertoire of skills in coping with the everyday ups and downs of family life.

At a national level, PIPPIN's parenting programme was recommended by Health Select Committee Report (HMSO 1997), as "an important and effective preventative child mental health initiative, which local authorities and trusts as well as central government should encourage and support in order to ensure its long-term development." The Expert Committee for the European Regional Council of the World Federation for Mental Health commended PIPPIN as an example of excellence in its 1998/9 report, as part of work carried out by a Health Education Authority Project for the Promotion of the Mental Health of Children Aged 0-6 years. PIPPIN is also recommended by the Sure Start Guide to Evidence Based Practice (Trailblazer Edition, 1999).

PIPPIN was also one of the interventions recommended by Communities That Care. It is also well-known, and highly regarded, by several senior directors of children's charities in the UK. Its benefits are implied by the following quote from the Sure Start review: "Prevention programmes focused on first-time mothers are particularly effective because of the acute need of these women for social support and child-rearing assistance. Programmes are effective in reducing problems and enhancing competencies." PIPPIN is, of course, aimed both at first-time mothers and first-time fathers.

Nurse Family Partnership
(www.nursefamilypartnership.org)

The "Nurse Family Partnership" Home Visiting programme was set up by Professor David Olds at the University of Colorado to replicate programmes for low-income mothers having first babies in Elmira, NY and Memphis. The programme is committed to producing enduring improvements in the health and well-being of low-income, first-time parents and their children. It achieves three important goals:

- Pregnancy outcomes are improved by helping women practice sound health-related behaviours, prenatal care, improving diet, and reducing the use of cigarettes, alcohol and substance abuse.
- Children's health and development are improved by helping parents provide responsible and competent care for their children.
- Families' economic self-sufficiency is improved by helping parents develop a vision for their own future, plan future pregnancies, continue their education and find jobs.

Home visitors are highly educated registered nurses, who receive more than 60 hours of professional training from the NFP Professional Development team. Nurse Home Visitors and families make a $2^1/_2$ year commitment to each other, following which 64 visits are made per family. They begin making visits during pregnancy, (no later than 28 weeks of gestation) and continue through the first two years of the child's life. Key elements include:

- targeting of the programme to support "at risk" families.
- specific training aimed at supporting parental behaviour to foster emotional attunement and confident non-violent parenting.
- an average 33 visits per family from onset of pregnancy to age 2.
- visits which last, on average, 75-90 minutes per family.
- a case load of about 25 families per nurse.

UK health visitors who are rarely able to afford more than 20-30 minutes per visit because their case loads are as high as 240 families will recognise the difference.

In addition to helping parents to attune emotionally with their children, and to use consistent and more appropriate discipline regimes, the nurses help the mothers envision a future consistent with their own values and aspirations; help them evaluate contraceptive methods, child care options, and career choices; and help them develop concrete plans for achieving their goals.

Nurse-Family Partnership is the most rigorously tested programme of its kind. Dr. David Olds conducted randomised controlled trials in Elmira, New York (1977); Memphis (1987); and Denver (1994). Research demonstrated that NFP mothers are less likely to abuse or neglect their children, have subsequent unintended pregnancies, or misuse alcohol or drugs; and they are more likely to stop needing welfare support and to maintain stable employment. (Olds 2002; Olds, Henderson & Eckenrode, 2002; Olds et al. 1997, 1998, 2002, 2004, 2005).

Among its striking successes have been reductions in child abuse and neglect by 50% in the Elmira study and reduced hospitalisations due to non-accidental injuries by 75% in Memphis. In Elmira, where 15-year follow-up data on children exists, the nurse-visited children had 50% lower arrests, 80% fewer convictions, significantly lower substance abuse with drugs, alcohol and tobacco, and less promiscuous sexual activity, than the control group. Mothers on the programmes had fewer subsequent pregnancies, greater employment and less use of public assistance.

Research statistics

Compared to control group-counterparts, families who participated in the Elmira trial exhibited the following successes 13 years after the programme ended (Olds, 1997):

Low-Income Unmarried Mothers:

- 69% Fewer arrests 15 years following the birth of their first child.
- 44% Reduction in maternal behavioural problems due to substance use.
- 32% Reduction in subsequent pregnancies.
- 2-year or greater interval between birth of first and second child.
- 30-Month reduction in welfare use.
- 83% Increase in employment by child's 4th birthday.

Children of Low-Income, Unmarried Mothers:

- 56% Fewer emergency room visits where injuries were detected.
- 79% Reduction in child maltreatment.
- 56% Fewer arrests & 81% fewer convictions among adolescents.
- 63% Fewer sexual partners among the 15-year-old children.

A follow-up study in Memphis with primarily black, urban families, when children were aged 6, also showed many benefits. Pregnancies were down 16%, there was a 4-month longer gap before second children were born, relationships with partners lasted 9 months (20%) longer, children visited by nurses had higher intellectual functioning and fewer behaviour problems (1.8% vs 5.4%) in the borderline or clinical range (Olds et al, 2004).

The success of the NFP has led to its expansion across the United States. It is currently offered in 20 states, serving more than 20,000 families annually.

This programme is not cheap – it costs about $8,000 per family for 2.5 years support – but economic evaluation by the Rand Corporation shows a payback to the public purse of 4 times its cost. Nurse-Family Partnership more than pays for itself, given the multitude of outcomes the programme effects.

The Nurse-Family Partnership topped WAVE's evaluation system, with a maximum 9 possible marks, and was also recommended by the Sure Start review, Blueprints, Support from the Start and Communities that Care.

Circle of Security (www.circleofsecurity.org)

The Circle of Security programme is a 20-week, group-based, parent educational and psychotherapeutic intervention designed to shift patterns of caregiving interactions in high-risk, caregiver-child dyads (pairs) to a more appropriate developmental pathway. Using edited videotapes of their interactions with their children, caregivers are encouraged to:

- Increase their sensitivity and appropriate responsiveness to their children's signals for closeness and comfort, affect regulation, and exploration and autonomy.
- Increase their ability to reflect on their own and their child's behaviours, thoughts, and feelings regarding their attachment-caregiving interactions.

- Reflect on experiences in their own histories that affect their current caregiving patterns.

Targeted outcomes

The Circle of Security programme is designed to:

- Decrease risk factors among families who demonstrate disordered or insecure attachment patterns, and who show potential for resilience and the capacity to change.
- Enhance caregiver observation skills, reflective functioning, affect regulation regarding self and others, and empathy.
- Facilitate caregivers' ability to create more secure attachments with their children.
- Foster understanding and community support related to attachment issues of high-risk families.

How the programme works

The Circle of Security programme is based at Head Start and Early Head Start centers. The three major programme components are:

- The identification and assessment of high-risk families by Head Start staff, a university-based assessment team, and Circle of Security therapists.
- A 20-week programme of weekly, 1 hour and 15 minute sessions broken down as follows: 4 weeks of educational material focused on creating secure and emotional attachments; 15 weeks focused on specific, diagnostically-informed video review interventions with caregivers; and 1 week of review, celebration, and closure.
- Collateral support for caregivers and children between group meetings provided by Head Start teachers and family service coordinators.

Evaluation findings

Preliminary evaluation findings have been positive (Marvin, Cooper; Hoffman & Powell, 2002) suggesting that Circle of Security may have:

- Increased ordered child and caregiver strategies (order strategies include secure, ambivalent, and avoidant, as opposed to disorganised and insecure-other).
- Increased secure caregiver strategies.
- Increased secure child attachment.
- Increased caregiver affection, sensitivity, delight, and support for exploration.
- Decreased caregiver rejection, neglect, flat affect, and role reversal.

Circle of Security is designated as a "Reported Effective Program" by The Children's Bureau's Office on Child Abuse and Neglect of the US Department of Health and Human Services in its Emerging Practices in the Prevention of Child Abuse and Neglect project. This was initiated to identify effective and innovative programmes in child abuse and neglect prevention around USA.

Second-tier of attractive interventions

Behind these four leading interventions are a number of other programmes which also score well (5 or 5.5) in our evaluation scale. Two are programmes recommended in the Sure Start Review:

A brief three-session sensitivity-focused intervention addressing secure attachment

The UCLA Family Development Project

One is recommended by The Children's Bureau's Office on Child Abuse and Neglect:

Parenting Partnership

and one is recommended by Support from the Start:

Parent Adviser

Brief 3-session sensitivity-focused intervention addressing secure attachment

The Sure Start Review states: Even depressed parents can readily be helped to be more sensitive and less intrusive with their infants, and improvements in sensitivity engender secure attachment. A brief three-session sensitivity-focused intervention can treble the number of infants assessed as securely attached, and this difference is maintained to 42 months (van den Boom, 1994, 1995).

Insecure and even (the more serious) disorganised attachment are not uncommon, even in populations not considered at high risk. However, a range of adverse outcomes are not commonly found in association with secure attachment, which may therefore indicate that this is a protective mechanism and may be a legitimate conceptual framework upon which to base prevention intervention (Kurtz, 2004).

UCLA Family Development Project

Relation-based family interventions are amongst the most effective early interventions. The Nurse-Family Partnership Project is a good example. Another example is the UCLA Family Development Project (Heinicke and Ponce, 1999) which focused on providing a trustworthy relationship to improve the mother's functioning and family relationships. There were multiple benefits to high-risk mothers: increased support from the family of origin, less coercion in disciplining, higher prevalence of attachment security in the child, and greater autonomy in problem-solving. Disorganised attachment was reduced by almost two-thirds. There were further benefits at two years in terms of the mothers' sensitivity, support of the child's autonomy and task involvement, and the child's attachment security and task orientation (Kurtz, 2004).

Parenting Partnership

Parenting Partnership is a home visiting programme designed to meet the needs of medically fragile children living in socially vulnerable families – e.g. parents who have childhood histories of abuse and high levels of stress relating to the care of their infant. There are weekly home visits by a clinician for the first three years of a child's life. Visits are approximately one hour in duration and comprise a variety of therapeutic activities intended to enhance parenting skills and resolve issues related to the parents' own difficult childhood. There are also monthly support group meetings.

Parenting Partnership aims to prevent maltreatment by helping parents resolve their abuse histories, foster predictable, responsive care for their sick infant, ameliorate social isolation, and increase problem-solving skills. The mission of the programme is to bolster protective factors among these families with the categorical intent being the reduction of child maltreatment for a population of at-risk children who cannot afford to be further compromised. By focusing on enhancing a variety of protective factors, the programme seeks to help parents achieve the following goals:

- Read, understand, and respond effectively to their child's unique behavioural cues.
- Perceive the care they provide from the infant's perspective.
- Exhibit a minimum of 5 behaviours associated with secure parent-child attachment.
- Build and maintain a responsive social support network.
- Understand child development and their own child's prognosis, needs, and progress.

One of the features of the home visits is to assist the parent in cue reading and promoting positive behaviours through videotaping parent-child interactions (e.g. during bath time). They also review the child's medical and developmental needs, and provide an appropriate role model for parents.

This innovative programme provides services for two very high-risk populations using a needs-based intervention simultaneously – special needs or medically fragile children and parents with childhood histories of abuse and neglect. Outcomes of the programme include reducing the number of injuries from maltreatment treated in emergency rooms.

Parenting Partnership was designated as an "Innovative Program" by The Children's Bureau's Office on Child Abuse and Neglect of the US Department of Health and Human Services in its Emerging Practices in the Prevention of Child Abuse and Neglect project.

Parent Adviser

Parent Adviser Services is another form of home visiting programme, applied in disadvantaged areas of London. The aim is to promote better parent-child relationships, and a stronger sense of self-esteem and self-efficacy among parents of pre-school children. Families are usually seen at home by purpose-trained visitors, initially for an hour a week. An evaluation comparing 55 disadvantaged families (most with multiple problems) seen by Parent Advisers, with 38

similar families who had "normal" Health Visitors and other NHS primary health care services, showed self-esteem among mothers taking part increased over four months, while depression, anxiety and stress declined, in contrast to worsening problems among the comparison group. There also appeared to be improvements in their children's behaviour (Davis, Spurr and Cox, 1997; Davis and Spurr, 1998).

An earlier evaluation in East London took place with families of children with learning and physical disabilities and found improvements in the well-being of mothers' and children's behaviour compared with randomly-allocated control families. The biggest improvements were found among Bangladeshi families being visited, who tended to be more disadvantaged and have fewer support networks than white families in the study (Davis & Rushton, 1991).

Third-tier of attractive interventions

Despite missing some of the factors of the programmes above when compared with our evaluation matrix, a further six interventions (score 4 or 4.5) stood out from a host of interesting programmes being evaluated. Of these, four were recommended by one or more of Blueprints, Support from the Start and Communities that Care:

- Front-pack baby carriers
- Infant massage
- The Community Mothers' Programme
- The Incredible Years

Two were recommended by experienced child welfare experts in the UK:

- The Sunderland Infant Programme
- The Buffalo Shaken Baby Prevention Project

Front-pack baby carriers

Recommended in the reviews by both Communities that Care and Support from the Start, front-pack baby carriers are a very cheap and simple intervention. In a randomised control trial in the United States, after 3 months, mothers using front-pack carriers for their babies were more responsive to their babies than a control group with conventional baby seat carriers. After a year the infants in the front-pack group were significantly more securely attached to their mothers (Anisfield et al, 1990). This is altogether an extremely cost-effective and simple way of encouraging increased bonding between parent and child.

Infant massage

Baby Massage has been evaluated for Sure Start in the National Evaluation of Sure Start. One report (Taragon, 2004) describes one local approach. Courses consist of five weeks of 2-hour group sessions, attended by an average of 8 carers with their babies. In addition to the massage itself, led by a skilled practitioner, mothers are provided with information and guidance on breast feeding, nutrition, hygiene and safety. This report cites a long list of benefits found by baby massage researchers, including emotional security, attunement and sounder sleep. One cross-cultural study (Prescott, 1975) is cited as evidence of violence reduction in the infants, later in life.

Baby Massage was signalled by Sutton and Murray (2004) in their Support from the Start review for its success in improving parent-child bonding (Field 1998, 2000). Field and colleagues showed improvements for pre-term infants in respect of weight gains, and reductions in cortisol levels and crying for pre-term infants, while parents reported decreased anxiety and depression (Field et al, 1986).

Communities that Care also indicate it as one of their "Promising Approaches", citing similar benefits (Field, 2000; Onozawa et al 2001).

The Community Mothers' Programme

This programme uses trained volunteer mothers to give monthly, home-based support to vulnerable mothers with children aged 0-2 years. When evaluated in Dublin (Johnson, Howell and Molloy, 1993) the scheme was found to be beneficial to both mother and child, with seven year follow-up research showing enhanced parenting skills and maternal self-esteem (Johnson, Molloy, Fitzpatrick, Scallon, Rooney, Keegan and Byrne, 2000). The programme is an extension of the Child Development Programme, which offers monthly support to new parents, antenatally and for the first year or more after birth. Most visits are undertaken by specially trained health

visitors who aim to support and encourage parents in meeting the challenges of child care.

Although the programme was not specifically designed to target child abuse, studies found substantially lower levels of child abuse among participating families than were typical for the Health Authority areas where it was introduced, though comparison methodologies have been criticised (Barker and Anderson, 1988; Barker et al, 1992).

This programme was one of those in the Support from the Start review, in the Birth to Two Years category (Sutton and Murray, 2004).

The Incredible Years

The Incredible Years is one of the Blueprints model violence-prevention programmes. It is also commended in both the Support from the Start and Communities that Care reviews.

The Incredible Years Series is a set of three comprehensive, multi-faceted, and developmentally-based curricula for parents, teachers and children designed to promote emotional and social competence and to prevent, reduce, and treat behaviour and emotion problems in young children.

Children, ages two to eight, at risk for and/or presenting with conduct problems (defined as high rates of aggression, defiance, oppositional and impulsive behaviours) are appropriate for the intervention. The programmes have been evaluated as "selected" prevention programmes for promoting the social adjustment of high risk children in preschool (Head Start) and elementary grades (up to grade 3) and as "indicated" interventions for children exhibiting the early onset of conduct problems.

This series of programmes addresses multiple risk factors across settings known to be related to the development of conduct disorders in children. In all three training programmes, trained facilitators use videotape scenes to encourage group discussion, problem-solving, and sharing of ideas. The BASIC parent series is "core" and a necessary component of the prevention programme delivery.

The Incredible Years training programmes have been shown to affect the following risk and protective factors:

Parents

- Increased positive and nurturing parenting style.
- Decreased harsh, inconsistent and unnecessary discipline.
- Increased praise and effective discipline.
- Decreased parental stress and depression.
- Increased positive parent commands and problem-solving.
- Increased parent bonding and involvement with teachers.

Teachers

- Increased proactive and positive classroom management skills.
- Decreased harsh and critical classroom management style.
- Increased positive classroom atmosphere.
- Increased bonding with parents.

Child

- Increased positive conflict management skills and social skills with peers.
- Decreased negative behaviours and noncompliance with parents at home.
- Increased social competence at school.
- Decreased peer aggression and disruptive behaviours in the classroom.
- Increased academic engagement, school readiness and cooperation with teachers.

These findings have been reflected in teacher and parent ratings, child testing and interviewing, independent observations in the home and at school, and laboratory observations of peer interactions and interactions with parents (Webster-Stratton, 2001; Webster-Stratton & others 1997, 1998, 1999, 2001).

Evaluation of the programme in the UK has produced very encouraging results in a Communities That Care trial in Coventry (Manby, 2002), through Sure Start in North Wales (Bywater, 2004) and in South London with a substantial number of black and ethnic minority families (Scott et al, 2000).

The Sunderland Infant Programme

The Sunderland Infant Programme began in 1999. It is part of a citywide primary prevention strategy for supporting children, funded by Sure Start and Tyne and Wear Health Action Zone.

The programme involves video-taping and then watching how a baby interacts with its parents. Dr Per Svanberg, the originator of the programme, explains that it is about understanding "babyese", the language babies use to communicate with the world. "The idea is not to look at how people are failing at parenting," he says, "but to understand babyese. Studying the interaction between a parent and child is a powerful way of learning baby language. Each baby is unique. Their signals are very quick and subtle."

Parents are invited to participate and learn more about their babies' unique ways of communicating, which are captured through a 3-4-minute video clip when babies are 8 to 12 weeks old. The clips are then analysed using Crittenden's CARE-Index methodology. Depending on the nature of the interaction, tailor-made interventions are devised, which may vary from behaviourally focused video-based guidance by health visitors to parent-infant psychotherapy with clinical psychologists.

Families need time to read and understand these signals. By studying how baby and parent interact, Dr Svanberg and his team are able to get a sense of how "attuned" they are with one another. Sensitive, attuned interaction is thought to be highly predictive of secure attachment. The interventions and video-taping help the non-attuned parent find effective ways to change their interaction strategies.

The programme utilises, and points to, a new and very important role for health visitors, as infant mental health workers. A health visitor working on the programme, said their practice has changed "dramatically", with a deeper understanding of the importance of the emotional aspects of health, the importance of secure attachment and the detrimental effects of insecure attachments.

To deal with the shift from concentrating heavily on the physical health of the child, nursery nurses have taken over some of the routine tasks of the health visitors, such as 18-month check-ups, dealing with sleep problems and organising courses. All staff involved in the programme received specific training in different areas of infant mental health, as well as in the tools used to analyse the interaction between babies and their families.

Thirty families have taken part in the evaluation of the project, alongside 26 control families. The first six-month evaluation is now complete. Reports say that not only has the intervention sensitised mothers to their babies' way of communicating, it has also had a serious impact on their own sense of well-being. Research reports have not yet been published but there is a preview in Young Minds Magazine (2002).

The Buffalo Shaken Baby Prevention Project

This programme was developed at the Children's Hospital of Buffalo, in New York State, by Dr Mark Dias. The project presents education to new parents about the dangers of shaken baby syndrome (SBS) through the use of Portrait of Promise, an 11- minute video, an educational SBS brochure and a 5 to 10 minute discussion with a nurse on staff.

The project seeks to ensure that parents of newborn children actually receive the information they need to protect their child against shaking injuries at a time when they are most receptive to the information. During the post-delivery stay in the hospital, a maternity nurse introduces the videotape, provides the SBS brochure and returns to answer questions and obtain an acknowledgment/evaluation form signed by the parents. To provide information on the retention of the materials, the Project collects information from follow up calls to the parents six months after discharge.

