How is parenting style related to child antisocial behaviour?

Preliminary findings from the Helping Children Achieve Study

Stephen Scott, Moira Doolan, Celia Beckett, Séan Harry, Sally Cartwright and the HCA team
This research report was commissioned before the new UK Government took office on 11 May 2010. As a result the content may not reflect current Government policy and may make reference to the Department for Children, Schools and Families (DCSF) which has now been replaced by the Department for Education (DFE).

The views expressed in this report are the authors’ and do not necessarily reflect those of the Department for Education.
Executive Summary

1. This study examined in detail 278 families living in inner city areas who had children at higher risk of poor social and academic outcomes due to antisocial behaviour. The children were aged 4-7, starting out on their school careers.

2. It found that a negative parenting style characterised by more harsh, inconsistent discipline was clearly associated with more severe child antisocial behaviour. This remained true even after a range of child and family socioeconomic factors were taken into account. Being in the top quarter of parents using of negative discipline was associated with having twice the rate of severe child behaviour problems in the clinical range (rising from 21% of children in families who didn’t use it, to 40% if they did).

3. However, maternal wellbeing (depression and stress), and partner violence each were additionally associated with child antisocial behaviour over and above the effect of negative parenting.

4. Since the study has confirmed the link between negative parenting and child antisocial behaviour in England today, the implications are that it is appropriate to offer parents parenting programmes that have been shown to reduce coercive parenting practices, improve positive parenting, and reduce child antisocial behaviour. Similar processes operate with younger children from age two onwards, for whom parenting help would also be beneficial.

5. Likewise, since maternal wellbeing and partner violence are independently associated with child antisocial behaviour, it is appropriate to offer interventions that reduce depression and stress, and improve the couple relationship.

6. The child characteristic of restlessness combined with poor ability to sustain attention (also known as symptoms of ADHD) was also found strongly to influence child antisocial behaviour. Because this pattern of behaviour is amenable to a range of interventions including parenting, this finding indicates the importance of careful assessment of child problems as well as parenting practices in order to ensure children receive appropriate help.

7. Readily available and simple questionnaires of parenting and child antisocial behaviour were good at detecting issues confirmed by more intensive interview methods, which however were more accurate predictors of child problems. Therefore the use of simple questionnaires in standard practice could be very
helpful for a range of practitioners who work with parents and children as an initial screen to identify those who would benefit from help.
1. INTRODUCTION

1.1 Child antisocial behaviour and parenting style

Antisocial behaviour is a major problem in childhood and beyond. More severe, persistent forms affect 5%-10% of children in developed western countries (Rutter, et al., 2008) and are linked to future adult crime, drug & alcohol misuse, unemployment, poor physical health and mental disorders (Cohen, 1998; Moffit, et al., 2002; Odgers, et al., 2007). It is estimated that a high risk youth could cost the public $1.7-2.3 million over their lifetime (Cohen, 1998).

A major risk factor is parenting style, in particular harsh and inconsistent parenting, which research has shown is associated with child behaviour problems (Scott, 2008; Finzi-Dottan, Bilu, & Golubchik, 2011; Dadds, 1995). Other factors that feed into this directly and indirectly include domestic violence, parental drug abuse, maternal depression, family poverty, parents with low education, stressed families and single parent status (Webster-Stratton & Reid, 2008; Bloomquist & Schnell, 2005).

Previous research has suggested some of the parenting behaviours that can improve or exacerbate children’s behaviour problems. Studies have reported a significant relationship between high levels of parental warmth and lower levels of externalising behaviour problems in children (Garber, Robinson, & Valentiner, 1997). Research also suggests that a lack of involvement, as well as poor monitoring and supervision of children’s activities, strongly predicts antisocial behaviour (Loeber & Stouthamer-Loeber 1986). Parents of children with antisocial behaviour are likely to be less positive, more permissive and inconsistent, and use more violent and critical discipline (Reid, Webster-Stratton & Baydar 2004). In an influential review Rutter, Giller & Hagell (1998) concluded that antisocial behaviour is associated with hostile, critical, punitive and coercive parenting.