In its initial year, the incidence of shaken baby syndrome presenting at the Children's Hospital of Buffalo was reduced from an average of one every six weeks to one in a year. The programme was subsequently extended, as the Upstate New York SBS Prevention Project, to seventeen counties in western New York. The two year evaluation report on the Project reported a reduction of more than 60% in the area served by the Project.

Other interesting programmes

The sections above capture 14 programmes out of our short-list of 42, all scoring 4 or more out of a possible 9 against our evaluation matrix. The following 11 programmes all scored 3.5:

Two recommended by both Communities that Care and Support from the Start:

- Syracuse Family Development Research Program
- Triple P (Positive Parenting Programme)

Three recommended by Communities that Care:

- The Family Partnership Model
- Family Links Nurturing Programme
- Dorset Healthy Alliance Project

Four recommended by Support from the Start:

- Houston Parent-Child Development Centre
- Yale Child Welfare Project
- Home-based support for post-natal depression
- Diet

Two recommended by the Sure Start mental health review:

- The Mount Hope Family Center Program
- Emotion education

Two identified through a research project on teaching empathy to children

- Education for Parenting: Learning How to Care
- Parents Under Construction / Childbuilders

Syracuse Family Development Research Program

This is mentioned in the Support from the Start review as a home visiting programme which produced measurable reductions in offending amongst the children benefiting (Lally, Mangione, Honig and Wittner, 1988). The Communities that Care review mentions it as one which has reduced risk factors.

Triple P (Positive Parenting Programme)

Originating in Australia, and developed through more than 20 years of clinical trials, Triple P is a multi-level parenting and family support strategy that aims to prevent severe behavioural, emotional and developmental problems in children by enhancing the knowledge, skills and confidence of parents. It incorporates five levels of increasing strength for parents of children from birth to age 12 (recently extended to age 16).

Level 1 involves a universal parent information strategy, increasing community awareness of parenting resources, encouraging parents to take part in programmes and creating optimism about solutions to common behavioural problems.

Level 2 is a brief one or two-session primary health care intervention, using parenting tip sheets and videotapes to provide guidance to parents of children with mild behaviour difficulties.

Level 3 is a 4-session primary care intervention targeting children with mild to moderate behaviour difficulties. It includes active skills training for parents.

Level 4 is an intensive 9-10 session individual, group or self-help parenting programme for parents of children with more severe behaviour difficulties.

Level 5 is an enhanced family intervention programme for families where parenting difficulties are complicated by other sources of family distress (e.g. relationship conflict, parental depression or high stress).

This multi-level strategy recognises that parents have differing needs and desires concerning the type, intensity and mode of assistance required. It can be applied universally, or focused on high-risk groups.

A substantial body of evidence from evaluation studies, including randomised control trials, suggests Triple P can significantly reduce disruptive child behaviour, dysfunctional parenting, marital conflict and parental stress and depression; it also increases marital satisfaction (Sanders et al, 2004).

The Family Partnership Model

The Centre for Parent and Child Support at Guy's Hospital provides training in the Family Partnership Model. The model is intended to provide a core understanding and set of skills

for engaging parents and being helpful to them. It can also be used to develop a model of parenting and enhance the relationship and interaction between parents and their children from birth onwards.

The Parent Adviser Programme uses home visiting to promote better mental health among young children and families under stress. The approach was devised for families of children with learning and physical disabilities and is now offered also to families where children exhibit behavioural problems. The service is not judged suitable for families where there are child protection issues. It is designed to address the psychosocial needs of the family as a whole, rather than focusing on the behaviour of an individual child. Families are usually seen at home for about an hour each week.

An evaluation in South London compared experiences of 55 families visited by parent advisers with 38 similar families receiving the usual contact with health visitors and other primary health care services. Most parents and children were assessed as 'very needy', with multiple problems.

Assessment 4 months after the start of the programme showed short-term benefits. Self-esteem among participating mothers had increased and their levels of anxiety, depression and stress in the parenting role had declined. Their referral problems had become less severe, the environment they provided for their children had improved. Children's behaviour also seemed to have improved. By contrast mothers in the comparison group showed a marked decrease in self-esteem, and were significantly more negative about their partners (Davis & Spurr, 1998).

Family Links Nurturing Programme

This programme applies principles derived from effective parenting programmes in a primary school classroom setting. Its aims are to:

- Develop children's sense of personal responsibility and a positive, caring outlook toward others
- Assist positive discipline and behaviour in school.
- Develop children's communication and social skills, including self-awareness.
- Promote attachment between children as a group, and with teachers and their school.
- Encourage use of positive discipline and parenting skills by parents, teachers and all school staff.

Ten weekly sessions each term in infant and junior schools aim to increase empathy, self-awareness, self-esteem and realistic expectations in children and adults. Parents are encouraged to participate in a parallel parenting programme so that attitudes, techniques and language used at school are reinforced in the home.

Questionnaires filled in by 30 infant school children who took part in the Nurturing Programme found the children less aggressive than a control group in describing how they would react to situations in and out of school. Their responses indicated they were more assertive, constructive and socially aware (Layton & Hunt, 1997). In a subsequent study participating children reported improved supervision by parents while a comparison school showed a deterioration (France & Hacking, 2003).

Dorset Healthy Alliance Project

This project, primarily targeted at 3-11 year olds, sought to break the cycles of violence, crime and abuse in a disadvantaged school whose male former pupils had a crime rate four times the Dorset average (23% vs 6%). Adults in the school catchment area were 8.5 times more likely to be on probation than the average person. Contact with Social Services was well above average, with 40% of the presenting problems being child protection cases.

The project was concerned with the relationship between education, health and anti-social behaviour. It promoted closer parent-school links while tackling a range of behavioural problems including disruptive behaviour, truancy and bullying. An educational social worker was based at a local primary school, but continued to work with the children and their families after they had moved up to the local secondary school.

Two project teachers were also appointed to run a number of related initiatives including:

- Home visits to encourage parental involvement.
- Home-school contact with families of vulnerable children.
- Anti-bullying campaigns (including a non-punitive technique "shared concern").
- Preventing exclusions and truancy by enrolling parental support.
- Family therapy for families of pupils with serious behaviour problems and dysfunctional homes
- An after-school club.
- Assertiveness and other social skills training.

In addition the social worker played a co-ordinating role in organising support for children at risk of abuse and for families under stress. There was accessible consultation and support for teachers dealing with problematic pupils and families. Teachers in the intervention school reported significantly less stress than the comparison group.

An evaluation found major improvements in pupils' behaviour at the primary school, including the virtual elimination of truancy, reductions in theft and vandalism, and improved commitment to school. Child protection referrals fell by 76% at a time when they increased by a third across Dorset as a whole. Truancy at the secondary school fell from 28% to 16%. Pupils had significantly better behaviour and attitudes than their peers in a comparison school, including reductions in theft, vandalism, under-age drinking, solvent and drug abuse. Academic performance levels improved significantly, the secondary school being included in the Sunday Times list of the 10 best improved state schools in England (Pritchard, 2001).

A preliminary cost-benefit analysis of the project suggested returns of between 111% and 250% from savings in special education and reductions in school thefts alone.

Houston Parent-Child Development Centre and Yale Child Welfare Project

Houston Parent-Child Development Centre (Johnson and Walker, 1987) and Yale Child Welfare Project. (Seitz, Rosenbaum and Apfel, 1985), two home visiting programmes, were both cited by Support from the Start as producing measurable benefits for the children of the families visited.

Home-based support for post-natal depression

Studies in the UK have shown that the provision of individual, home-based support, conducted weekly over the first few months after birth, and typically totalling around 8-10 sessions, is effective in speeding up the mother's recovery from postnatal depression (Holden et al, 1989; Cooper et al, 2003). There is also evidence that depressed mothers experiencing high levels of adversity, who are particularly vulnerable to interaction difficulties, can improve the quality of their relationships with their infants (Murray et al, 2003). Post-natal depression is implicated in various studies as a contributor to poor attunement, and a contributing factor on the path to anti-social behaviour (Shaw et al, 2001).

Diet

A recent trial in Southampton suggested adverse effects of artificial food colourings and preservatives on the behaviour of 277 hyperactive or atopic 3-year olds drawn from the general population (Bateman et al, 2004). After withdrawal of these additives from the diet, hyperactive behaviour was reduced. Children were given drinks containing colourings and preservatives and a placebo drink. The parents, blind as to which drink was being given, reported more hyperactive behaviour while their children received the drink with additives than when they had the placebo drink. This was a carefully conducted trial and has considerable implications for public health intervention, for example policies on drinks permitted in schools.

Some material from recent studies linking diet and anti-social behaviour, especially violent behaviour, is given in Appendix 6.

The Mount Hope Family Center Program

The Mount Hope Family Center Program provides corrective emotional experience for depressed mothers to address distortions in the mother's perception of the child and thereby foster resilience in the infant. The programme substantially reduced the number of insecurely attached infants, maintained on follow-up when the children were four years old (Toth et al, 2002).

Emotion education

Dysfunctions of processing emotion information have been implicated in both internalising and externalising psychological problems. A significant number of research trials have demonstrated that affective education, which attempts to increase children's awareness and expression of feelings and their ability to understand the possible causes of behaviour, is quite effective in the reduction of behavioural problems, as well as in the enhancement of competencies (Fonagy and Target, 1997).

Evidence suggests that increasing the frequency of positive emotion experiences has beneficial effects on mental and physical health. Carol Izard and colleagues (2002) suggest a prevention strategy for the first years of life based on practising free play with the infant which involves positive emotional expression. This helps the infant to participate in more effective interactions with others. Izard suggests a targeted emotion-centred intervention to facilitate the induction of positive emotion and the modulation of negative emotions. The third to fifth year of life may be a particularly sensitive period for developing a dependable foundation for accurate perception and labelling of emotions. Emotion education also facilitates the development of empathy and socio-moral behaviour in the latter half of pre-school years (Hoffman, 2000).

Other short-list programmes

- Post-natal depression treatment, Cambridge
- Post-natal depression treatment, Staffordshire
- Enhancing Parenting Skills Course
- Parent Management Training based on Living With Children (Patterson et al)
- The Child Development Programme
- Health Visitor support for hyperactive children and their families
- The End to Violence Programme
- The Family Nurturing Network
- Community Parenting Centres
- Parenting Positively
- PATHS (Promoting Alternative THinking Strategies)
- Big Brothers Big Sisters of America
- Handling Children's Behaviour
- Nurture Groups

It should not be assumed that these programmes are considered to be in any way inadequate; many are excellent, and may succeed very well in what they set out to do. One is even delivered by WAVE itself, and has successfully "cured" a number of violent criminals, in prison and after release from prison, from engaging in violent behaviour. Not one has yet re-offended in this way. (All but one have not re-offended in any way.) However, the programmes do not meet the criteria of being a strategic intervention tackling the roots of violence.

It is better to prevent fires before they happen. That does not mean the work of firemen/women is not of the utmost value. In practice WAVE accepts that a range of intervention programmes, across all ages and stages of violent behaviour, should be adopted.

There are just two further interventions to mention before concluding this review of possible interventions.

Community Parenting Centres

Mel Parr is the designer and former CEO of PIPPIN, with extensive experience in the field of early prevention. She has developed a persuasive proposal that government could take care of the need to foster the mental health and emotional well-being of all babies by establishing a network of Community Parenting Centres around the country. One approach could be to develop these as an adaptation of the government's proposed Children's Centres.

The basic idea is that the hallmark of an effective approach is one integrating a focus on interpersonal relationships, the enhancement of attachment security and facilitation of the development of reflective function – an individual's capacity to reflect emotionally and to contemplate the emotional state of others (Fonagy, 1998). This is not to be confused with "introspection" or "talking about" parenting, emotions, or needs of children. Reflective function cannot be simply changed by a conscious act of will, by lecture or demonstration, or by reading about it in a self-help guide or parenting manual. The issue is not what happened in the past, but how parents make sense of themselves and relationships since, and how this influences their ability to tolerate and "be with" their own and their infant's experiences while providing a potential space for reflection.

Parr believes this reflective function is the emotional parenting skill that is the most likely common factor at the heart of the success of the interventions recommended by WAVE. For example, delivering "First Steps in Parenting" (Parr, 1996) an early parenting programme for the antenatal and postnatal period, requires an individual knowledgeable and skilled in all of infant mental health, parenting and group work. This is necessary for the facilitator to be able to tolerate and contain parental and infant anxiety and facilitate issues relating to parent-infant relationships as they arise through the ordinary concerns raised by women and their partners in the period surrounding the birth of their infant (Woollett & Parr, 1997; Parr, 1998; Parr, 2003).

Mel Parr's idea would also meet the suggestion by Fonagy that multi-modal community-based programmes, conducted in community centres, would combine the advantages of home visiting and behavioural parent training, and also have low drop-out rates (Fonagy, 2004).

The other intervention is one considered so important to an understanding of violence that it warrants a section of its own.

Section 9
PTSD: Linking childhood abuse and violence

Recognition of the importance of Post-Traumatic Stress Disorder (PTSD) and investment in its diagnosis and treatment have a major role in combating the cycle of violence.

The role of PTSD in maintaining violence

The way infants experience the world in their very early years is crucially important to whether or not they grow up with a propensity to be violent, and a whole array of social factors act as triggers to violence where the propensity has been laid down. There is, however, one specific factor in the maintenance of a perpetual cycle of violence that is so pervasive and significant it deserves special mention: Post-Traumatic Stress Disorder, or PTSD. It helps maintain cycles of violence and is being created anew all the time; it is a major component of the very fabric from which a violent society is woven. The good news is two-fold: (i) PTSD is easily diagnosed and (ii) effective treatment for it already exists.

The American Psychiatric Association defines Post-Traumatic Stress Disorder (PTSD) in DSM-IV, the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, as exposure to a traumatic event, followed by persistent **re-experiencing** of that event, together with two further clusters of symptoms: **avoidance** and **increased arousal**. *[For a more formal description of the symptoms of PTSD, see footnote at end of this section.]*

When people are traumatised (including being abused, raped, or exposed to any severe shock, or natural disasters) some are resilient and able to cope with the experience.

People who have been subjected to multiple stressors in their early lives are not resilient, and do not cope with trauma; instead, they attempt to "bury" it. They may then become emotionally numb in an important area of life (emotional numbness is a common observation about psychopaths). However, the traumatising event is often buried only incompletely, such that the after-effects of it keep leaking out through memories or flashbacks.

Traumatic memories are often encoded in our brains through all the senses, including smell, taste and sound. Any of the senses can trigger a reminder of the original trauma. When this happens, the emotions can completely overwhelm someone's ability to function. While many of us have experienced occasional moments of overwhelming emotion which we cannot understand or explain, traumatic stress victims can be overwhelmed in this way many times a day or week. To understand how this works, we need to consider the Completion Principle.

PTSD and the completion principle

Horowitz (1986), a brilliant academic in the field of understanding how we respond to stress, proposes that individuals have mental models or schemata of the world, which they use to interpret incoming information. He also proposes an inherent drive to make our mental models coherent with current information (the *"completion principle"*).

When new data comes along – e.g. until now all dogs have been friendly, then to our surprise one dog bites – we make adjustments to the mental model, which grows and evolves throughout our lives.

A traumatic event presents information incompatible with existing schemas, requiring massive changes to the schematic models. Complete processing and integration take time, during which active memory tends to intrude with repeat representations of the traumatic event, causing emotional stress, while inhibition modulates the flow of information to prevent emotional exhaustion. If inhibitory control is not strong enough, intrusive symptoms such as nightmares and flashbacks emerge. When inhibition is too strong, avoidance symptoms such as numbing occur.

In processing trauma, the person oscillates between avoidance and intrusion until processing is "completed". The mental model has been adjusted and a revised model is now in place. The trauma may be stored as an unfortunate event belonging to the past.

In Post-Traumatic Stress Disorder, completion of the information processing does not take place; the sensations and emotions of the event start to lead a life of their own (van der Kolk and McFarlane, 1996). Replaying the trauma leads to sensitisation such that every replay increases distress (McFarlane et al, in press; Post 1992).

The dangers of re-enactment

Re-enactment is a common feature of PTSD. It is the term used for a compulsive (and often unconscious) need to re-experience the overwhelming emotion of the original event. Thus traumatised combat soldiers may become mercenaries or join police SWAT teams; abused women may be attracted to men who mistreat them; sexually molested children may grow up to become prostitutes or paedophiles; people who received or witnessed violence as children may become violent to others (van der Kolk and McFarlane, 1996).

Re-enactment usually involves a moment of choice. Some people continue to take the role of victim – especially if they are physically weak, making this a common female response. Others decide that if (as it appears to them) the world is made up of victims and victimisers, on balance they'd rather be a victimiser – a choice easier to make if the person lacks empathy, and is physically strong, or has access to weapons which provide a feeling of strength, making this a more common response in males (but also in female bullies who use words as weapons).

The shift from victim to victimiser often takes place early in school life, by being cruel to animals and/or becoming a bully of weaker children (thus re-enacting what is being suffered at home). It can also take place in adolescence when the child outstrips the father in physical strength or risk-taking. Often it is a pivotal moment in someone's life, when they finally throw off the experience of constantly being bullied and hit back at their school tormentor or parental bully – and discover that violence works. In that tough world they suddenly win respect.

McFarlane and van der Kolk (1996), two of the world's leading experts in traumatic stress, warn that "The costs of the re-enactment of trauma in society, in the form of child abuse, continued violence, and lack of productivity, are staggering."

PTSD reflexes can by-pass the thinking mind

In pages 18-19, on the Infant Brain, we saw how trauma can damage the limbic system of a child (which controls emotions), and how the hair-trigger reflex can be highly sensitised.

The reflex to be violent in those who have been traumatised through violence and chosen to stop being victims can be very strong. An important element of this pattern is that the action reflex often does not pass through the conscious mind. The original trauma becomes emotionally locked into the limbic system and our responses to it, which may include the hair-trigger reflex, by-pass the frontal lobe. As our reactions are not controlled by thinking we may try to persuade ourselves (by rational thought) that we should not feel this way or act this way – but our bodies persist in doing so.

Emotion-laden memories play a key role in traumatic memory. Brown & Kulik (1977) argue there is a special "flashbulb memory" for encoding emotion-lading memories. By enabling the organism to learn quickly about threat without having to undergo repeated exposure to the stimulus (e.g. a leaping lion) such a mechanism would have evolutionary survival value, and might account for both the re-experiencing phenomenon and the fact that reactions to traumatic reminders by-pass the thinking brain (the next time we see a lion we don't stop to think before we start running).

Abuse during childhood can cause PTSD and violent behaviour

Numerous studies have demonstrated that both adults who have experienced severe shocks and children who have suffered violent or sexual abuse become traumatised, frequently leading to PTSD; and PTSD increases propensity to violence.

Following the Vietnam war it was observed that many veterans became violent on return to civilian society, where they had not been violent beforehand. The root cause of this behaviour has been traced to the fact that combat exposure frequently leads to PTSD, and there is a known, strong correlation between PTSD and aggressive behaviour. Problems

with aggression against others have been particularly well documented in war veterans, in traumatised children, and in prisoners with histories of early trauma (Lewis, 1990, 1992). Currently there is concern about high levels of PTSD in veterans returning from Iraq (figures of 10-15% have been cited), and about violent behaviour, including murder and attempted murder, amongst soldiers honourably discharged (Associated Press, 22 August 2005).

Numerous studies have found a direct relationship between severity of childhood abuse and later tendencies to victimise others (Burgess et al, 1987; Green, 1983; Pynoos & Nader, 1988; Widom, 1987; Mezey & King, 1989; Groth, 1979; Lewis et al, 1988; Lewis et al 1989; van der Kolk, 1996; Werner, 1989). Lewis et al (1988, 1989) have extensively studied the association between childhood abuse and subsequent victimisation of others. As an example, in one study they found that of 14 juveniles condemned to death for murder in the United States in 1987, 12 had been brutally physically abused and 5 had been sodomised by relatives (Lewis et al, 1988). Abuse during childhood frequently leads to PTSD (Dutton, 1995; Dutton, 1998; Perry, 1994; Pynoos, Steinberg & Goenjian, 1996; van der Kolk, 1987; de Zulueta, 1993) and sharply increases the risk for later delinquency and violent criminal behaviour.

A high proportion of violent prisoners and ex-prisoners suffer from PTSD.

In view of the patterns of abuse leading to PTSD then leading to violence, it is not surprising that a significant proportion of violent offenders in prisons and young offenders institutes suffer from PTSD.

Collins and Bailey (1990) found a relationship between PTSD and imprisonment for violence; Long (1991) found high rates of PTSD in imprisoned youths; Raeside (1994) found PTSD "almost ubiquitous" in Australian female prisoners and that this contributed significantly to their criminal histories (McFarlane, 1996). Steiner et al (1997) found very high rates of PTSD amongst violent juvenile prisoners. Of attenders at a drug rehabilitation unit, 59% had an association with PTSD (Fullilove et al, 1993).

The National Study of Psychiatric Morbidity in NZ Prisons, an investigation into the prevalence of psychiatric disorders among New Zealand inmates (Simpson & Brinded, 1999) found that lifetime prevalence of PTSD for women inmates was 37 percent. Community sample lifetime prevalence is 1.3 percent (Davidson et al, 1991; Wells et al, 1989). It states "The incidence of PTSD is grossly elevated relative to the community at large and is more in keeping with findings for high risk populations such as victims of criminal offences and combat veterans."

A study by the New South Wales Department of Corrections (Butler & Allnutt, 2003) found a 24% level of PTSD amongst prisoners. The NSW report goes on to say "It is likely that PTSD [is] ... under-diagnosed in the prisoner population." One American study found a 34% level of PTSD amongst female prisoners (Teplin, Abram and McClelland, 1996).

The correlation between PTSD and violent behaviour has major implications for treatment of offenders and ex-offenders.

Recognition and treatment of PTSD

Attempting to cure someone of violence while failing to recognise and treat their PTSD is like trying to persuade a maniac to stop shooting people without taking away his gun. Whenever PTSD is not treated, the likelihood of a recurrence of violent behaviour is much higher.

As of 2004, UK child, prison and probation programmes largely overlooked PTSD (many prison psychologists do not even know what it is), yet it is relatively easy to diagnose, and there are proven Cognitive-Behavioural techniques whose success with PTSD-afflicted combat veterans and rape victims has been amply demonstrated.

One of these Cognitive-Behavioural treatment methods (Prolonged Exposure Therapy) has been used within WAVE's "An End to Violence" Programme for violent prison inmates and ex-prisoners (combined with cognitive restructuring). A key element of the programme is the recognition that "completion" has not taken place, possibly across a wide range

of childhood traumas, and that until it does so the PTSD cannot be cured. The programme also recognises the need for the completion process to take place at the somatic (bodily sensations) level, not just in the thinking brain.

Results are very positive. On each occasion PTSD has been healed, intrusion and avoidance symptoms dropping to a fraction of their initial levels. Violence and aggression seemed, both by self-report and prison or probation feedback, to have ceased to be a behaviour option; this was also shown in psychometric measures where composite aggression and violence dropped from an average 42% of maximum on the Buss-Durkee, Novaco and Spielberger scales to a "normal" 10% of maximum, 11% at 6-month follow-up. There was also a sharp improvement in acceptance of responsibility; and improvements, sometimes very striking, in Fear of Negative Evaluation and Social Avoidance, which can impede re-integration into the community. To date none of the participants in the programme has violently re-offended.

Table 6: Scores as % of maximum possible

Psychological Measure	Before	After	At Follow-up
Composite anger/ aggression	42%	10%	11%
Angry thoughts	56%	27%	27%
Anger Intensity	46%	15%	13%
Anger Behaviour	43%	8%	9%
Control of Anger	52%	80%	89%

Early recognition and treatment of PTSD is in WAVE's view an essential part of any armoury to combat violence in society. Screening for PTSD at entry to school, legal, prison systems and all branches of the armed forces could be a very cost-effective way to reduce crime. Veterans of armed combat would, of course, also benefit from routine screening.

Conclusions

- Children who are abused are often traumatised, and many develop PTSD.
- PTSD, from any cause, can turn people violent, or make them more violent.
- PTSD cannot be cured by changing thinking alone. This means conventional interventions fail. Hence PTSD plays an important link in maintaining violence.
- A high proportion of violent prisoners and sex offenders are suffering from PTSD, probably as a result of childhood abuse or neglect.
- There are demonstrated, effective, methodologies for treating PTSD.
- Treating PTSD has a beneficial impact on outcomes with violent offenders.

Footnote: The symptoms of PTSD

The three key symptoms of PTSD are: avoidance, increased arousal and persistent re-experiencing, or re-enactment.

Avoidance

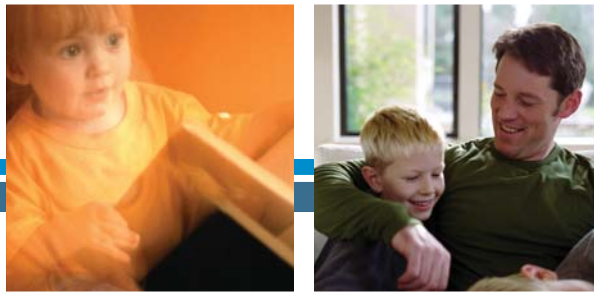
Avoidance includes efforts to avoid thoughts, feelings, conversations, activities, places or people associated with the trauma; inability to recall an important aspect of the trauma; detachment and estrangement; restricted emotions; and sense of foreshortened future. DSM-IV requires at least three of these to be present for PTSD to be diagnosed.

Increased arousal

Increased arousal may take the form of sleep difficulties, irritability or anger outbursts, difficulty concentrating, hypervigilance, or exaggerated startle response. DSM-IV requires at least two of these to be present for PTSD to be diagnosed. Further, DSM-IV requires that the symptoms last more than one month and cause clinically significant distress.

Re-experiencing

Re-experiencing may take the form of recurrent and intrusive images, thoughts and perceptions (or, in young children, repetitive play); dreams; illusions, hallucinations and flashbacks; and intense distress at exposure to cues which are reminders of the trauma.



Section 10
First steps to reduce violence

WAVE recommends large-scale implementation of a series of pilot studies of approved early intervention programmes

Programmes for pilot studies

The first steps to reduce violence require actions which greatly expand the proportion of society's resources being spent on effective, early, preventative interventions. This Report has highlighted (see Section 8) some of the interventions which might be selected, including three in the top four in our evaluation system: Roots of Empathy, PIPPIN and a UK-friendly adaptation of the Nurse Family Partnership, which remains true to its core principles (especially the 2 $^{1}/_{2}$ year relationship between family and visitor, beginning in pregnancy).

Two effective programmes highly recommended by The Children's Bureau's Office on Child Abuse and Neglect of the US Department of Health and Human Services are The Circle of Security (also in the top four), a 20-week, group-based intervention which uses edited videotapes to shift patterns of caregiving interactions in high-risk, caregiver-child dyads; and Parenting Partnership, an innovative home visitation programme designed to meet the needs of medically fragile children living in socially vulnerable families – e.g. parents who have childhood histories of abuse and high levels of stress related to the care of their infant.

In addition, many other early interventions show promise, and might be tested in pilot studies. Amongst those whose evidence is impressive, both recommended in the Sure Start review, are the brief 3-session "van den Boom" intervention, which trebled the number of infants with secure attachment; and the UCLA Family Development Project, which focused on providing a trustworthy relationship to improve the mother's functioning and family relationships (and greatly improve child outcomes).

A UK-based home visiting programme which also scored well in our review was Parent Adviser, which promotes better parent-child relationships in disadvantaged areas of London. This was particularly beneficial for ethnic minority families with few support networks.

Other recommended interventions include Front-pack baby carriers, Infant massage and The Incredible Years (all recommended by both Support from the Start and Communities that Care); The Community Mothers' Programme (Support from the Start) and two identified by British child welfare experts: The Sunderland Infant Programme and The Buffalo Shaken Baby Prevention Project.

Later interventions which should be expanded include action to identify and heal PTSD at key points such as when people enter the school, criminal justice, prison systems or armed forces. The success and combined behavioural, educational and financial cases for the programme of the Dorset Healthy Alliance is also very striking, and further pilots of this novel approach would seem worthwhile.

Three recommended thrusts for action

How could all these ideas be put further into action? Within the limits of the current system (see below) WAVE's recommendation is for a combination of three thrusts:

1. Encouragement of adoption of these recommended programmes by local communities under the umbrella of Sure Start, with adequate funding made available to support them;
2. Provision of specific government funds, under a new project "The Early Prevention Initiative", to local authorities and local Primary Care Trusts, willing to run pilot studies of a list of approved and recommended early prevention programmes;
3. Specific pilot studies funded by the DfES (e.g. Roots of Empathy) or the Department of Health (e.g. Nurse-Family Partnership).

WAVE also recommends sufficient funds be made available to conduct high-quality research evaluations of these pilot studies. This could, for example, be a continuing responsibility of the Sure Start evaluation team at Birkbeck College.

Select one British town or city as a large-scale test area for simultaneous implementation of a full range of effective intervention strategies, to see if their combined effects might be cumulative

Select a town or city for intensive implementation

This above idea did not originate within WAVE, but has been put to WAVE, independently, by senior individuals in both the Labour Party and Conservative Party. WAVE commends it as sound and promising.

WAVE invites debate on the merits of a focused, national crime prevention agency to coordinate, fund and drive effective early prevention strategies

Can an early prevention strategy be implemented?

Although government attitude has been shifting steadily towards earlier intervention, the present structure of responsibilities between Government Departments makes it difficult for this policy to succeed. Existing priorities between DoH, DfES and the Home Office mean the main areas requiring expenditure to prevent future crime and violence do not coincide with those currently given funds for crime prevention. We therefore invite a debate about the merits of establishing a focused, national crime prevention agency to coordinate, fund and drive effective prevention strategies.

The status quo

Current government structures reflect reactive rather than preventative approaches to violence. The ministries which must spend more to succeed with a preventative strategy are Health and Education. Both, however, are under heavy pressure to attend to other priorities such as waiting lists and examination success. The Ministry which does give priority to fighting crime is the Home Office but, by virtue of its ministerial duty to reduce crime now rather than in the future, it understandably concentrates its expensive efforts on tackling symptoms, and on age groups too old for truly effective (and cost-effective) prevention.

In recent years the government has been moving laudably closer and closer to an early prevention strategy. Government web sites are full of research reports praising early intervention. From Sure Start to On Track to Children's Centres, there has been an upsurge in government initiatives which are all steps in the right direction. Nor has this been a one party process: Oliver Letwin, when Shadow Home Secretary, issued a number of insightful documents recommending a strategy of early prevention rather than late reaction.

All, however, have had the flaw of defining "early" as far too late. Anti-social behaviour is hard to shift after 5 years of age. A recent DfES report lent weight to growing awareness that even birth may be too late to prevent damage, and that to be optimal intervention should begin during pregnancy (Sutton and Glover, 2004). For the reasons explained in this report, WAVE recommends even earlier intervention in the form of teaching parenting skills to school children before they become parents.

A national agency to oversee and coordinate prevention?

Ideally, society will address the more extreme social issues involved in the escalation of violence and the erosion of civilisation, as described earlier in the section on social factors. As a matter of priority, however, a structure capable of delivering on a strategy of early prevention needs to be put in place.

Farrington and Coid (2003), in their excellent review, identify three hurdles to overcome before the "best clinical practice" identified from prevention experiments can be successfully integrated into service-delivery systems. The first is the need for training of professionals, able to administer the effective programmes; secondly, not all professionals see themselves as responsible for administering these interventions; and thirdly

there is no organisation in Britain with overall responsibility for co-ordinating programmes to prevent later antisocial behaviour. Farrington and Coid's assessment that the current structure, with responsibility scattered across a range of service agencies, lacks effectiveness is borne out by countless professionals on the ground. Farrington and Coid conclude (p. 365):

> *"Therefore, a national agency should be established with a primary mandate of fostering and funding the prevention of crime and antisocial behaviour."*

Their suggestion is for this agency to provide training, technical assistance, skills and knowledge to local agencies implementing prevention programmes, as well as funding for such programmes, and ensure high standards for evaluation research:

> *"It could set a national and local agenda for research and practice in the prevention of crime, drug and alcohol abuse, mental health problems and associated social problems."*

Provided it does not repeat the current weakness of primary emphasis on late, reactive interventions, WAVE believes these recommendations have much to commend them, and invites a debate on the merits of this proposal. Set up with the right terms of reference, encouraging effective early interventions and the investment of funds and training to make these succeed, it could be the single most effective step towards creating a long-term downward trend in violence in this country. It would require a government with the courage to do what works in the longer term, rather than promising unrealistic and undeliverable improvements in the short-term.

Specific first steps

The following specific initiatives to counteract the propensity to violence are urgently recommended:

1. Expand greatly the proportion of society's resources being spent on effective, early, preventative interventions.
2. Include in the interventions selected: Roots of Empathy, PIPPIN and a UK-friendly adaptation of the Nurse Family Partnership, which remains true to its core principles.
3. Pilot test some of the many other early interventions that show promise
4. Expand later interventions including: action to identify and heal PTSD at key points such as when people enter the school, criminal justice, prison systems or armed forces; and both Triple P and The Incredible Years parent training approaches.
5. As a priority, conduct further pilot versions of the novel Dorset Healthy Alliance approach.
6. Put ideas into action by a combination of three thrusts:

a. Encouragement of adoption of these recommended programmes by local communities under the umbrella of Sure Start, with adequate funding made available to support them;

b. Provision of specific government funds, under a new project "The Early Prevention Initiative", to local authorities and local Primary Care Trusts, willing to run pilot studies of a list of approved and recommended early prevention programmes;

c. Specific pilot studies funded by the DfES (e.g. Roots of Empathy) or the Department of Health (e.g. Nurse-Family Partnership).

7. Make sufficient funds available to conduct high-quality research evaluations of these pilot studies.
8. Select one British town or city as a large-scale test area for simultaneous implementation of a full range of effective intervention strategies.
9. Debate the merits of establishing a focused, national crime prevention agency to coordinate, fund and drive effective prevention strategies.

03–67331
06–54401
04–21156
03–10032

References

Section 1 – Violence: the current situation

Browne, K. D. (1989). *Family violence: spouse and elder abuse*. In K Howells and C Hollin (eds), *Clinical Approaches to Violence*. Wiley, Chichester

Browne, K. D. and Herbert M. (1997). *Preventing Family Violence*. Wiley, Chichester

Buchanan, A (1996). *Cycles of Child Maltreatment: Facts, Fallacies and Interventions*. Wiley, Chichester

Dutton, D. G. (1988). *The Domestic Assault of Women: Psychological and Criminal Justice Perspectives*. Boston: Allyn & Bacon

Gelles, R.J. and Cornell C.P. (1990). *Intimate Violence in Families*. Sage, Newbury Park.

Helton, A. (1986). *The pregnant battered female*. *Response to the Victimisation of Women and Children*, (1): 22-23.

Home Office (1992). *Criminal Statistics: England and Wales 1990*. London: HMSO

Home Office (1996). *The 1996 British Crime Survey, England and Wales*. C. Mirlees-Black, P. Mayhew and A. Percy, eds

Home Office (2003). *Home Office Statistical Bulletin: Crime in England & Wales 2002/03*. J. Simmons and T. Dodd, eds.

Home Office Statistical Bulletins: Crime in England & Wales 2002/03 (Table 3.04) and 2003/04 (Table 2.04).

McFarlane, J. (1991). *Violence during teen pregnancy: health consequences for mother and child*. In B. Levy (Ed.), *Dating Violence: Young Women in Danger*. Seattle, WA: Seal Press, pp 136-141

Mooney, J. (1993). *The Hidden Figure: Domestic Violence in North London*. The findings of a survey conducted on domestic violence in the North London Borough of Islington. Islington Council.

Newberger, E.H., Barkan, S., Lieberman, E., McCormick, M., Yllo, K., Gary, L. and Schechter, S. (1992). *Abuse of pregnant women and adverse birth outcome: current knowledge and implications for practice*. The Journal of the American Association, 267(17).

National Society for the Prevention of Cruelty to Children (1985). *Child abuse deaths. Information Briefing No. 5.* NSPCC, London.

Cawson, P, Wattam, C, Brooker, S & Kelly, G. (2000). *Child Maltreatment in the United Kingdom*. National Society for the Prevention of Cruelty to Children

Painter, K. (1991). *Wife Rape, Marriage and the Law. Survey Report: Key Findings and Recommendations*. Faculty of Economic and Social Studies, University of Manchester, Department of Social Policy and Social Work.

Straus, M., Gelles, R.J., and Steinmetz, S.K. (1980) *Behind closed doors: Violence in the American family*, NewYork: Anchor Press

U.S. Department of Health and Human Services, Administration on Children, Youth and Families, Child Maltreatment 2001 (Washington, DC: US Government Printing Office, 2003).

WAVE report "A Tale of 10 Children", WAVE website www.wavetrust.org

Section 2 – The nature of violence

Bohman, M. (1996). Predisposition to criminality: Swedish adoption studies in retrospect. in *Genetics of criminal and anti-social behaviour*. Wiley: Chichester (Ciba Foundation Symposium 194)

Bremner, J.D., Vythilingam, M., Vermetten, E., Southwick, S.M., McGlashan, T., Nazeer, A., et al (2003). MRI and PET Study of Deficits in Hippocampal Structure and Function in Women With Childhood Sexual Abuse and Posttraumatic Stress Disorder. *American Journal of Psychiatry* 160, May 2003, 924-932

Levinson, D. (1989). *Family Violence in Cross-Cultural Perspective*. Newbury Park: Sage

Lewis, D.O. (1990). Neuropsychiatric and experiential correlates of violent juvenile delinquency. *Neuropsychology Review 1* (2), 125-136.

Lewis, D.O. (1992). From abuse to violence: *Psychophysiological consequences of maltreatment. Journal of the American Academy of Child and Adolescent Psychiatry*, 31, 383-391

Mednick, S. (1996). General Discussion III, page 135, in *Genetics of criminal and anti-social behaviour*. Wiley: Chichester (Ciba Foundation Symposium 194)

Perry, B.D., Pollard, R.A., Blakley, T.L., Baker, W.L. & Vigilante, D. (1996). Childhood Trauma, the Neurobiology of Adaptation and Use-dependent Development of the Brain: How States become Traits. *Infant Mental Health Journal*.

Raine, A., Brennan, P. and Mednick, S.A. (1994). Birth complications combined with early maternal rejection at age one year predispose to violent crime at 18 years. *Archive of General Psychiatry*, 51: 984-988.

Rutter, M. (1996). Introduction: concepts of antisocial behaviour, of cause, and of genetic influences, page 5, in *Genetics of criminal and anti-social behaviour*. Wiley: Chichester (Ciba Foundation Symposium 194)

Rutter, M. (1996). Concluding remarks, p.266, in *Genetics of criminal and anti-social behaviour*. Wiley: Chichester (Ciba Foundation Symposium 194)

Teicher, M. H. (2000). Wounds That Time Won't Heal: The Neurobiology of Child Abuse. *Cerebrum*, 2, 4 (Fall 2000).

Section 3 – The roots of violence

Minus 1 to 3: the key period

Caspi, A. et al 1996. 'Behavioural observations at age 3 years predict adult psychiatric disorders.' *Archives of General Psychiatry* 53: 1033-1039. American Medical Association.

www.childtrendsdatabank.org/health/violence/72Infant Homicide.htm

Creighton, S.J. (2004). Child deaths. In *Child protection statistics*, NSPCC Research Department, London

Cummings, E.M., Iannotti, R.J. & Zahn-Wexler, C. (1989). Aggression between peers in early childhood: Individual continuity and developmental change. *Child Development*, 72, 887-895.

Eron, L.D., (1997). The Development of Antisocial Behaviour From a learning Perspective. ' In D. M. Stoff et al. (eds.) *Handbook of Antisocial Behaviour*. Wiley: New York

Hosking, G.D.C. (2001). Nursery Crimes. *Relational Justice Bulletin*, 9 (January 2001)

Huesmann, R.R., Eron, L.D., Lefkowitz, M.M. & Walder, L.O. (1984). 'The stability of aggression over time and generations.' *Developmental Psychology* 20:1120-1134

Kazdin, A.E. (1987). *Conduct disorders in childhood and adolescence*. Newbury Park, CA: Sage Publications.