The proximal relationship of parent to child ensures that each exerts a strong influence on the other. Social Learning Theory suggests that a child learns behaviour from interaction with significant people in their environment, particularly parents and these behaviours are maintained through modelling and reinforcement. Conversely, undesirable behaviours can be unintentionally reinforced by parents’ attention to such behaviour and subsequent attempts at appeasement. Additionally, the coercive nature of this interaction results in an increased risk of scholastic difficulties when negative spiral patterns of reinforcement, involving both the parent and the child, go unchallenged (Taylor and Biglan 1998). Patterson (1982) found that these patterns, when established in a coercive family environment, result in an escalation of negative behaviour on the part of the child, which in turn reinforces the parent’s withdrawal and harshness towards the child, as well as the child’s
problematic behaviour (McKee, Colletti, Rakow, Jones, & Forehand, 2008). Therefore, parents who are inconsistent in their approach towards their child can unintentionally promote negative child behaviour, which can lead to a mutual escalation into negative behaviour from both (Rutter, et al., 2008). In families where the focus is on negative behaviour, prosocial behaviour often goes unrecognised and nonviolent conflict resolution is neither taught, nor modelled (Patterson 1982). Reducing harsh, negative and inconsistent parenting has been shown to have a positive influence on children’s behaviour in a number of studies (Eyberg, Nelson, & Boggs, 2008; Kaminski, Valle, Filene, & Boyle, 2008); once parents have been shown the skills to manage problem behaviour, levels of antisocial behaviour in children can return to a normal level (Jouriles, McDonald, Rosenfield, Corbitt-Shindler, Stephens, & Miller, 2009).

Family risk factors are strongly associated with antisocial behaviour in children; and reducing risk factors, such as coercive parenting, through Family Interventions can improve the parent-child relationship and thus the child’s behaviour (Scott, 2008). When ineffective parenting is a problem, cognitive behaviourally based parenting interventions can both prevent and treat antisocial behaviour (Beauchaine et al 2005, Gardner et al 2006). Interventions such as the Webster Stratton Incredible Years parenting programme utilise a collaborative approach, helping parents to learn strategies to more effectively deal with undesirable behaviour, reduce negative and harsh parenting, and increase positive feedback and interactions (Webster Stratton & Hammond, 1997).

1.2 Overview of the Study

- The HCA trial had four stages. At Stage One, 2,497 children in reception, year one and year two were screened for antisocial behaviour using a brief questionnaire filled in by both the teacher and parent. Additionally, 193 children were referred by local services and got the same screen. At Stage Two, families whose children’s antisocial behaviour was at least in the more severe third of the population, and who agreed to be studied (total 278) were assessed in more depth by interviews and a range of other measures. Then for Stage Three they were randomly assigned to one of three interventions or a control condition: Incredible Years parenting programme (IY); Supporting Parent’s with Kid’s Education literacy programme (SPOKES); a combination of both IY and SPOKES (COMBI), or Signposting (Control). Finally at Stage Four, recruited families are being assessed again 9-11 months after the first assessment, and a further year later (Beckett, et al 2010). Future reports will examine the effectiveness of these interventions.

- The stage one population screen was conducted in two contrasting local authorities: A deprived London Borough with a multi ethnic population and a small city in SW England which is average for deprivation and is more than
95% White British. At the in depth assessment (stage two), families took part in three separate interviews. The parent was interviewed by a researcher and was asked for demographic information as well as for information relating to the child’s behaviour, parenting and family life. The parent was also asked to complete a questionnaire pack. The child was assessed in school with a variety of literacy and behaviour assessments, and finally an observation consisting of a structured interaction between parent and child took place in the family home.

- This report analyses data from the detailed assessment at Stage 2. Observational data on parenting are not included as coding is not yet complete; resources permitting, this should be available in April 2012. This report includes some children who for a variety of reasons, such as moving away, were unable to complete stages 3 and 4.

1.3 Focus of this report

This report examines the relationship between parenting styles and a range of family factors and child antisocial behaviour.

The hypotheses tested were that:

1. Child antisocial behaviour will be associated with negative parenting
2. Child antisocial behaviour will be associated with family demographic factors: lower socioeconomic status, younger parenthood, lower levels of parental education.
3. Child antisocial behaviour will be associated with maternal wellbeing factors: depression and stress and partner violence.
4. Mothers’ parenting style will be associated with the factors described in 2 and 3 above.

1.4 Methods

Sample
As noted above, the children were aged 4-7 and attending local primary schools. Parents had to be able to understand and speak sufficient English to take part. There were 105 families from London, and 173 from the Southwest; 190 families were White British, 87 were from an ethnic minority. As is usual for children who show elevated levels of antisocial behaviour, boys outnumbered girls, 159 to 119.
1.5 Measures

Family Characteristics
These were measured by an interview that included questions about family income, family structure, parental education and household information.

Child behaviour and attainment
This was measured using the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). This is the most widely used questionnaire in the country on its topic area, and the five questions on each of the three subscales on Antisocial behaviour (eg fights), Pro-Social behaviour (eg helpful to adults), Peer Relations (eg has at least one good friend) subscales were completed by parents and teachers for screening purposes.