Moffitt, T E and Caspi, A (1998). Annotation: implications of violence between intimate partners for child psychologists and psychiatrists. *Journal of Child Psychology and Psychiatry*, 39, 2, 137-144, Cambridge University Press, Cambridge.

National Society for the Prevention of Cruelty to Children (1985). *Child abuse deaths*. Information Briefing No. 5. NSPCC, London.

Rutter, M. Giller, H. & Hagell, A. (1998). *Antisocial Behaviour by Young People*. Cambridge University Press, Cambridge

Shaw, D. S., Owens, E. B., Giovannelli, J., & Winslow, E. B. (2001). Infant and toddler pathways leading to early externalizing disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, 36-43.

Stevenson, J. and Goodman, R. (2001). Association between behaviour at age 3 years and adult criminality. *British Journal of Psychiatry*, 179, 197-202.

Sutton, C. and Glover, V. (2004). Pregnancy: risk and protective factors; effective interventions. *Support From the Start: working with young children and their families to reduce the risks of crime and anti-social behaviour*. Research Report No 524, Department for Education and Skills, London.

Tolan, P.H. and Gorman-Smith, D. (1997). Treatment of Juvenile Delinquency: Between Punishment and Therapy. In D. M. Stoff, J. Breiling and J.D. Maser. (eds.) *Handbook of Antisocial Behaviour*. Wiley: New York

van der Kolk, B.A., Roth, S., Pelcovitz, D. and Mandel, F. (1993). *Complex PTSD: results of the PTSD field trials for DSM-IV. Washington DC*: American Psychiatric Association

World Health organisation International Statistics (2003). WHO, Geneva

The infant brain

Bremner JD, Randall P, Scott TM, Bronen RA, Seibyl JP, Southwick SM, Delaney RC, McCarthy G, Charney DS, Innis RB.(1995). MRI-based measurement of hippocampal volume in patients with combat-related posttraumatic stress disorder. American Journal Psychiatry 152(7), July 1995, 973-81

Bremner, J.D., Vythilingam, M., Vermetten, E., Southwick, S.M., McGlashan, T., Nazeer, A., et al (2003). MRI and PET Study of Deficits in Hippocampal Structure and Function in Women With Childhood Sexual Abuse and Posttraumatic Stress Disorder. *American Journal of Psychiatry* 160, May 2003, 924-932

Chugani, H.T. (1997). Neuroimaging of developmental non-linearity and developmental pathologies. In R. W. Thatcher, G.R. Lyon, J. Rumsey and N. Krasnegor, eds, *Developmental Neuroimaging: Mapping the Development of Brain and Behaviour*. San Diego: Academic Press, 187-195.

Eisler, R. & Levine, D.S. (2002). Nurture, Nature and Caring: We are not Prisoners of our Genes. *Brain and Mind*, 3, 9-52.

Gunnar, M.R. (1996). '*Quality of care and the buffering of stress physiology*.' University of Minnesota Institute of Child Development.

Perry, B.D. (1995) Incubated in Terror: Neurodevelopmental Factors in the Cycle of Violence. In J.D. Osofky (ed.) *Children, Youth and Violence: Searching for Solutions*. Guilford press: New York.

Perry, B.D., Pollard, R.A., Blakley, T.L., Baker, W.L. & Vigilante, D. (1996). Childhood Trauma, the Neurobiology of Adaptation and Use-dependent Development of the Brain: How States become Traits. *Infant Mental Health Journal*.

Schore, A.N. (1994). *Affect Regulation and the Origin of the Self*, Erlbaum, Hillsdale, NJ.

Schore, A.N. (2000). '*Attachment and the regulation of the right brain*.' Attachment and Human Development 2(1).

Shore, R. (1997). *Rethinking the Brain: New Insights into Early Development*. Families and Work Institute, New York.

Stern, D. (1985). *The interpersonal world of the infant: a view from psychoanalysis and developmental psychology*. New York: Basic Books

Teicher, M. H. (2000). Wounds That Time Won't Heal: The Neurobiology of Child Abuse. *Cerebrum*, 2, 4 (Fall 2000).

Attunement and empathy, keys to non violence

Als, H. and Gilkerson, L. (1995). Developmentally supportive care in the neonatal intensive care unit. *Zero to Three*. (June-July): 2-9.

David, T., Goouch, K., Powell, S. and Abbott, L. (2003). *Birth to Three Matters: A Review of the Literature compiled to inform The Framework to Support Children in their Earliest Years*. Research Report No 444, Department for Education and Skills. London: Queen's Printer

Dawson, G., Hessl, D. and Frey, K. (1994). Social influences on early developing biological and behavioural systems related to risk for affective disorder. In *Development and Psychopathology*. Cambridge: Cambridge University Press, pp 759-779

de Zulueta, F. (1993). *From Pain to Violence: The Traumatic Roots of Destructiveness*. Whurr, London

Dutton, D. (1998). *The Abusive Personality: Violence and Control in Intimate Relationships*. Guilford Press, New York

Gilligan, J. M.D. (1996) *Violence - Our Deadly Epidemic and its Causes*. Grosset/Putnam. New York.

Goleman, D. (1996). *Emotional Intelligence: Why it can matter more than IQ*. London: Bloomsbury

Hofer, M.A. (1995). Hidden regulators: Implications for a new understanding of attachment, separation, and loss. In S. Goldberg, R. Muir and J. Kerr, eds, *Attachment Theory: Social Development and Clinical Perspectives*. Hillsdale, NJ: The Analytic Press

Kraemer, G.W. (1992). 'A psychobiological theory of attachment.' *Behavioural and brain sciences*. 15(3): 511.

Main, M. and George, C. (1985). Responses of abused and disadvantaged toddlers to distress in agemates: a study in the daycare setting. *Developmental Psychology*, 21, 407-412

Martin, J. (1981). 'A longitudinal study of the consequences of early mother-infant interaction: a microanalytic approach.' *Monographs of the Society for Research in Child Development*. 46.

Ounce of Prevention Fund (1996). *How Early Experiences Affect Brain Development*. Chicago: Ounce of Prevention Fund, p.5

Pickens, J. and Field, T. (1993). Facial Expressivity in Infants of Depressed Mothers, *Developmental Psychology*, 29, 6.

Peterson, L. & Gable, S. (1998). Holistic injury prevention. In J.R. Lutzker (Ed), *Handbook of child abuse and treatment*, (pp 291-318). New York: Plenum

Radke-Yarrow, M. and Zahn-Waxler, C. (1984). "Roots Motives and Patterns in Children's Prosocial Behaviour", Erwin Staub et al., eds., Development and Maintenance of Prosocial Behaviour, New York: Plenum

Shaw, D.S. and Winslow, E.B. 1997. 'Precursors and correlates of antisocial behaviour from infancy to preschool.' In D. M. Stoff et al. (eds.) *Handbook of Antisocial Behaviour*. Wiley: New York

Shaw, D. S., Owens, E. B., Giovannelli, J., & Winslow, E. B. (2001). Infant and toddler pathways leading to early externalizing disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, 36-43.

Sroufe, L.A. (1989). Infant-caregiver attachment and patterns of adaptation in preschool: The roots of maladaptation and competence. In M. Perlmutter, ed. *Minnesota Symposium in Child Psychology* 16:41-83. Hillsdale, NJ: Lawrence Erlbaum Associates

Sroufe, L.A. (2003). Interview with Sir Richard Bowlby on WAVE video "*From Pain to Violence*"

Stern, D. (1985). *The interpersonal world of the infant: a view from psychoanalysis and developmental psychology*. New York: Basic Books

Parental discipline methods

Buchanan, A. (1996). "*Cycles of Child Maltreatment: Facts, Fallacies and Interventions*." Wiley: Chichester.

Cohen, P., Brook, J.S., Cohen, J., Velez, C.N. & Garcia M. (1990). Common and uncommon pathways to adolescent psychopathology and problem behaviour, in *Straight and devious pathways from childhood to adulthood*, edited by L. Robins and M. Rutter, Cambridge University Press, Cambridge

England, B. (1993) "A history of abuse is a major risk factor for abusing the next generations." In R.J. Gelles and D.R. Loseke (Eds), "*Current Controversies on Family Violence*." Newbury Park, CA:Sage: cited in: Buchanan A. - "*Cycles of Child Maltreatment: Facts, Fallacies and Interventions*", (1996). Wiley: Chichester.

Farrington, D.P.(1991). 'Childhood aggression and adult violence: early precursors and later-life outcomes." In D. J. Pepler and K. H. Rubin (eds.). *The development and treatment of childhood aggression*. Erlbaum: Hillsdale, NJ. 5-29.

Farrington, D.P. (1995), 'The development of offending and anti-social behaviour from childhood: Key findings from the Cambridge study in delinquent development, *Journal of Child Psychology and Psychiatry*, 36

Kaufman, J. and Zigler, E. (1993). "The Intergenerational transmission of abuse is overstated", in R.J. Gelles and D.R. Loseke (Eds), *Current Controversies on family violence*. Newbury Park. CA: Sage

Kazdin, A.E. (1985). *Treatment of antisocial behaviour in children and adolescents*. Homewood. IL: Dorsey Press.

Loeber, R. and Stouthamer-Loeber, M. (1986). Family factors as correlates and predictors of juvenile conduct problems and delinquency. In M. Tonry and N. Morris (eds) *Crime and justice: An annual review of research*, Vol VII, 7, 29-149. Chicago: University of Chicago Press

McCord, J., (1990). Long-term perspectives on parental absence, in *Straight and devious pathways from childhood to adulthood*, eds L. Robins and M. Rutter, Cambridge University Press, Cambridge

Miller A. (1987). *For your own good: The roots of violence in childhood*. Virago. London

Oliver, J.E. (1993): "Intergenerational child abuse, rates, research and clinical implications": *American Journal of Psychiatry*, 150 (9), 1315-1325

Patterson, G.R., DeBaryshe, B.D., and Ramsey, E. (1989). A Developmental Perspective on Antisocial Behaviour, *American Psychologist*, 44, No2. 329-335

Rutter, M., & Giller, H. (1983). *Juvenile delinquency: Trends and perspectives*. New York: Penguin Books.

Smith, Honigsberg and Smith (1973), cited in Gelles, D. and Cornell, C.P. (1995). *Intimate Violence in Families*. Newbury Park: Sage

Tremblay, R.E. (2004). Physical Aggression During Early Childhood: Trajectories and Predictors. *Pediatrics*, 114, 1, July 2004, 43-50.

Trickett, P.K. and Kuczynski, (1986). Children's misbehaviours and parental discipline strategies in abusive and non-abusive families. *Developmental Psychology*, 22. 115-123

Section 4 – The role of social factors

Belson, W.A. (1978) *Television violence and the adolescent boy*. Westmead, England: Saxon House, Teakfield Limited

Browne, K.D. and Pennell, A. (1995). *The Effects of Video Violence on Young Offenders*. Home Office Research Report No 65, London

Caprara, G.V. and Rutter, M., (1995). Individual development and social change, in: Rutter M. and Smith D.J. (Eds) *Psychosocial Disorders in Young People; Time Trends and their causes*: J. Wiley: Chichester

Cohen, P., Brook, J.S., Cohen, J., Velez, C.N. & Garcia M. (1990). Common and uncommon pathways to adolescent psychopathology and problem behaviour, in *Straight and devious pathways from childhood to adulthood*, edited by L. Robins and M. Rutter, Cambridge University Press, Cambridge

Duster, T. (1995). "Post-industrialism and youth unemployment," pp. 461-486 in K. McFate, R Lawson & W. J. Wilson (Eds.). *Poverty, inequality and the future of social policy*: *Western States in the New World Order*. New York: Russell Sage.

Dwyer, P. (1996) *Opting Out: Early School Leavers and the Degeneration of Youth Policy*. Hobart: National Clearinghouse for Youth Studies.

Eron, L.D., (1982) Parent child interaction, television violence and aggression on children. *American Psychologist* 27, 197-211.

Geen, R. (1994). Television and aggression: recent developments in research and theory; in *Media, children and the family: social scientific, psychodynamic and clinical perspectives*, eds Bryant, J. and Zillmann, D; Lawrence Erlbaum, Hillsdale NJ.

Hess, L.E. (1995). "Changing Family Patterns in Western Europe: Opportunity and risk factors for adolescent development" in: Rutter M. and Smith D.J. (Eds) *Psychosocial Disorders in Young People; Time Trends and their causes*; J. Wiley: Chichester

Huesmann, L. R., Lagerspetz, K., & Eron, L. D. (1984). Intervening variables in the TV violence-aggression relation: Evidence from two countries. *Developmental Psychology*, 20(5), 746-777. (EJ 308 850)

International Narcotics Control Board, (2003). *Annual Report*. United Nations. ISBN 92-1-148172-4 ISSN 0257-3717

James, O. (1995) *Juvenile Violence in a Winner-Loser Culture: Socio-Economic and Familial Origins of the Rise of Violence Against the Person*. London: Free Association Books.

Jo E. and Berkowitz. L. (1994). A priming effect analysis of media influences: an update, in *Media effects: advances in theory and research*, eds Bryant, J. and Zillmann, D; Lawrence Erlbaum, Hillsdale NJ.

Johnson, R. (1996). *Violence - causes and cures* (unpublished paper delivered to Quaker Alternatives to Violence programme Annual Conference, July 1996), summarised in Quaker AVP Newsletter.

Kendler, K.S., et al. Childhood sexual abuse and adult psychiatric and substance use disorders in women: An epidemiological and co-twin control analysis. *Archives of General Psychiatry* 57(10):953-959, 2000.

Miller, T. R., Cohen, M.A. and Wiersema, B. (1996). *Victim Costs and Consequences: A New Look*, NIJ Research Report. Washington.

National Research Council (*1993).Understanding and preventing violence*. Washington, DC: National Academy Press.

National Television Violence Study (1995). Mediascope, for the National Cable Television Association

Newcombe, R., Measham, F. and Parker, H. (1995). A survey of drinking and deviant behaviour among 14/15 year olds in North West England. *Addiction Research*, vol.2, no.4.

Polk, K. (1984) "The new marginal youth," *Crime and Delinquency*. 30: 462-480.

Polk, K. (1999). Changing Patterns of Violence. Paper given at the 3rd National Outlook Symposium on Crime, Australian Institute of Criminology, Canberra, March 22, 1999

Public Record Office web site, Pathways to the Past, 1901

Richardson, A. & Budd, T. (2003). *Alcohol, crime and disorder: a study of young adults*. Home Office Research Study 263, London

Sampson R.J. and Laub J.H. (1993), *Crime in the making: Pathways and turning points through life*. Cambridge MA/London, Harvard University Press

Smith, D.J. (1995). Youth Crime and Conduct Disorders: Trends, Patterns and Causal Explanations. In: Rutter M. and Smith D.J. (Eds) *Psychosocial Disorders in Young People; Time Trends and their causes*: Wiley: Chichester

Wartella, E. (1995) "Media and Problem Behaviours in Young People", in: Rutter M. and Smith D.J. (Eds) *Psychosocial Disorders in Young People; Time Trends and their causes*: J. Wiley: Chichester

Section 5 – The cost of violence in the UK

Bright, J. (1999). Social Exclusion (Social Exclusion Unit, The Cabinet Office). Presentation to Royal Society of Medicine Conference, London, on *The Roots of Violence in Children and Young People*, March 1999.

Caldwell, R.A. (1992). *The Costs of Child Abuse vs Child Abuse Prevention*: Michigan's Experience. Michigan Children's Trust Fund, Lansing, MI.

Mandel, M.J., Magnusson, P., Ellis, J.E., DeGeorge, G., & Alexander, K.L. (1993). The economics of crime. *Business Week* (December 13), 72-75, 78-81.

Miller, T. R., Cohen, M.A. and Wiersema, B. (1996). *Victim Costs and Consequences: A New Look, NIJ Research Report*. Washington.

National Commission of Enquiry into the Prevention of Child Abuse (1996). *Childhood matters*. London: The Stationery Office

National Crime Prevention Council of Canada (1996). *Safety and Savings: Crime Prevention through Social Development*, Ottawa, Ontario, March

National Crime Prevention Council of Canada (2000). *The dollars and sense of a comprehensive crime prevention strategy for Canada*. A Report of a Seminar on the Effectiveness of Crime Prevention through Social Development (July 2000).

Scott, S., Knapp, M., Henderson, J. & Maughan, B. (2001) Financial cost of social exclusion: follow-up study of antisocial children into adulthood, British Medical Journal, 323, 191-194.

Working party of the Attorney General of California (1994). *The impact of Violence*. Sacramento, CA

World Health Organisation (2004). Economic Dimensions of Interpersonal Violence. Geneva

Section 6 – Early intervention is cost-effective

Barnett, W.S. (1995). Long-Term Effects of Early Childhood Programs on Cognitive and School Outcomes. *The Future of Children*, 5, 3, Winter 1995

Barnett, W.S. (1993). Cost-benefit analysis. In L.J. Schweinhart, H.V. Barnes, & D.P.Weikart, *Significant benefits: The High/Scope Perry preschool study through age 27* (pp. 142-73). Ypsilanti, MI: High/Scope Press.

Barnett, W.S. (1996). *Lives in the balance: Age-27 benefit-cost analysis of the High/Scope Perry preschool program*. Ypsilanti, MI: High/Scope Press.

Caldwell, R.A. (1992). *The Costs of Child Abuse vs Child Abuse Prevention*: Michigan's Experience. Michigan Children's Trust Fund, Lansing, MI.

Farrington D.P. and Coid J.W. (2003). *Early prevention of adult antisocial behaviour*. Cambridge: Cambridge University Press

Hahn, A. (1994). *Evaluation of the Quantum Opportunities Program* (*QOP*)*: Did the Program Work?* Waltham, MA: Brandeis University

Hahn, A. (1999). Extending the time of learning. In D.J. Besharov (ed.), *America's Disconnected Youth: Toward a Preventive Strategy*, 233-265. Washington DC: Child Welfare League of America Press

Greenwood, P.W., Model, K.E., Rydell, C.P. and Chiesa, J. (1996). *Diverting Children From A Life of Crime: Measuring costs and benefits*. Rand: California.

Jones, M.B., & Offord, D.R. (1989). Reduction of antisocial behaviour in poor children by nonschool skill-development. *Journal of Child Psychology and Psychiatry*, 30, 737-50.

Karoly, L.A., Greenwood, P.W., Everingham, S.S., Hoube, J., Kilburn, M.R., Rydell, C.P., Sanders, M. & Chiesa, J. (1998). *Investing in our children: What we know and what we don't know about the costs and benefits of early childhood interventions*. Santa Monica, CA: The RAND Corporation

Lally, J.R., Mangione, P.L. and Honig, A.S. (1988). The Syracuse University family development research program: Long-range impact of an early intervention with low-income children and their families. In D. Powell (ed.), *Parent Education as Early Childhood Intervention: Emerging Directions in Theory, Research and Practice*, 79-104. Norwood, NJ: Ablex

MacLeod, J. and Nelson, G. (2000). Programs for the promotion of family wellness and the prevention of child maltreatment: A meta-analytic review. *Child Abuse & Neglect*, 24, (9), pp 1127-1149.

Tremblay, R.E. and Japel, C. (2003). Prevention during pregnancy, infancy and the preschool years. Farrington D.P. and Coid J.W. (Eds) *Early prevention of adult antisocial behaviour*. Cambridge: Cambridge University Press

Section 7 – Interventions that work

Section Center for the Study and Prevention of Violence (2004). *Blueprints for violence prevention*. University of Colorado, Boulder, CO.

The Children's Bureau's Office on Child Abuse and Neglect (2003). *Emerging Practices in the Prevention of Child Abuse and Neglect*. US Department of Health & Human Services, Washington, D.C.

Communities that Care (2005). "A guide to Promising Approaches, second edition". Communities that Care, London.

David, T., Goouch, K., Powell, S. and Abbott, L. (2003). Birth to Three Matters: *A Review of the Literature compiled to inform The Framework to Support Children in their Earliest Years*. Research Report No 444, Department for Education and Skills. London: Queen's Printer

de Zulueta, F. (1993). *From Pain to Violence: The Traumatic Roots of Destructiveness*. Whurr, London

Dutton, D. (1998). *The Abusive Personality: Violence and Control in Intimate Relationships*. Guilford Press, New York

Garmezy, N. (1993) Children in poverty. Resilience despite risk. Psychiatry. 56, 127-136.

Gilligan, J. (1996) *Violence - Our Deadly Epidemic and its Causes*. Grosset/Putnam. New York.

Goleman, D. (1996). *Emotional Intelligence: Why it can matter more than IQ*. London: Bloomsbury

Kurtz, Z. (2004). *What works in promoting children's mental health*. Sure Start, London

MacLeod, J. and Nelson, G. (2000). Programs for the promotion of family wellness and the prevention of child maltreatment: A meta-analytic review. *Child Abuse & Neglect*, 24, (9), pp 1127-1149.

Main, M. and George, C. (1985). Responses of abused and disadvantaged toddlers to distress in agemates: a study in the daycare setting. *Developmental Psychology*, 21, 407-412

McCord, J. (1982) 'A longitudinal view of the relationship between paternal absence and crime' in

J. Gunn & D.P. Farrington (eds.) Abnormal offenders, delinquency, and the criminal justice system. Chichester: Wiley.

Peterson, L. & Gable, S. (1998). Holistic injury prevention. In J.R. Lutzker (Ed), *Handbook of child abuse and treatment*, (pp 291-318). New York: Plenum

Sutton, C., Utting, D. and Farrington, D. (2004). *Support From the Start: working with young children and their families to reduce the risks of crime and anti-social behaviour*. Research Report No 524, Department for Education and Skills, London.

Section 8 – An early prevention strategy

Roots of Empathy (www.rootsofempathy.org)

Cohen, J. (1988). *Statistical power analysis* (2nd ed.) Hillsdale , NJ : Erlbaum.

Schonert-Reichl, K.A. (2002). Effects of the "Roots of Empathy" Program on Primary Grade Children's Emotional and Social Competence. Paper of the Department of Educational and Counselling Psychology, and Special Education. University of British Columbia.

Schonert-Reichl, K.A., Smith, V., Zaidman-Zait, A. & Hertzman, C. (2004). *Fostering Children's Social and Emotional Competence in Schools: Effects of the "Roots of Empathy" Primary Preventive Intervention*. Human Early Learning Partnership, University of British Columbia, Vancouver.

PIPPIN (www.pippin.org.uk)

Buist, A., Westley, D., and Hill, C. (1999) Antenatal prevention of postnatal depression, *Archives of Womens' Mental Health* 1: 167-173.

Parr, M. (1996). *Support For Couples in the Transition to Parenthood*, Unpublished PhD Thesis, University of East London (1996)

Parr, M. (1998). A New Approach to Parent Education, *British Journal of Midwifery*, 6:3: 160-165

Commons Health Select Committee Report (1997). The Stationery Office, London.

Sure Start Unit (1999) "*A guide to evidence-based practice: 'Trailblazer' edition*", Sure Start, London

Nurse Family Partnership (www.nursefamilypartnership.org)

Olds, D. (1997). The prenatal/early infancy project: Fifteen years later. In G.W. Albee and T.P. Gullotta, eds, *Primary Prevention Works*, Vol VI *of Issues in Children's and Families'* Lives. Sage Publications, Thousand Oaks, CA, pp. 41-67.

Olds D.L. et al. (1997). 'Long-term effects of home visitation on maternal life course and child abuse and neglect.' *Journal of the American Medical Association* 278: 637-643.

Olds D.L., Henderson C.R., Cole R, Eckenrode J, Kitzman H, Luckey D, Pettitt L, Sidora K, Morris P, Powers J. (1998). Long-term effects of nurse home visitation on children's criminal and antisocial Behaviour: 15-year follow-up of a randomised controlled trial. *Journal of the American Medical Association*, 14, 1238-44. [Elmira follow up]

Olds, D.L. (2002). Prenatal and Infancy Home Visiting by Nurses: From randomised Trials to Community Replication. In *Prevention Science*, 3, 3, 153-172.

Olds D.L., Henderson C, Eckenrode J. (2002). Preventing child abuse and neglect with parental and infancy home visiting by nurses. In: K.D.Browne, H.Hanks, Stratton.P, Cerezo MA, editors. *Early prediction and prevention of child abuse: A handbook*. 2002. p. 165-82.

Olds D.L., Robinson J, O'Brien R, Luckey D.W., Pettitt L.M., Henderson C.R. Jr, Ng R.K., Sheff K.L., Korfmacher J, Hiatt S, Talmi A. (2002). Home visiting by paraprofessionals and by nurses: a randomised, controlled trial. *Pediatrics*. 2002 Sep;110(3):486-96. [Denver study]

Olds D.L., Kitzman H, Cole R, Robinson J, Sidora K, Luckey D.W., Henderson C.R. Jr, Hanks C, Bondy J, Holmberg J. (2004). Effects of nurse home-visiting on maternal life course and child development: age 6 follow-up results of a randomised trial. *Pediatrics*. 2004 Dec;114(6):1550-9. [Memphis follow-up]

Olds D.L., Robinson J, Pettitt L, Luckey D.W., Holmberg J, Ng R.K., Isacks K, Sheff K, Henderson C.R. Jr. (2005). Effects of home visits by paraprofessionals and by nurses: age 4 follow-up results of a randomised trial. *Pediatrics* 2004 Dec;114(6):1560-8. [Denver follow-up]

Circle of Security (www.circleofsecurity.org)

The Children's Bureau's Office on Child Abuse and Neglect (2003). *Emerging Practices in the Prevention of Child Abuse and Neglect*. US Department of Health & Human Services, Washington, D.C.

Marvin, R., Cooper, G., Hoffman, K. & Powell, B. (2002). The Circle of Security Project: Attachment-based intervention with caregiver-pre-school child dyads. *Attachment & Human Development*, Vol. 4, No 1, April 2002, 107-124

Second-tier of attractive interventions

Davis, H. & Rushton, R. (1991). Counselling and supporting parents of children with developmental delay: a research evaluation. *Journal of Mental Deficiency Research*, 35, 89-112.

Davis, H., Spurr, P. Cox, A. & Lynch, M.A. (1997) A description and evaluation of a community child mental health service. *Clinical Child Psychology and Psychiatry*, 2, 221-238.

Davis H & Spurr P. (1998). Parent Counselling: An Evaluation of a Community Child Mental Health Service. *Journal of Child Psychology and Psychiatry*, 39(3): 365-376.

Heinicke C.M. & Ponce V.A. (1999). Relation-based early family intervention. In Cicchetti D, Toth SL (eds).; Volume 9:

Developmental Approaches to Prevention and Intervention, Rochester Symposium on Developmental Psychopathology 1999, Rochester: University of Rochester Press.

Kurtz, Z. (2004). *What works in promoting children's mental health*. Sure Start, London

Van den Boom D.C. (1994).The influence of temperament and mothering on attachment and exploration: An experimental manipulation of sensitive responsiveness among lower class mothers with irritable infants. *Child Development*, 1994; 65: 1449-1469.

Van den Boom D.C. (1995). Do first-year intervention effects endure? Follow-up during toddlerhood of a sample of Dutch irritable infants. *Child Development*, 1995; 66: 1798-1816.

Third-tier of attractive interventions

Anisfield, E., Casper, V., Nozyce, M & Cunningham, N. (1990) Does infant carrying promote attachment? An experimental study of the effects of increased physical contact on the development of attachment. *Child Development*, 61, 1617-1627.

Barker, W. (1994) *Child Protection: the Impact of the Child Development Programme*. Bristol: Early Childhood Development Centre.

Barker, W. & Anderson, R.A. (1988) *The Child Development Programme: an evaluation of process and outcome*. Bristol: Early Childhood Development Unit.

The Buffalo Shaken Baby Prevention Project: contact Kim Smith RN KSmith@kaleidahealth.org or Kathy DeGuehery RN KDeGuehery@kaleidahealth.org, Program Coordinators

Field, T. (1998) Touch therapy effects on development. *International Journal of Behavioural Development*. 22, 779-797.

Field, T. (2000) *Touch Therapy*. London. Churchill Livingstone.

Field, T., Schanberg, S.M., & Scafidi, F., Bower, C., Vega-Lahr, N., Garcia, R., Nystrom, J. & Kuhn, C. (1986). Tactile/kinesthetic stimulation effects on preterm neonates. *Pediatrics*, 77, 654-658.

Hutchings, J. and Bywater, T. (2004). Evaluation of the Webster-Stratton Group Parenting Programme with parents of "at risk" schoolchildren in North Wales Sure Start Centres.

Johnson, Z., Howell, F. & Molloy, B. (1993) Community mothers programme: randomised controlled trial of non-professional intervention in parenting. *British Medical Journal*, 306, 1449-1452.

Johnson, Z., Molloy, B., Fitzpatrick, P., Scallon, E., Rooney, B., Keegan, T. & Byrne, P. (2000). Community Mothers Programme; A seven year follow-up of a randomised controlled trial of non-professional intervention in parenting. *Journal of Public Health Medicine*, 22, 337-342.

Maher, T. (2002). Talking Babies - securing early attachment. *Young Minds Magazine*, September/October 2002

Manby, M. (2002) *Parents and Children Videotape Series*: *Overview Evaluation of Four Programmes*, CtC Coventry Nationwide Children's Research Centre

Onozawa K, Glover V, Adams D, et al (2001). Infant massage improves mother-infant interaction for mothers with postnatal depression. *Journal of Affective Disorders* 63: 201-207

Prescott, J. (1975). Apr. "Pleasure/Violence Reciprocity Theory: The Distribution of 49 Cultures, Relating Infant Affection to Adult Physical Violence." .

Scott, S., Spender, Q.,Doolan, M., Jacobs, B. and Aspland, H. (2001) Multicentre controlled trial of parenting groups for childhood antisocial behaviour in clinical practice, *British Medical Journal* 323, 194-198

Sutton, C. and Murray, L. (2004). Birth to two years: risk and protective factors; effective interventions. *Support From the Start: working with young children and their families to reduce the risks of crime and anti-social behaviour*. Research Report No 524, Department for Education and Skills, London.

Taragon, S. (2004). *Baby Massage: Local Evaluation Report for Keystone Sure Start*. Red Door Associates

Webster-Stratton, C. (2001). The Incredible Years Parent, Teacher and Child Training series. Book eleven: Blueprints for violence prevention. Boulder, CO: Institute of behavioural Science, University of Colorado.

Webster-Stratton, C. & Hammond, M. (1997). Treating children with early-onset conduct problems: A comparison of child and parent training interventions. Journal of Consulting and Clinical Psychology, 65, 93-109.

Webster-Stratton, C. & Hancock, L. (1998) 'Parent training for young children with conduct problems. Content, methods, and therapeutic process.' In C.E. Schaefer (ed) Handbook of Parent Training. New York. NY. Wiley.

Webster-Stratton, C. & Reid, M.J. (1999). Treating children with early-onset conduct problems: The importance of teacher training. Paper presented at the Association for the Advancement of Behaviour Therapy, Toronto, Canada.

Webster-Stratton, C. Reid, M.J. & Hammond, M. (2001) Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. Journal of Clinical Child Psychology, 30, 238-302.

Webster-Stratton, C. & Taylor, T. (2001). Nipping early risk factors in the bud: Preventing substance abuse, delinquency and violence in adolescence through interventions targeted at young children (ages 0-8 years). Prevention Science, 2(3), 165-192.

Other interesting programmes

Bateman, B.J., Warner, J.O., Hutchinson, E., Dean, T. et al (2004). The effects of a double blind placebo controlled artificial food colourings and benzoates preservatives challenge on hyperactivity in a general population sample of pre-school children. *Archives of Disease in Childhood*. 89

Cooper, P.J. & Murray, L. (2003) Controlled trial of the short- and long-term effect of psychological treatment of post-partum depression. Impact on maternal mood. *British Journal of Psychiatry*, 182, 412-419.

Davis H & Spurr P. (1998). Parent Counselling: An Evaluation of a Community Child Mental Health Service. *Journal of Child Psychology and Psychiatry*, 39(3): 365-376.

Fonagy P. (1998). Prevention, the appropriate target of infant psychotherapy. *Infant Mental Health Journal*, 19(2): 124-150.

Fonagy P, Target M. (1997). Attachment and reflective function: Their role in self-organisation. *Development and Psychopathology*, 9: 679-700.

France, A. & Hacking, S. (2004). *Evaluation of the Family Links Programme*, Coventry, University of. Sheffield.

Hoffman M.L. (2000). *Empathy and moral development. Implications for caring and justice*. Cambridge: Cambridge University Press.

Holden, J. (1989) Counselling in a GP setting: a controlled study of health visitor treatment of postnatal depression. *British Medical Journal*, 298, 223-226.

Holden, G.W. & West, M.J. (1989). Proximate regulation by mothers: A demonstration of how differing styles affect young children's Behaviour. *Child Development*, 60, 64-69.

Izard CE, Fine S, Mostow A, Trentacosta C, Campbell J. (2002). Emotion processes in normal and abnormal development and preventive intervention. *Development and Psychopathology*, 14(4): 761-787.

Johnson, D. L. & Walker, T. (1987) Primary prevention of behaviour problems in Mexican American children. *American Journal of Community Psychology*. 15, 375-385.

Lally, J.R.; P.L. Mangione; A.S. Honig; and D.S. Wittner. (1988). "More Pride, Less Delinquency: Findings From the 10-Year Follow-Up Study of the Syracuse University Family Development Research Program." Zero To Three 8(4):13–18.

Layton, M. (1996) *An evaluation of the effectiveness of the 'School and Family Links Programme'. Part of the 'Family Nurturing Network*' Registered Charity Number 1034907. Master of Arts in Education Dissertation, Oxford Brookes University

Murray, L., Cooper, P.J., Wilson, A. & Romaniuk, H. (2003) Controlled trial of the short- and longterm effect of psychological treatment of post-partum depression. *British Journal of Psychiatry*, 182, 420-427.

Parr, M. (1996) *Support For Couples In The Transition To Parenthood*, Unpublished PhD Thesis, University East London.

Parr, M. (1998) *A New Approach to Parent Education British Journal Midwifery*, 6, (3): 160-165.

Parr, M. (2003). Group Based Approaches to Training Non-Mental Health Professionals to Support Parent-Infant Relationships. *The Signal: Newsletter of the World Association for Infant Mental Health*, 11: 3, 1-6

Pritchard, C. (2001). *A family-teacher-social work alliance to reduce truancy and delinquency – the Dorset Healthy Alliance Project*. Home Office Research, Development and Statistics Directorate, Occasional paper No 78

Sanders, M. R., Turner, K. M. T., & Markie-Dadds, C. (2002). The development and dissemination of the Triple P-Positive Parenting Program: A multilevel, evidence-based system of parenting and family support. *Prevention Science*, 3, 173-189.

Sanders, M.R. (2003). *Triple P Positive Parenting Program Professional Training*. *The Evidence Base for the Triple P-Positive Parenting Program*. University of Queensland.

Seitz, V., Rosenbaum, L.K. & Apfel, N. (1985) Effects of family support intervention. A ten-year follow up. *Child Development*, 56, 376-391.

Shaw, D. S., Owens, E. B., Giovannelli, J., & Winslow, E. B. (2001). Infant and toddler pathways leading to early externalizing disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, 36-43.

Toth S.L., Maughan A, Manly J.T., Spagnola M, Cicchetti D. (2002). The relative efficacy of two interventions in altering maltreated preschool children's representational models: implications for attachment theory. *Developmental Psychopathology*, 14(4): 877-908.

Woollett, A., and Parr, M. (1997). Psychological tasks for women and men in the postpartum. *Journal of Reproductive and Infant Psychology*, 15: 159-183.

Section 9 – PTSD: Linking child abuse and violence

American Psychiatric Association; 1994. *Diagnostic and Statistical Manual of Mental Disorders*. 4th ed. Washington, DC.

Brown, R. & Kulik, J. (1977). Flashbulb memories. *Cognition*, 5, 73-99.

Burgess, A.W., Hartman, C.R., & McCormick, A. (1987). Abused to abuser: Antecedents of socially deviant Behaviour. *American Journal of Psychiatry*, 144, 1431-1436.

Butler, T. & Allnutt, S. (2003). Mental illness among New South Wales Prisoners. NSW Corrections Health Service. Matraville, NSW.

Collins, J.J., & Bailey, S.L., (1990). Traumatic stress disorder and violent Behaviour. *Journal of Traumatic Stress* (ISSN: 0894-9867), v. 3, No. 2, pp. 203-220.

Davidson J, Hughes D, Blazer D and George L (1991). Post traumatic stress disorder in the community: an epidemiological study. *Psychological Medicine*. 21: 713-721.

de Zulueta, F. (1993). *From Pain to Violence: The Traumatic Roots of Destructiveness*. Whurr, London

Dutton, D. G. (1995). *The domestic assault of women: Psychological and criminal justice perspectives*. Boston: Allyn & Bacon.

Dutton, D. (1998). *The Abusive Personality: Violence and Control in Intimate Relationships*. Guilford Press, New York

Fullilove, M.T., Fullilove, R.E., Smith, M., Michael, C., Panzer, P.G. & Wallace, R. (1993). Violence, trauma and post-traumatic stress disorder among women drug users. *Journal of Traumatic Stress*, 6, 533-543

Green, A.H. (1983). Dimension of psychological trauma in abused children. *American Journal of Psychiatry*, 22, 231-237

Groth, A.N. (1979). Sexual trauma in the life histories of sex offenders. *Victimology*, 4, 6-10.

Horowitz, M.J. (1986a). *Stress Response Syndromes*. Jason Aronson: Northvale, NJ

Horowitz, M.J. (1986b). Stress Response Syndromes: A review of posttraumatic and adjustment disorders. *Hospital and Community Psychiatry*, 37, 241-249

Lewis, D.O. (1990). Neuropsychiatric and experiential correlates of violent juvenile delinquency. *Neuropsychology Review*, 1(2), 125-136.

Lewis, D.O. (1992). From abuse to violence: Psychophysiological consequences of maltreatment. *Journal of the American Academy of Child and Adolescent Psychiatry*, 31, 383-391.

Lewis, D.O., Pincus, J.H., Bard, B., Richardson, E., Prichep, L.S., Feldman, M., & Yeager, C. (1988). Neuropsychiatric, psychoeducational, and family characteristics of 14 juveniles condemned to death in the US. *American Journal of Psychiatry, 145,* 584-589.

Lewis, D.O., Lovely, R., Yeager, C., & Della Femina, D. (1989). Toward a theory of the genesis of violence: A follow-up study of delinquents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 28, 431-436.

Long, C.D. (1991). Posttraumatic stress disorder symptomatology in incarcerated and nonincarcerated adolescent males. (Dissertation). *California School of Professional Psychology*, Fresno.

McFarlane, A. (1996). The longitudinal course of trauma. In *Baillière's Psychiatry*, 2(2), May 1996

McFarlane, A.C. & van der Kolk, B.A. (1996). Trauma and its Challenge to Society. In van der Kolk, B.A., McFarlane, A.C. and Weisaeth, L. *Traumatic Stress: The Effects of Overwhelming Experience on Mind, Body and Society*. New York: Guilford Press

Mezey, G. & King, M. (1989). The effects of sexual assault on men: A survey of 2 victims. *Psychological Medicine*, 19, 205-209.

Perry, B.D. (1994). Neurobiological sequelae in childhood trauma: Post-traumatic stress disorders in children. In M. Murberg (Ed.), *Catecholamine function in post-traumatic stress disorder: Emerging concepts*. Washington, DC: American Psychiatric Press, 233-255.

Post, R.M. (1992). Transduction of psychosocial stress into the neurobiology of recurrent affective disorder. *American Journal of Psychiatry*, 149, 999-1010

Pynoos, R.S. & Nader, K. (1988). Children's memory and proximity to violence. *Journal of the American Academy of Child and Adolescent Psychiatry*, 28, 236-244

Pynoos, R.S., Steinberg, A.M. & Goenjian, A. (1996). Traumatic Stress in Childhood and Adolescence: Recent Developments and Current Controversies. In van der Kolk, B.A., McFarlane, A.C. and Weisaeth, L. (Eds) *Traumatic Stress: The Effects of Overwhelming Experience on Mind, Body and Society*. New York: Guilford Press

Raeside, C.W. (1994). *Posttraumatic stress disorder in a female prison population*. Dissertation. Royal Australian and New Zealand College of Psychiatrists.