For greater detail on selected families, the Parental Account of Child Symptoms interview (PACS; Taylor et al, 1991) was given. It is a researcher rated measure used to assess the parent’s detailed account of the severity and frequency of the child’s antisocial behaviour and restlessness and inattention (ADHD symptoms). It is well validated and predicts later poor outcomes. Whereas questionnaires inevitably take whatever response the parent wishes to give, the interview is rated by the investigator, giving a more objective view. Thus for example the parent may rate their child as very aggressive on the questionnaire, while the interview might reveal that he bangs his toys noisily, which would not get a very high rating. In contrast another parent may say her child is not aggressive, but interviewing might reveal she regularly punches her brother, which would be given a higher rating.

The British Picture Vocabulary Scale (BPVS) was administered to give a measure of the extent of a child’s vocabulary and is related to later academic attainment

Parenting styles
The parent looking after the child for the most time completed the Alabama Parenting Questionnaire (APQ; Shelton, Frick, & Wootton, 1996), a self-report of parenting practices, measuring positive parenting practices (praise & rewards; parental involvement) and negative parenting practices (failure to carry out adequate monitoring and supervision, lack of consistency of discipline, corporal punishment).

To get a more detailed view, the Interview of Parenting Practices (Scott, 2003) was administered. This is also a researcher rated measure used to assess the parent’s detailed descriptions of their positive and negative parenting practices and approaches to discipline.
**General parental wellbeing**

This was assessed using the Depression, Anxiety & Stress Scale (DASS; Lovibond & Lovibond, 1996). This questionnaire has 3 subscales, depression, anxiety and stress assessing the mental wellbeing of the mother or main carer.

The Index of marital satisfaction (Hudson, 1992) was also administered. This questionnaire assesses one partner’s view of the nature of the relationship with the other.
2. RESULTS

Factors associated with child antisocial behaviour

2.1. Parenting style
NB *= results significant at p<.05, ** at p<.01, *** at p<.001.

Negative parenting whether measured by Alabama questionnaire or interview was found to be clearly associated with child antisocial behaviour as identified both by SDQ questionnaire (questionnaire r=.28**/ interview r=.20**) and by PACS interview (PACS r=.27**/.32**). Thus using interviews for both constructs gave the strongest association, probably because they are more accurate measures. The association between negative parenting and child antisocial behaviour still held after controlling for demographic factors including ethnicity, parental education, and being a single parent family.

Both questionnaire and interview measures of negative parenting were associated with lower child vocabulary scores (r= -.19**, = -.28***). However, this effect was no longer significant when parental education was taken into account.

Thus across a range of measures, an association was consistently found between negative parenting and child antisocial behaviour. The first hypothesis was thus upheld. Although the correlations may not on the face of it seem especially large, an indication of its significance is that parents who were in the top quarter of reported use of negative discipline had twice the rate of children with severe behaviour problems compared to the other parents (up from 21% to 40% in the clinical range meeting a diagnosis of conduct disorder).

Likewise, negative parenting was also associated with poorer child vocabulary scores.

In contrast, no association was found between any measure of positive parenting and child antisocial behaviour, but positive parenting as measured by questionnaire was associated with prosocial behaviour on the SDQ (e.g. helpfulness, concern for others) in the child (r=.19**) but not when using the interview measure of parenting.

The question arises as to whether the more intensive interview approach to the assessment of parenting adds to the prediction of child antisocial behaviour, once a questionnaire has been completed. This was found to be the case, thus when both were combined the interview added to the prediction of antisocial behaviour (Beta rose from .27 to .36), and in this head-to-head situation the interview was almost twice as powerful as the questionnaire.
2.2 Family characteristics

Socio-economic Status & Education
A small association was found between lower SES and child antisocial behaviour by questionnaire (SDQ r=.13*), but not by interview. Similarly, a small association was found between lower levels of mother education and child antisocial behaviour by questionnaire (SDQ r=-.14*), but not by interview. This association is somewhat weaker than sometimes found by others in the research literature. It certainly suggests that targeting intervention delivery by these factors is at best a weak ay to reach parents who are parenting more harshly, or who have children who are difficult.

2.3 Ethnicity
Parents of White British children in the study reported more severe antisocial problems as measured by interview (PACS r=.35**) but not by questionnaire, whether filled in by parent or teacher. This may because White British children are worse behaved at home but not at school, or because White British parents were more prepared to admit difficulties. Having English as an Additional Language had a slight effect by parent interview (r=.17*) and teacher questionnaire (r=.17*) but not parent questionnaire.

2.4 Family structure
No differences in child antisocial problems were found between single parent families and others.

2.5 Maternal age
A weak association was found between being a younger mother and child ASB and as measured by the questionnaire (SDQ r=.14*) but not the interview.