Raeside, C.W.J., Shaw, J.J. & McFarlane, A.C. (1995). *Posttaumatic stress disorder (PTSD) in perpetrators of violent crime*. Manuscript submitted for publication: cited in McFarlane, A.C. and Yehuda, R. (1996). Resilience, Vulnerability and the Course of Posttraumatic Reactions, in van der Kolk, B.A., McFarlane, A.C. and Weisaeth, L. (Eds) *Traumatic Stress: The Effects of Overwhelming Experience on Mind, Body and Society*. New York: Guilford Press

Simpson A.I.F., & Brinded, P. (1999). *National Study of Psychiatric Morbidity in NZ Prisons. An investigation into the prevalence of psychiatric disorders among New Zealand inmates*. New Zealand Department of Corrections.

Steiner, H., Garcia, I., & Matthews, J. (1997). Posttraumatic stress disorder in incarcerated juvenile delinquents. *Journal of the American Academy of Child and Adolescent Psychiatry*, (ISSN 0890-8567) v. 36, no. 3, pp. 357-365.

Teplin LA, Abram KM, et al. (1996). Prevalence of psychiatric disorders among incarcerated women. I. Pretrial jail detainees. *Archives of General Psychiatry*, 53: 505-512.

van der Kolk, B.A. (1987). *Psychological trauma*. American Psychiatric Press: Washington DC.

van der Kolk, B.A. (1996). The Complexity of Adaptation to Trauma. In van der Kolk, B.A., McFarlane, A.C. and Weisaeth, L. Traumatic Stress: *The Effects of Overwhelming Experience on Mind, Body and Society*. New York: Guilford Press

van der Kolk, B.A. & McFarlane, A.C. (1996). The Black Hole of Trauma. In van der Kolk, B.A., McFarlane, A.C. and Weisaeth, L. *Traumatic Stress: The Effects of Overwhelming Experience on Mind, Body and Society*. New York: Guilford Press

Wells J E et al (1989). Christchurch Psychiatric Epidemiology Study, Part 1: Methodology and Lifetime Prevalence for Specific Psychiatric Disorders. *Austr NZ J Psychiatry*. 23: 315-326.

Werner E.E. (1989) "High-risk children in young adulthood: A longitudinal study from birth to 32 years." *American Journal of Orthopsychiatry 59,* 72-81

Widom, C.S. (1987). The cycle of violence. *Science*. 244, 160-165.

A more comprehensive review of the role of PTSD in violence, including sexual violence, can be found on WAVE's web site www.wavetrust.org.

Section 10 – First steps to reduce violence

Farrington D.P. and Coid J.W. (2003). *Early prevention of adult antisocial behaviour*. Cambridge: Cambridge University Press

Sutton, C. and Glover, V. (2004). Pregnancy: risk and protective factors; effective interventions. *Support From the Start: working with young children and their families to reduce the risks of crime and anti-social behaviour*. Research Report No 524, Department for Education and Skills, London.

References for specific interventions can be found in Section 8

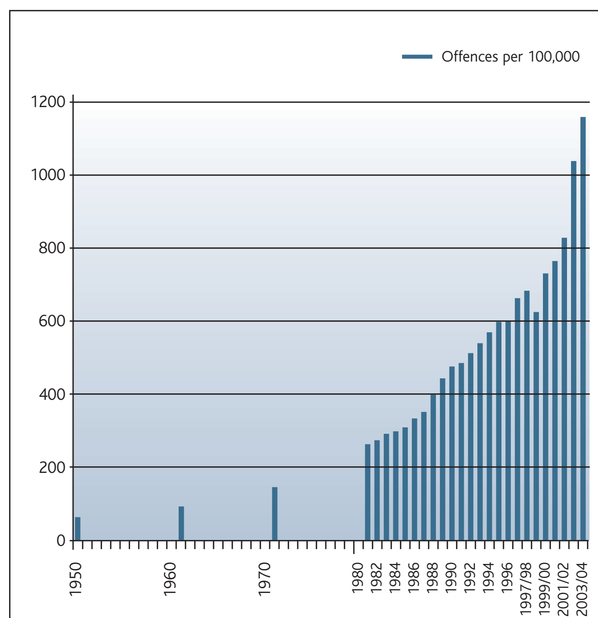
Appendix 1

Some statistics on violence: a view by George Hosking

It is over 20 years since Gibbons (1982) noted that crime figures "...are among the most unreliable and questionable social facts...". Finding and interpreting crime statistics is still a challenge.

For some time in my writings for WAVE I have commented on the huge rise in violence in the second half of the 20th Century. The graph below, shown in the main report Section I, shows recorded violent offences per 100,000 population in England & Wales between 1950 and 2003.

Figure 3: Violent Offences per 100,000 population, England & Wales 1950-2004



In the graph, the significant rise in reported 1999-2003 figures appears despite their having been adjusted downwards to reflect changed recording practice. The rise in violence is massive, and terrifying. The report shows the figures rising from 47 per 100,000 population in 1950 to 1,158 in 2003/04 This is 25 times the level in 1950. (2,113 in the police records, but I adjusted down to remove changes in methodology).

While some of the increase is inflated due to more accurate capture of violent crime, especially forms such as domestic violence, there has undoubtedly been a massive rise in actual violence in Britain since the 1950s – a phenomenon observed all over the globe.

WAVE prefers to keep a long-term perspective on levels of violence, for the simple reason that we seek to promote a return to levels of violence of the 1950s (or less), rather than settle for, say, violence as it was in 1980 – already nearly 6 times higher in England & Wales than in 1950.

Is this possible? James Gilligan, former head of the Massachusetts Prison Service psychiatry service, who reduced violent crime in the state's prisons almost to zero, has said *"It is really quite clear that we can prevent violence, and it is also clear how we can do so, if we want to"* (Gilligan, 1996, page 21). Like Gilligan, I have worked with, and cured, violent men – though not as many as he, in his 25 years of experience with violent murderers. I accept his arguments – indeed I have found them of enormous value in dealing with some very difficult, violent people. I seek here to add to them. We propose that "acceptable" levels are set at least as low as those in 1950, not as high as those in 1980 (or 2000).

Much recent comment from official UK sources on trends in violence has been optimistic, drawing attention to short-term reductions in violence, as measured by the British Crime Survey. Compared with official police statistics this sampling and interview method has the major advantage of capturing unrecorded crime, coupled with the disadvantages of not including crime against under-16 year olds (a growing segment), and being dependent on statistical projections. The following Home Office comments in 2001 and 2003 show it has given some cause for encouragement:

British Crime Survey 2001

"All BCS violence" in 2000 was 36% below 1995, though still 21% above 1981."

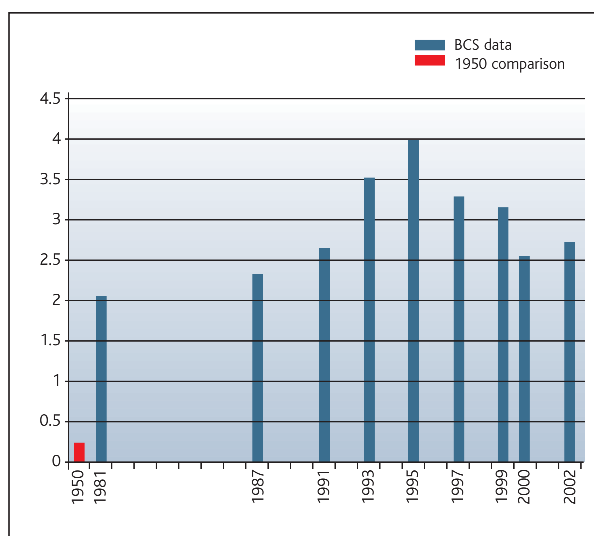
Home Office statistical bulletin: crime in England & Wales 2002/03:

"Longer-term trends in BCS violence show significant declines. Comparison of results reported to the BCS in 2002/03 with those for earlier years show falls in overall violence of 19% since 1999 and 24% since 1997..."

"In contrast, police recorded violent crime has increased substantially in recent years, but much of this is due to increases in reporting and recording of violent crime" (Povey & Allen, 2003).

These comments reflect the trend in BCS data, as can be seen from the Figure below:

Figure 4: BCS violence 1981-2002, with 1950



The ratio of 1950 to 1981 reflects recorded crime – there was no British Crime Survey prior to 1981.

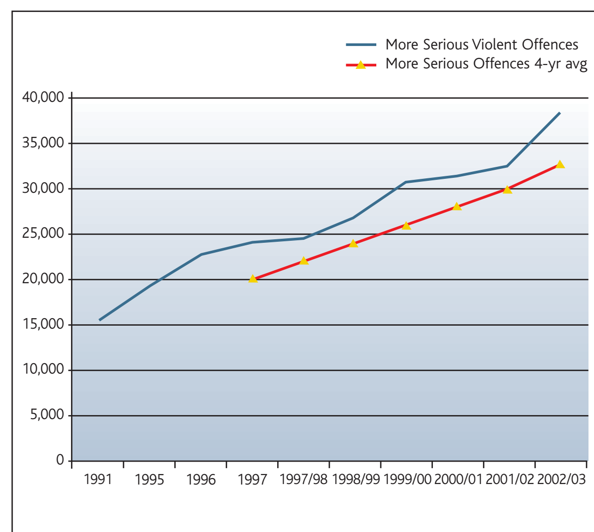
The improvements in BCS data between 1995 and 2000 reflect major reductions in two types of violence – Domestic Violence and Acquaintance Violence. One can understand the former – the wonderful work done by advocates of zero tolerance and strong action against domestic violence led to much increased recording of the offence in the 1990s, and many police forces have now set up Community Safety Units which take the offence seriously, unlike the tendency in the past. This could perhaps explain the improved figures 1995-2000.

It is harder to explain the apparent improvement in Acquaintance Violence 1995-2000.

A weakness of relying on global violence statistics to observe trends in data is that "total violence" equates a punch on the nose with a murder – each counts as 1. Further, if one looks at *where* the changes in definition obscure the real trends in numbers, it is almost entirely in the categories classified as "Less serious offences". These were 203,856 in 1998/99 before the change in definition, and rose by 133% to 475,741 in 1998/99 after the change in definition, mainly due to the inclusion of Common Assault in the new figures.

In contrast, if one looks at the category "More serious offences" the reclassification in 1998/99 resulted in less than a 1% increase, from 26,900 to 27,047. Being less seriously affected by changes in definition, and also representing more serious violence, trends in these figures may be a more reliable indicator of trends in society. And in this category the number of offences has risen from 15,829 in 1991, through 23,581 in 1997 and 30,447 in 2000 to 38,291 in 2003, as follows:

Figure 5: More serious violent offences, England & Wales 1991– 2003



Because of the possibility of random fluctuations in the figures for any one year, the graph also shows a moving average over a 4-year period. This shows a more reliable trend line.

More serious crimes in England & Wales

All the figures on this and the next four pages are taken from the Home Office Statistical Bulletin: Crime in England & Wales 2002/03. Jon Simmons and Tricia Dodd, editors; from Table 3.04: Recorded crime by offence 1991 and 1995 to 2002/03.

The trend data on specific serious crimes give cause for serious concern. *Most of these show no or minimal change in the 1998/99 reclassification process*. While the adoption of consistent reporting by police areas in the National Crime Recording Standard (NCRS) in 2002 has been estimated to increase overall crime reporting by 10%, it is unlikely that the effect on most of the offences recorded in the following section is significant.

Figure 6: Trends in homicide, England & Wales 1991-2002

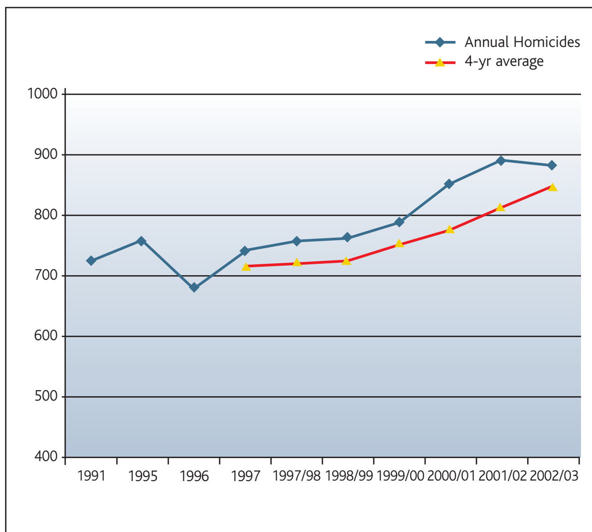
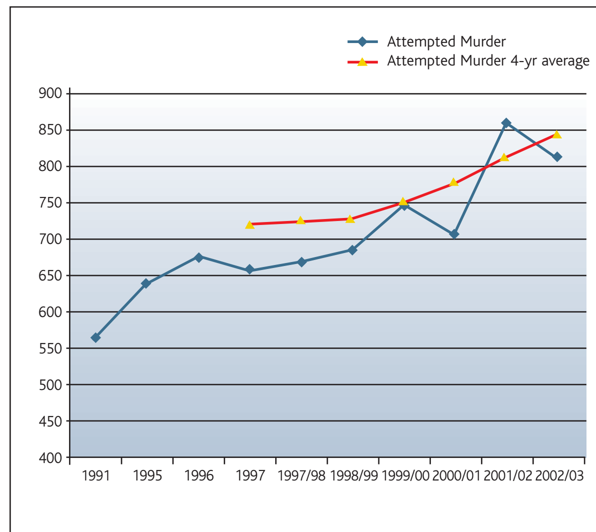
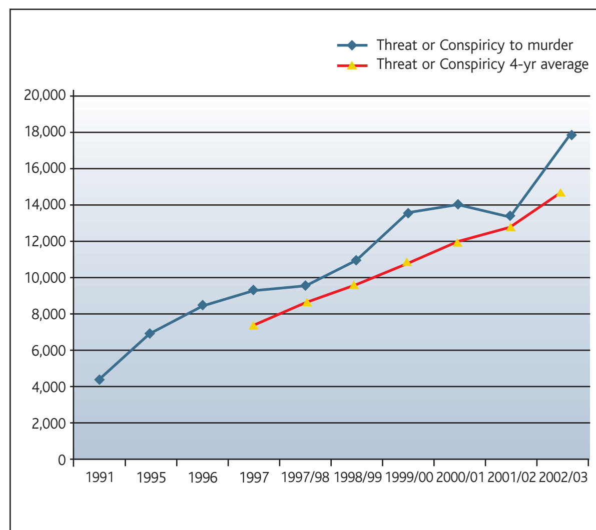


Figure 7: Trends in attempted murders, England & Wales 1991-2002



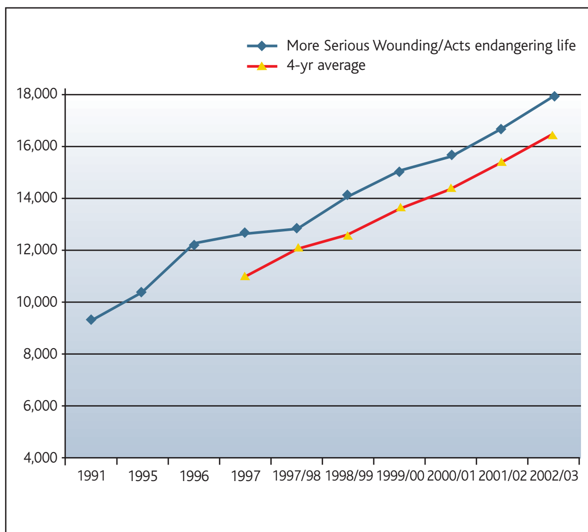
Though possibly affected by changed reporting, there has also been a sharp rise in recorded threats to murder and/or conspiracy to murder offences:

Figure 8: Threat and conspiracy to murder, England & Wales 1991-2003



Povey and Allen (2003) say that these figures may have been affected in 2001/02 by the adoption of common reporting by police forces around England & Wales.

Figure 9: More serious wounding or other acts endangering life, England & Wales 1991-2003



The data for the four graphs above are shown in the Table below. Unlike the data for less serious offences, no downward trend in violence is visible. It should be borne in mind that in the base year of 1991 recorded violence (all violence) in England & Wales was already 11 times higher than in 1950.

Table 7: Serious Violent Offences , England & Wales, 1991-2003

	Homicide	Attempted Murder	Threat and Conspiracy to Murder	Wounding or other Acts Endangering Life
1991	725	555	4,712	9,408
1995	745	634	7,044	10,445
1996	679	674	8,533	12,169
1997	739	652	9,340	12,531
1997/98	748	661	9,661	12,833
1998/99	750	676	11,112	14,006
1999/00	766	750	13,434	15,135
2000/01	850	708	14,064	15,662
2001/02	891	857	13,662	16,556
2002/03	876*	818	18,068	17,882
Rise since 1991:	+21%	+45%	+283%	+90%

* excludes 172 Harold Shipman

What of serious sexual offences? This is another area where one would hope that a society successfully tackling violence would be seeing evidence of steep declines in offending.

Figure 10: Female rape, England & Wales 1991-2003

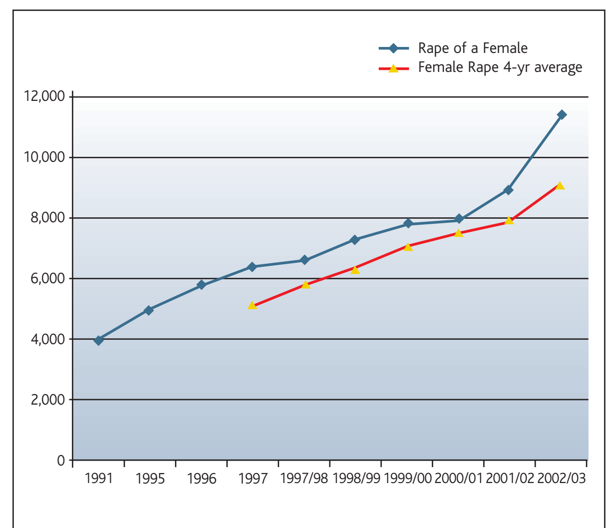


Figure 11: Male rape, England & Wales 1991-2003

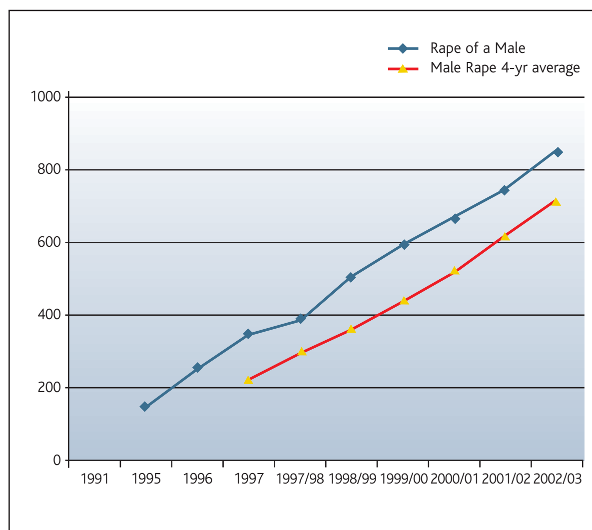
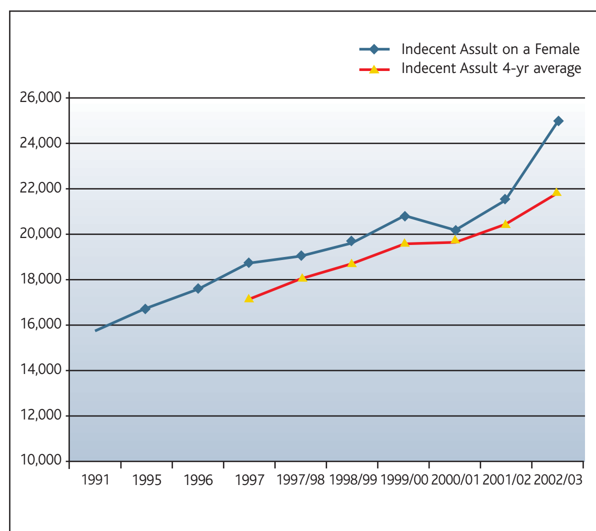


Figure 12: Indecent assault on a female, England & Wales 1991-2003



The data for the three graphs above are shown in the Table below. As with the data for "More Serious Offences", no downward trend in sexual violence is visible. This is an area which could be affected by greater reporting than in past years.

Table 8: Sexual Offences , England & Wales, 1991-2003

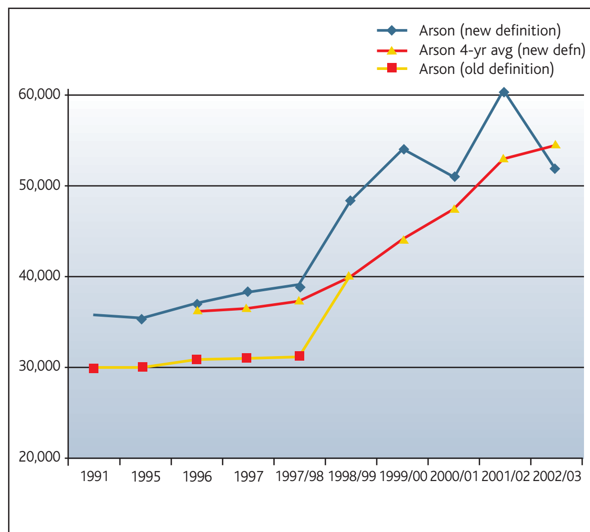
	Rape of a Female	Rape of a Male	Indecent Assault on a Female
1991	4,045	no data	15,792
1995	4,986	150	16,876
1996	5,759	231	17,643
1997	6,281	347	18,674
1997/98	6,523	375	18,979
1998/99	7,139	504	19,524
1999/00	7,809	600	20,664
2000/01	7,929	664	20,301
2001/02	8,990	730	21,790
2002/03	11,441	852	24,811
Rise since 1991:	**+183%**	**+468% ***	**+57%**

* Index for Male Rape based on 1995

These violent sexual crimes may have been influenced by a shift in readiness to report. The following categories, Arson, Kidnapping and Violent Disorder, are unlikely to have been heavily affected by changes in definition.

Adjusting for a change of definition in 1998/99 to make figures comparable, Arson offences rose from 35,888 in 1991 (30,090 under the old definition) to 53,200 in 2002. The 4-year average rose from 36,573 in 1997 (average of 1991, and 95-97) to 55,071 in 2002.

Figure 13: Arson, England & Wales 1991-2003



There have also been dramatic increases in offences for Violent Disorder and Kidnapping.

Table 9: Offences of Arson (offence no 56), Violent Disorder (offence no 65) and Kidnapping (offence no 36)

	Arson	Violent Disorder	Kidnapping
1991 *	35,888	1,517	766
1997 *	37,588	2,060	1,559
2001/02	60,470	2,603	2,792
2002/03	53,200	2,770	3,187
Rise since 1991:	**+48%**	**+83%**	**+316%**

* Actual Arson figure for 1991 was 30,090 but 1991 and 1997 have been adjusted upwards to reflect reporting changes in 1998/99.

Little comfort can be taken from the trend data above. Far from reversing the massive increase in violence since 1950, it appears that in the last 10 years serious violence has continued to climb alarmingly.

Appendix 2
Domestic violence and child abuse

Domestic violence is intertwined with child abuse. Domestic violence begets child abuse and child abuse begets domestic violence. They are causes and consequences of each other.

From our research, there are 4 important messages we wish to convey about domestic violence.

1) Children in homes with domestic violence are abused by witnessing the violence between their parents

2) Children who witness domestic violence are more likely later to become victims or perpetrators of domestic violence

3) Children who suffer child abuse are more likely later to become victims or perpetrators of domestic violence

4) The presence of domestic violence in a family hampers the success of programmes to reduce child abuse and violence

Before we elaborate on these 4 points, let us state that a civilised society should find no level of domestic violence to be acceptable.

Surveys in the USA and UK, specifically concerned with domestic violence, show that at least one in four married women say they have been hit by their husband (Straus, Gelles & Steinmentz, 1980, 1988; Painter 1991). As many as one-third of women in the UK experience severe physical violence from a male partner at some time during their adult lives. One in ten report such violence annually, 75% from their current partner and 25% from their former partner (Mooney, 1993).

Severe violence to wives on a regular basis is estimated to occur in 7% of USA families (Dutton, 1988). Pregnant women are especially prone to abuse (McFarlane, 1991; Newberger et al, 1992). In a study of 290 pregnant women Helton (1986) found 15.2% reported a battering before their current pregnancy and 8.3% reported a battering during their current pregnancy.

Nor is the problem confined to heterosexual relationships. Brand and Kidd (1986) found similar rates of violence in committed relationships, for heterosexuals and female homosexuals. Moreover violence takes place in both directions: in heterosexual relationships Straus, Gelles and Steinmetz (1980, 1988) found 12.1% of husbands vs 11.6% of wives had had inflicted at least one violent act on their partners in the year covered by their national US survey. A MORI poll commissioned by the BBC TV Programme "Here and Now" found similar rates in the UK and also no gender differences in use of violence (Browne & Herbert, 1997).

Equivalent frequency does not mean equivalent force, or severity. Where male and female violence is interactive, the woman suffers most. From 1983 to 1990 approximately 20% of all homicide victims were women killed by current or former male partners. This is between 42% and 49% of all female homicide victims, compared with 7-11% for male homicide victims. (Home Office, 1992; Morley and Mullender, 1994).

For women who suffer non-lethal violence, the long term effects can be severe. Stark and Flitcraft (1996) describe a battering syndrome resulting in repeated incidents of physical assault. Consequences include acute and chronic pain (e.g. in the pelvic and genital area, abdomen, chest and breast), bruises, broken bones, facial trauma, and other muscular and skeletal injuries (Grisso et al, 1991; McCauley et al, 1996; Mullerman, Lengahan and Pakieser, 1996).

One third of women in violent relationships are attacked more than 6 times a year and, on average, the female victim is seriously injured 4 times a year (Monney, 1993). The Manchester survey by Pease et al (1991) showed that after an initial violent incident, 35% of victims suffered a second attack within 5 weeks of the first, and after a second violent incident 45% of victims suffer a third attack within 5 weeks of the second.

Not surprisingly, women who live with domestic violence can suffer from post-traumatic stress syndrome (PTSD) (Carmen, Rieker & Mills, 1984), a subject dealt with elsewhere in this report (Section 9).

1) Children in homes with domestic violence are abused by witnessing the violence between their parents

Studies estimate that 10 to 20 percent of children are at risk of exposure to domestic violence (Carlson, 2000). Thus well over 3 million U.S. children witness the abuse of a parent or adult caregiver each year (Carlson, 1984; Straus and Gelles, 1990). Steinman (1989) found that children are present during almost half of all battering incidents. Goodman and Rosenberg (1987) showed that when children are present in the home, they actually witness or are aware of almost all such violent episodes.

Mothers who are domestic violence victims may have difficulty in being emotionally available to their children (Augustyn, Parker, Groves & Zuckerman, 1995). The mother's threshold of acceptance of violence is lowered. Groves & Zuckerman (1997) report that in their Child Witness to Violence Project it is not uncommon to hear mothers minimise violent events or to hear from mothers that their children did not see or hear a violent incident. Separate interviews with the children reveal that they see and hear more than their parents think.

Research also indicates children exposed to domestic violence are at an increased risk of being abused or neglected. Studies indicate there are child abuse victims in 30 to 60 percent of families experiencing domestic violence (Appel and Holden, 1998; Edleson, 1999; Jaffe, Wolfe & Wilson, 1990).

Children who live with domestic violence face increased risks: the risk of exposure to traumatic events, the risk of neglect, the risk of being directly abused, and the risk of losing one or both of their parents. All of these may lead to negative outcomes for children and may affect their well-being, safety, and stability (Carlson, 2000; Edleson, 1999; Rossman, 2001). Childhood problems associated with exposure to domestic violence fall into three categories:

Behavioural, social, and emotional problems. Higher levels of aggression, anger, hostility, oppositional behaviour, and disobedience; fear, anxiety, withdrawal, and depression; poor peer, sibling, and social relationships; and low self-esteem.

Cognitive and attitudinal problems. Lower cognitive functioning, poor school performance, lack of conflict resolution skills, limited problem solving skills, pro-violence attitudes, and belief in rigid gender stereotypes and male privilege.

Long-term problems. Higher levels of adult depression and trauma symptoms and increased tolerance for and use of violence in adult relationships.

Children's risk levels and reactions to domestic violence vary, some showing great resiliency while others cope very badly (Carlson, 2000; Edleson, 1999; Hughes, Graham-Bermann & Gruber, 2001). Protective factors, such as social competence, intelligence, high self-esteem, outgoing temperament, strong sibling and peer relationships, and a supportive relationship with an adult, can help protect children.

This means those least able to cope are those already damaged by prior child abuse. Children who witness domestic violence *and* are physically abused are at risk of higher levels of emotional and psychological maladjustment than children who witness violence and are not abused (Carlson, 2000; Hughes et al, 2001).

The children of mothers subjected to psychological abuse are prone to depression and low self-esteem (Arias, 1999). Arias and Street (1996) explored the effects of children's exposure to their mother's psychological abuse by the father. The results, via the transmission mechanisms of maternal depression (Arias, Street and Brody, 1996), and neglectful and abusive parenting, were depression and low self-esteem for both sons and daughters (Arias and Street, 1996).

2) Children who witness domestic violence are more likely later to become victims or perpetrators of domestic violence

Researchers have often found an important association between growing up in a violent home and being in a violent adult relationship, either as a victim or as an offender (e.g. Gayford, 1975; Carroll 1977; Hanks & Rosenbaum, 1978; Rosenbaum & O'Leary, 1981; Walker, 1984; Kalmuss, 1984; Giles-Sims, 1985; Straus, Gelles & Steinmentz, 1980, 1988). Roy (1977) states the children were taught by their violent fathers "how to be men" and "how to be husbands".

The behaviour and psychiatric problems discovered in the children of violent marriages include truancy, aggressive behaviour at home and school, and anxiety disorders (Levine, 1975; Hughes and Barad, 1983; Davis and Carlson, 1987; Carroll, 1994). It is suggested that children learn aggressive behaviour as a general style for controlling their social and physical environments and that this style continues into adulthood (Browne & Saqi, 1987). Lewis (1987) suggests women learn to accept violent behaviour towards themselves as a result of childhood experiences.

Gelles (1987b) concludes that the family serves as a basic training ground for the development of aggressive behaviour by exposing children to violence, by making them victims of violence and by providing them with learning contexts for the commission of aggressive acts. It transmits the norms and values which condone the use of aggression between family members.

Not all victims go on to become perpetrators. Many siblings of batterers live peacefully in non-violent marriages (Dobash & Dobash, 1979).

3) Children who suffer child abuse are more likely later to become victims or perpetrators of domestic violence

Numerous studies have found a direct relationship between severity of childhood abuse and later tendencies to victimise others (Burgess et al, 1987; Green, 1983; Pynoos & Nader, 1988; Widom, 1987; Mezey & King, 1989; Burgess et al, 1984; Groth, 1989; Lewis et al, 1988; Lewis et al 1989; van der Kolk, 1996; Werner, 1989). Lewis et al (1988, 1989) have extensively studied the association between childhood abuse and subsequent victimisation of others. As an example, in one study they found that of 14 juveniles condemned to death for murder in the United States in 1987, 12 had been brutally physically abused and 5 had been sodomised by relatives (Lewis et al, 1988).

Collins and Bailey (1990) found a relationship between PTSD and imprisonment for violence. Steiner et al (1997) found very high rates of PTSD amongst violent juvenile prisoners.

Consistent with these findings, high levels of trauma symptoms are found in populations of abuse perpetrators. In a sample of incarcerated men, the presence of physical abuse in childhood increased the probability of perpetrating family violence by 500% (Dutton & Hart, 1992). This fits into a pattern of evidence that many men in treatment for spouse abuse have previously experienced traumatic events (Dutton & Hart, 1992; Murphy, Meyer & O'Leary, 1993).

The role of trauma in the perpetration of violence towards intimate partners is further evidenced by studies with Vietnam combat veterans (Riggs, 1997). Veterans with PTSD have less cohesive, less expressive, more conflictual and more violent relationships than veterans without PTSD (Jordan et al, 1992; Riggs et al, 1995; Solomon et al, 1987). PTSD in Vietnam veterans is specifically associated with increased risk for perpetrating domestic violence (Jordan et al, 1992; Byrne & Riggs, 1996).

Dutton (1999) proposes that a triad of childhood events found retrospectively in populations of batterers constitutes a powerful trauma source and that many

aspects of the personality structure and function of intimately abusive men are best understood from a trauma-response framework. The trauma stressors he suggests are responsible are (i) witnessing violence directed toward the self or the mother, (ii) shaming and (iii) insecure attachment (Dutton 1995a,b,c,d). Bowlby (1973) considered insecure attachment itself both a source and consequence of trauma. The infant turns to the attachment-object during periods of distress seeking soothing; a failure to obtain soothing maintains high arousal and endocrine secretion. Van der Kolk (1987) considered child abuse an "overwhelming life experience" and reviewed the defenses that children use to deal with parental abuse: hypervigilance, projection, splitting, and denial. Terr (1979) also described driven, compulsive repetitions, and re-enactments that permeate dreams, play, fantasies and object relations of traumatised children. Shaming, conceptualised as verbal or behavioural attacks on the global self, has been found to generate life long shame-proneness or defences involving rage.

A combination of all three of these early experiences is traumatising, and evidence exists in adult batterers both for the presence of trauma symptoms and the childhood experiences described above (Dutton, 1999). Conceptualising the affective, cognitive and behavioural features of intimate abusiveness from a trauma perspective explains the internally driven and cyclical aspect of the behaviour, and also the problems with modulation of arousal and anger.

Further evidence of the link between early childhood experience and domestic violence perpetration comes from the Dunedin study (see page 17). This showed levels of domestic violence 9 times higher in males aged 21 who were identified at age 3 as being "at risk" than in 21 year old males not so identified at age 3 (Caspi et al, 1996).

4) The presence of domestic violence in a family hampers the success of programmes to reduce child abuse and violence

Section 8 outlines the significant impact of the Olds Nurse Home Visiting Programme in reducing child abuse. Professor Olds asked why the programme did not succeed with some families, and found the main reason for the failure of Nurse Home Visiting to reduce child abuse by 100% rather than 50% in the Elmira Study was the presence of domestic violence in the families where Home Visiting was less successful.

The beneficial programme effect on child abuse and neglect was reduced in those households in which domestic violence was higher during the 15-year period following the birth of the first child (Eckenrode, Ganzel, Henderson, Smith, Olds, et al, 2000). There were significantly fewer cases of child maltreatment in the nurse-visited group than the comparison group among mothers who reported 28 or fewer incidents of domestic violence over the 15-year period. Programme effects were non-significant for mothers reporting more than 28 incidents of domestic violence over 15 years. For mothers who received visits until the child's second birthday, the treatment effect decreased as the level of domestic violence increased. The domestic violence did not moderate programme effects on any other reported programme effect on maternal or child functioning at the 15-year follow-up. The moderation was specific to child abuse and neglect.

Appendix 3
A tale of 10 children, by George Hosking

This is a tale of 10 children named Ainlee, Dennis, Jasmine, John, Lauren, Maria, Martin, Michael, Toddler and Victoria. Their ages were 14, 8, 7, 6, 4, 2, 21 months, 20 months and 18 months. They lived in Brent, Fife, Manchester, Norfolk, Plaistow, Shropshire, Tottenham. They lived in a society pledged to protect them, and their stories are not unique. The tales of hundreds of other children could be told in their place.

Their parents were not wicked people. Most likely they too had been abused as children, and their suffering, unrecorded in the press, may have been just as horrific as that which they inflicted. They had not learned how to love, how to attune, how to empathise. No one taught them how to be a parent.

1945: Child 1 – Dennis O'Neil

Dennis O'Neil died on January 9th 1945, aged 13. Dr A J Rhodes, the pathologist at the Royal Salop Infirmary, Shropshire, reported the boy was undernourished, thin, wasted and well below normal weight. He had septic ulcers on his feet and his legs were severely chapped. He had died from cardiac failure after being struck on the back with a stick, and struck violent blows on the chest. Photographs of his body showed he had been subjected to the most cruel and sadistic treatment.

Dennis's food, according to his younger brother, who survived, was usually three pieces of bread and butter, and tea. The brothers used to creep to the pantry to find food, but were usually discovered and then beaten unmercifully, getting as many as 100 "stripes" in a day. Dennis was so hungry he used to crawl to the nearby cattle and suck at their udders. There had hardly been a single night when they had not been thrashed in a long time.

On the night before his death Dennis had been beaten for biting into a swede. He was lashed, naked, to a bench with a rope and beaten with a stick until his legs were all blue and swollen. He could not stand and was locked in a cubbyhole. That night he was banged on his chest with fists; he had cried out in pain "my back, my back". His brother said he was pummelled yet again on the morning he died.

1956: Child 2 – Toddler Holdsworth

Toddler Holdsworth was 2 when he died. For more than a year before his death his mother thrashed him with straps, and buckles on straps, causing wounds all over his head, neck, back and limbs, "because the child was dirty in his habits". The judge described it as "systematic torture" and "one of the most shocking cases of its kind that I can remember" and his death as "a merciful release".

1967: Child 3 – Michael Buckingham

On January 16th 1967 18-month old Michael Buckingham was murdered by his father. Dr Alan Usher, the Home Office pathologist, said he found three areas of scalding on Michael, 17 burns and 47 bruises. He concluded the boy must have suffered appalling shock and pain before he died. In a statement the boy's father said "I must have been in one of my moods. I punched him and burnt him with the poker. I poured some boiling water on a rag and cleaned him up with it. I do not think he is mine. I have knocked him about before to get back at the wife.... He never seemed to like me."

1973: Child 4 – Maria Colwell

Maria Colwell died on 6th January 1973, aged 7. Maria, removed from her mother's care due to neglect, had been living happily with an aunt after her father's death, but was returned to her mother at the mother's request. Despite warnings of abuse, and 30 calls to social services from neighbours, she was left in the violent household. One neighbour reported the child being hit for being dirty, and saw her at a window with a blackened face "and one eye just a pool of blood." The neighbour asked NSPCC and Social Services: "What protection does a child have against her parents? Does she have to be killed before they take her away?" In Maria's case the answer was yes. Maria was taken to hospital in a pram after being beaten by her stepfather the night before. She was found to be dead on arrival. She had

two bruised eyes, bruising on neck, back, arms and legs, severe internal injuries and brain damage. Her stomach was empty.

1984: Child 5 - Jasmine Lorrington

Jasmine Lorrington was 4 when she died in Brent on 5th July 1984. She was so badly beaten, burnt, starved and tortured that scarcely a single part of her body was without injury. Dr Iain West of Guy's Forensic Medicine Department described her as looking like a Belsen victim. She had been kept a prisoner in a small bedroom with body-building weights tied to a broken leg to stop her moving. When she died she was emaciated and deformed, and weighed 1 stone 9 lb. She suffered "appalling cruelty", with 20 separate areas of bone injury, before finally being battered to death by her stepfather, dying of punches to the head. The social worker responsible for visiting Jasmine said in evidence to the subsequent enquiry that "the family obviously loved the children", though she admitted having seen Jasmine only once in 10 months, as she believed the family's excuses for her non-availability. Jasmine's mother and stepfather had met as children in a school for the educationally subnormal.

1991: Child 6 – Martin Nicoll

20-month old Martin Nicoll died when his stepfather threw him from the bathroom into the hall, hitting his head against the door surround. The blow resulted in a fractured skull, blood clot and massive swelling of the brain. Pathologists recorded a further 67 injuries including a fractured wrist, missing fingernail, twisted ankle and numerous bruises, cuts and abrasions. Martin had suffered a series of horrific and savage beatings. A family friend said he had on 4 or 5 occasions seen the baby hit so hard he was knocked to the floor. His mother hid him from her family because he was so badly injured: "I couldn't even look at him". In evidence his mother told how the stepfather forced an earring through the baby's ear, tore off a fingernail and force-fed him lager. She told a tale of horrific domestic violence. As her husband was led from court he reached over and punched his wife so hard he sent her reeling down a flight of stairs.

2000: Child 7 – Victoria Climbié

8-yr-old Victoria Climbié had a kettle of boiling water tipped over her head. Her toes were struck with a hammer. She was beaten with a bicycle chain, belt buckle and had cigarettes stubbed out on her body. She lived in a freezing bath. On 25th February 2000 Victoria died of hypothermia and multiple organ failure, with 128 horrific injuries to her body, after suffering months of horrific abuse and neglect in a tiny flat in Tottenham.

2000: Child 8 – Lauren Wright

Lauren Wright was found dead on 6th May 2000 after suffering a fatal blow to the stomach from her stepmother, which caused her digestive system to collapse. Lauren was described as "a cheerful little girl with nothing but trust and a ready smile". Her stepmother starved her. Aged 6 at her death, Lauren's weight was half the average for a 3-year-old. Her stepmother forced her to eat insects and pepper sandwiches, made her stand in front of a fire until she screamed with pain, and beat her severely. Lauren had a life of unimaginable misery. Emaciated, with 60 bruises on her back, arms, shoulders and legs, her death was slow and agonising. Lauren's stepmother was found guilty of manslaughter, as was her father, who had turned a blind eye to her abuse. One villager from her home of Welney in Norfolk stated that a year before the death he had seen her stepmother, in the street, punch Lauren on the head with "incredible" force, knocking her to the ground. The stepmother had walked on, and the little girl had got up with silent tears streaming down her face, and chased after her stepmother. The villager had felt "sick to his stomach" but had not reported the incident because "he didn't want to get involved".

2002: Child 9 – Ainlee Labonte

In January 2002 Ainlee Labonte, of Plaistow, east London, aged two years and 7 months, was starved, punched, scalded, burnt and tortured to death by her parents. She had 64 scars, scalds and bruises on her body, including cigarette burns. She weighed just 9.5kg (21lbs), about half the normal weight of a child that age. She had not been fed for 2 days. Health visitors were paralysed by fear of her violent parents and would not

visit their home. Her mother, who was 17 when Ainlee was born, had been abused as a child. A child protection expert, Miss Kenward, giving evidence to Newham's enquiry, said Ainlee had experienced unimaginable pain and loneliness before she died.

2003: Child 10 – John Gray

Tiny John Gray, just 21-months old, suffered more than 200 injuries before he died. John suffered a series of beatings from his mother's partner. He had more than 200 injuries to 92 parts of his body. His liver had been ruptured, he had a fractured arm, broken ribs and injuries to his testicles. His mother and her partner failed to call for medical help. The dead boy's father said he had reported to the police in Fife, Scotland, where he lived, that his son was being injured by his wife's lover, but that police said they could take no action as the offences were committed in England.

Society's response

Dennis O'Neill's foster father was sentenced to 6 years imprisonment for manslaughter. The judge told him his behaviour had "shocked the world, and shocked England". It had indeed – so much so that as a result of the subsequent public outcry the verdict was commuted on appeal to murder and the sentence increased to 10 years.

Toddler Holdsworth's mother was sentenced to 7 years. Patrick Harvey's mother got 2½ years. Maria Colwell's stepfather was sentenced to life, reduced on appeal to 8 years. Jasmine Lorrington's stepfather was sentenced to 10 years, her mother to 18 months. Martin Nicoll's mother was sentenced to 12 months, her husband to life. Victoria Climbié's aunt and her boyfriend were both jailed for life. Ainlee Labonte's parents were jailed for ten and 12 years. John Gray's mother and her lover were both sentenced to 5 years.

Whether the parents or step-parents received 12 months, 2½ years, 5 years, 8 years, 10 years or life, the children remain dead. Society has a need to punish; but there is no evidence it effectively deters other offenders (a Rand Corporation study shows it is less effective than parent training).

Why do parents kill their children?

Ania Wilczynski from the Institute of Criminology at Cambridge University has identified 11 reasons why parents kill, including revenge, jealousy and rejection. However the most common reason is an effort to discipline. "Often serious physical assault of a child began with an attempt at discipline" she said. "That initial assault is often the first step towards a fatal attack, and while society continues to condone hitting children we are guilty of allowing some to cross a non-existent barrier." A core issue is that many parents have unrealistic expectations of what a child is capable of at whatever age it is, and punish it – sometimes unto death – for failing to behave with a maturity beyond its capability.

The examples given above are but a tip of an iceberg. In my research for **The WAVE Report** I came across over 100 examples such as the 10 above – Jean Titchener of Camberwell, whose mother used to burn her hands and feet with a lamp, and whose body was "just one mass of sores" (died 1946); Susan Yate, of King's Lynn, who died in hospital 3 days after she was found with a ruptured lung and multiple bruises from a savage beating (1955); Patrick Harvey of Birmingham, who was beaten to death by his mother with a 2-foot stick because he had soiled his trousers (1962); James Nunn, of Norfolk, whose father battered him, inflicting "horrifying injuries", because the 3-week old kept him awake at night (1973). He got 2 years probation. There was also Heidi Koseda of Hillingdon, who died of thirst and starvation, locked in a cupboard while her family carried on as normal outside. A post mortem found bits of nappy in her stomach, which she had eaten in a desperate attempt to keep alive (1985); Leanne White, who was beaten to death by her stepfather, who made her sleep on the floor. She suffered 107 external injuries and died of internal bleeding and repeated blows to the stomach (1992); Jacob Jenkinson who was smothered to death by his father (1999).

Public Inquiries

Deaths such as those above often led to Public Inquiries – I counted 24 in the 1970s, 25 in the 1980s and 22 in the 1990s – but no visible reduction in levels of child abuse (and in parallel there has been a marked worsening in levels of

violence in society, of which abuse and neglect are primary causes). The reason is simple – the Public Inquiries generally addressed the symptoms of child abuse, not its root causes. As a result, we now react to the symptoms more swiftly, more intelligently and more effectively than ever before. We still do not address the root causes – so the abuse keeps occurring. It is as if we are stood at the bottom of a cliff where bodies fall, becoming ever more skilled at dealing with the broken and falling bodies, but never going to the top of the cliff to stop the flow of bodies in the first place.

I propose that we move to the top of the cliff; that we – society – intervene before the abuse takes place.

Trends in violence against children

Finally, let us turn to UK statistics on violence against children. I have no information on which to base an assumption that trends in official figures reflect reality, understate or overstate the true position. What *is* evident is that they show no improvement.

Table 10: England & Wales: Recorded offences against children

Offence Number:	11	13	74
	Cruelty to or Neglect of Children	Child Abduction	Gross Indecency with a child
1991		196	1,147
1995		355	1,287
1996		374	1,215
1997		390	1,269
1997/98		391	1,314
1998/99	2,300	490	1,271
1999/00	2,631	577	1,365
2000/01	2,558	546	1,336
2001/02	3,067	584	1,661
2002/03	4,109	846	1,880
2003/04	6,081	921	1,942
Rise since 1991:	**+164% ***	**+370%**	**+69%**

* Since 1999 – no official data before 1999

I do not know the true position as far as child abuse is concerned. Numbers on the Child Protection Register fell by one-third between 1991 and 1999 (Department of Health, 1999), but the NSPCC states that this could reflect changes in system or operating practices rather than an actual change in maltreatment.

We do know that true levels of child abuse far exceed those reported to the police. I was very struck some years ago by a Director of the NSPCC who stated that, despite all their best efforts, child abuse levels in the UK had not reduced over the previous 50 years. The NSPCC Report "Child Maltreatment in the United Kingdom" (Cawson, Wattam, Brooker & Kelly, 2000) estimated 7% of UK children have been "seriously" physically abused (e.g. violent treatment by parents or carers regularly over years; or bruising, marks, soreness and pain lasting to the next day or longer on more than half the occasions). 14% were estimated to have suffered intermediate physical abuse (e.g. irregular violent treatment). A further 3% were in a "cause for concern" category (e.g. received physical discipline regularly over years, but the effects lasted until the next day on less than half the occasions).

Whichever definition one takes, the NSPCC survey suggests 20-25% of UK children suffer physical abuse at some level. They also estimate that 15% experience serious or intermediate absence of care. Whether these levels are higher or lower than 20 or 50 years ago is impossible to say. What one can say is that they are unacceptable in any civilised society, and especially in one which has shown, by signing the UN Convention on the Rights of the Child, that it is committed to protecting children from harm.

Why are current policies failing – because clearly they are? I believe the explanation for that is remarkably simple. Governments, of all hues, have consistently poured money into tackling symptoms rather than root causes. This is driven by a very natural desire to produce results quickly. It is a strategy which does not work. As a society we must learn to do what works, even if we have to show some patience in waiting for the results to show. What works is early prevention, before abuse takes place.

Appendix 4
Polk's hypothesis of youth abandonment

The source of rising violence

Kenneth Polk, Professor of Criminology at the University of Melbourne, suggests that rising violence in almost every western country has been a function of unprecedented rates of violence by young males from the lowest income groups (James, 1995). Between 1987 and 1993, a period during which overall violence in England & Wales rose by 50%, there were declines in rates of violence for offenders over the age of 17. The whole of the increase was due to sharply rising violent offences by 10-13 and 14-16 year groupings (James, 1995).

Polk's hypothesis of youth abandonment

Polk's Hypothesis of Youth Abandonment says society can expect problems when young people who leave school early with limited qualifications, skills or experience, are excluded from full-time, career-oriented work (Polk, 1984; Duster, 1995; Dwyer, 1996). In recent decades technological developments have reduced the need for unskilled manufacturing labour. "Downsizing" of public and private entities, flight of capital to cheap labour countries, and shifts in labour composition from full-time career workers to part-time, casual workers have further contributed to a large segment of the youth population leaving school with little hope of ever finding full-time, career-oriented work.

James (1995) argues that a legacy of the economic rationalism of recent decades is the creation of a winner-loser culture with profound disparities between the economic winners and the "losers" left stranded at the bottom of the economic heap. James argues that inequality in incomes combined with false promises of equal opportunity, lack of welfare support for the disadvantaged and poor job quality are major causes of violence in developing and developed nations alike. In Britain all three of these patterns have occurred (James, 1995). Similar trends can be found in many other countries.

Historically virtually all young people could look forward to a process of moving from childhood, through schooling, into adulthood with some combination of work and family roles. Those lower in the class structure would exit school much earlier than high status students. As late as the early 1970s in Australia, for example, roughly two-thirds of the population of 16- to 19-year-olds were in full-time employment. Those full-time jobs have virtually disappeared in the space of one generation.

The problem of abandonment affects those who select early pathways out of school, that is, what previously would have been seen as a "working class" population. For these young people attempting to enter the labour force with little to offer in the way of qualifications, skills or experience, there are currently in Australia few opportunities for full-time career oriented work.

As a consequence, they lack access to the progressive independence that occurs once a person enters waged employment. Without this vital income support, other steps which are expected to follow in the pathway can not happen, including promotion, growing independence from parents, focusing on an exclusive partner, marriage, and the establishment of a family. Such individuals become "stuck" in a social and economic no-mans-land, one where a central feature of their existence is that normal supports for identity as "man" or "woman" are not available.

The violence response

Why should young people respond with violence to abandonment, or being losers in a winners-losers culture? As they move from pre-puberty to adulthood, young people follow different developmental trajectories. Built into these trajectories are a variety of definitions of self which provide basic supports for masculine or feminine identities.

Most males are not violent even when confronted with situations where their masculinity might be challenged. They have many solid bases upon which they can ground their self-image "as a man", such as their job, income, friendship networks, role as head of a family, etc. Their "sense of who they are" is not likely to feel challenged by a simple insult or jibe. At the same time the man is likely to realise that violence is a risky strategy and can lead to a number of potential costs, including pain or severe injury.

For other young males, for whom the normal supports for identity "as a man", such as promotion at work, economic independence, establishment of sexual relationships, focusing

on an exclusive partner, marriage, and then a family, are not available, violence can be a central pillar around which a masculine identity can be constructed. It has a number of advantages. It is not dependent on the amount of money owned or earned, the quality and cost of the car, the clothing one wears, or the accent one uses (in all of which the "loser" in the "winner-loser" game is bound to lose, yet again). It does not (at least initially) cost money; and it is available (the steps from insult to death can occur in a small number of minutes). In some conditions it can be highly efficacious in establishing dominance. The evidence it provides of masculine prowess is highly visible and tangible.

Sub-culture support

In addition, well established cultural understandings lend support to the use of violence as a way of contesting masculinity. Communities of lower class or abandoned folk will not, in general, support violence. There is not likely to be widespread support for, say, violence toward the elderly, babies, or parents. However there can be specific situations when violence is condoned or approved. One example would be a perceived sign of disrespect or a challenge. The individuals involved, including the victim, offender, on-lookers, may then see little recourse but to engage in the virtually ritualistic steps of the honour contest which progressively lead toward actual physical engagement in combat.

Appendix 5
Sure start: what works in primary prevention

From the Sure Start Report "What works in promoting children's mental health" (Kurtz, 2004)

6.1 Primary prevention

1. The earlier in the child's life the prevention commences, the more likely it is to be effective.

2. Prevention needs to be disorder, context and objective specific. Focused, highly structured, proactive programmes targeting risk factors rather than problem behaviours are more efficacious than generic unstructured ones, such as the provision of counselling or group discussion.

3. Multiple component, multi-year programmes which focus on a range of risk factors using a range of strategies are more likely to be effective. Similarly, programmes which simultaneously focus on the system or context within which the child lives (e.g. school, family, community), as well as on the child, are more likely to be successful than programmes which focus on the child alone.

4. Prevention programmes focused on first-time mothers are particularly effective because of the acute need of these women for social support and child-rearing assistance. Programmes are effective in reducing problems and enhancing competencies.

5. Only a minority of transition programmes for first-time mothers are effective, but those which are have important and widespread benefits, including significant fiscal ones. Home visitation by itself is of little benefit without an accompanying structured programme of proven effectiveness. Many questions about why certain programmes are effective and others are not remain unanswered.

6. The Infant Health and Development Programme (Berlin et al, 1998) for low birthweight babies showed benefits from a year of home visits, educational programmes and parent group meetings on child IQ and behaviour, but long-term benefit was limited. This and other studies indicate that the simple provision of educational and supportive input from health visitors does not benefit disadvantaged mothers in the long term.

7. The Elmeira (Nurse Family Partnership) Project was more comprehensive and included formal training and parenting techniques beginning before the birth of the child and lasting for two years. Significant (32%) reductions in Emergency Room visits and child abuse (from 19% to 4%) were reported by the second year, with more positive parenting by the third and fourth year, lasting IQ gains and significant cost offset in terms of health care and assistance costs. A 15-year follow-up showed a 50% reduction in verified report of child neglect and abuse, benefit being specific to the socio-economic status group (Olds et al, 1997).

8. The probable effective agent of these programmes is the fostering of a positive affectionate relationship between the mother and the infant and in the strengthening of the mothers' self-perceived efficacy in relation to her parenting role. Long term success was associated with structural change in the mother's life, particularly a delay in second pregnancy, and the provision and good take-up of pre-school facilities.

9. In view of the significant long-term effect of insecure attachment on child development, and the importance of the exercise of sensitivity by the caregiver in engendering secure attachment, the enhancing of sensitivity may be an appropriate target for prevention. Programmes targeting the modification of the type of attachment in high-risk groups show promise.

10. The Perry Preschool Project (Schweinhart et al, 1985), which provided a well-designed pre-school experience as well as structured home visits to promote parent-child interaction, led to superior performance, higher employment rates, and greater earning potential, as well as a reduction in arrests and incarcerations. Other relatively well-controlled trials confirm that multi-year, multi-component programmes, combining early education with family support, are a relatively inexpensive and effective way of preventing serious adolescent behavioural problems.

11. Brief group interventions for children whose parents are undergoing divorce are moderately helpful and probably work by improving the quality of mother-child relationships.

12. Interventions with parents are more likely to be effective, but most statutory programmes are overly didactic and pay inadequate attention to enhancing parental competence.

13. There is good evidence that extended home visitation reduces the risk of physical maltreatment and neglect in high risk groups (low socio-economic status young single mothers). Evidence for the prevention of sexual abuse is less compelling.

14. Individuals at high risk of physically abusing or neglecting their child can be readily targeted, appear to be willing to take part in such programmes, and programmes that enhance parent competence are effective.

15. A large number of mental health promotion programmes focusing on teaching interpersonal problem-solving have been carried out, but appear to be only moderately effective in ameliorating problems. By contrast, interventions which promote individuals' capacities for awareness of feelings and the causes and consequences of behaviour improve competence related to both of these and successfully reduce problems. They are particularly effective for younger children, as they are in the process of developing their capacities in emotion regulation and social cognition.

16. There is good evidence that effective programmes have in common the following features:

17. Comprehensiveness – Successful programmes include multiple components because no single programme component can prevent multiple high risk behaviour.

18. System orientation – Interventions should be aimed at changing institutional environments as well as individuals.

19. Relatively high intensity and long duration – Successful programmes are rarely brief. Short-term programmes have, at best, time-limited benefits, especially with at-risk groups. Multi-year programmes tend to have an impact on more risk factors and have more lasting effects.

20. Structured curriculum – There is no clear indication as to the 'ideal curriculum', but proactive interventions should be directed at risk and protective factors rather than problem behaviours. In this way, multiple adverse outcomes may be addressed within a single programme.

21. Early commencement – This has been shown to be essential, and intervention during pregnancy brings additional benefits.

22. Specific to particular risk factors – It is unrealistic to hope that a generic preventive intervention will be able to reduce the risk for all psychological disorders. Prevention needs to be disorder, context and objective specific.

23. Specific training – There is less consistency in the literature on the qualifications required to carry out preventive work. Most studies in the UK use health visitors who have a statutory obligation to visit young children and their carers.

24. Attention to maintaining attendance – The families most in need of early prevention programmes are likely to need high levels of support to engage in an intervention, and continued assistance to maintain attendance. In experimental programmes, they are the most likely to drop out.

6.2 Approaches which are based on a single conceptual model, however broad, can no longer be considered tenable: because they tend to highlight only one or two of the multiple determinants which are now known to operate in the causation of psychological disorders in children and they cannot provide adequate accounts of the complex developmental paths (vulnerabilities, risk factors and the absence of protective influences) which combine ultimately to bring about mental disorder.

Appendix 6

Some studies on the impact of diet

A recent trial in Southampton, cited in "Support from the Start", showed a significant reduction in hyperactive behaviour by 277 hyperactive or atopic 3-year olds when artificial food colourings and additives were removed from their diet (Bateman et al, 2004).

In another double-blind, placebo-controlled, randomised experiment, Professor Gesch of Oxford University recruited 231 young adult prisoners, assigning half to receive dietary supplements and the other half to receive a placebo. The placebo and active-treatment groups were matched according to their number of disciplinary incidents and their progress through the prison system. There were no significant differences between the two groups in IQ, verbal ability, anger, anxiety, or depression.

Subjects remained on the supplements, which contained vitamins, minerals, and essential fatty acids, for an average of 142 days. Compared to the placebo group, the researchers report, prisoners taking the active supplements committed an average of 26.3% fewer offenses. Compared to baseline rates, there was a 35.1% reduction in offenses in the supplemented group. "The greatest reduction occurred for the most serious incidents including violence," the researchers note, with a 37% drop seen in such incidents (Gesch et al, 2002).

Gesch *et al.'s* research supports previous findings by Stephen Schoenthaler and colleagues, whose studies show that nutritional supplementation can reduce antisocial acts by incarcerated children or adults, as well as reducing antisocial behaviour and increasing IQ in "at risk" school children *(Crime Times, 2000, Vol. 6, No. 2, Pages 3 & 6)*. Schoenthaler's dietary supplement research on young adult offenders in California revealed a 38% lower rate of serious rule violations in the group receiving supplements. Two other large, placebo-controlled studies by Schoenthaler et al., one of a group of "at risk" elementary school children and the other of adolescent delinquents, also revealed that those receiving dietary supplements showed a marked drop in violent and non-violent antisocial acts.

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