2.6 Summary of family characteristics
Hypothesis two was not upheld in this sample: there was not more child antisocial behaviour reliably reported across measures in families with a range of demographic features associated with disadvantage.
2.7 Parental wellbeing and the couple relationship

Maternal wellbeing

Maternal depression was found to be associated with child ASB as measured by questionnaire (SDQ r=.23*) and interview (r=.24**); likewise maternal perception of stress was related (SDQ r=.15, PACS r=.30) but anxiety was not.

2.8 The couple relationship

Mother’s experience of partner violence was also associated with child ASB, by questionnaire (SDQ r=.18*), and interview (r=.24**). These findings show the importance of taking account of maternal wellbeing in relation to child problems.

2.9 Summary of environmental factors related to child antisocial behaviour

Here we only consider factors where the strength of relationship with child antisocial behaviour is significant when measured by both approaches, ie is reliable since found by both questionnaire and interview. These are

1. Parenting: a negative parenting style
2. Maternal wellbeing: depression and stress

Social class, maternal educational status, being a single parent and ethnicity were not reliably associated with child antisocial behaviour; nor was maternal anxiety.

Inter-relation of environmental factors: do they each exert an independent influence, or are they interchangeable?

Further analyses investigated whether the maternal wellbeing and couple relationship factors influenced child antisocial behaviour through negative parenting, or whether they had additional effects even when parenting quality was taken into account. The effects were striking: all three factors still had almost equally strong effects even after allowing for parenting, that is they had additional effects (bivariate and partial correlations for depression: r=.24 becomes .20 after allowing for parenting, stress .30 becomes .24, violence .24 becomes .16).

2.10 Child characteristics

In addition to influences outside the child, the child’s own characteristics were examined. Child restlessness combined with poor ability to sustain attention (also known as symptoms of ADHD) were found strongly to predict child antisocial
behaviour ($r=.40$). This influence was independent of parenting and maternal wellbeing or partner violence, which further added to the prediction of child antisocial behaviour (raising $r$ to .47).

2.11 **Factors associated with parenting styles**

Please see Annex 1.
3. DISCUSSION

3.1 Summary of key findings

Child antisocial behaviour problems were found to be clearly associated with negative parenting, maternal depression and stress, and partner violence. When negative parenting and one of these other factors was present, the chance of the child having severe antisocial behaviour problems was tripled. Child inattention and restlessness further increased the chances of antisocial behaviour. In contrast, socio-demographic factors were not associated with increased rates of child antisocial behaviour. The interview measures were more accurate than questionnaires at detecting behaviour problems, but the questionnaires were a good screen.

3.2 Strengths and limitations of the study

Strengths
The study had many strengths. It had a large sample of families including a high proportion with children at risk of poor outcomes in later life due to antisocial behaviour. Families with socio-demographic risk factors such as low income, minority ethnic status and lone parenthood were well represented. It used high quality measures (detailed interviews as well as questionnaires) previously shown to be reliable and valid.

Limitations
Firstly, it should be noted that since this was a cross-sectional study, causal effects cannot be assumed. Thus from this study we cannot conclude that negative parenting caused the children to behave antisocially. Indeed other research suggests that some of the association is due to irritating children evoking harsher parenting. However, a whole range of studies has shown that the causal effect is there too, and that harsh parenting inadvertently trains children up to become antisocial. Perhaps the point here is that the present study has confirmed that for those who wish to deliver services in England today, poor parenting is clearly linked to child antisocial behaviour, so that this approach to identifying children with behaviour problems is valid because it will pick up families with less optimal parenting that could benefit from an evidence-based parenting programme.

Secondly, the strengths of the associations found may be limited by the fact that there were no families with children who did not display antisocial behaviour (families
with children below the screen cut-off were not studied) – had they been included, the associations found in this study might have been still stronger.

Thirdly, the study relied on the parent (almost always the mother) as the informant about parenting, and used both parents and sometimes teachers to report child antisocial behaviour. Whilst the interview technique uses the researcher to estimate the quality of parenting, nonetheless the material on which judgements are made comes from the parent, who may not always be a totally reliable informant. In later reports we will be able to overcome this limitation to some extent by including ratings from direct observation of parents with their children.

Implications

Opportunity to use parenting programmes
These findings confirm those of others that antisocial behaviour is prevalent in children in England today and is clearly associated with harsh parenting. It underlines the fact that there is the opportunity to improve children’s life chances through directly intervening with programmes that are effective in changing parenting styles. Considerable evidence exists that parenting programmes can be effective in England in helping parents reduce coercive parenting and improve child behaviour, be it in clinical samples (Scott et al 2001, Gardner et al 1997), or selected from a school screen (Scott et al, 2010).

Opportunity to use interventions that reduce parental depression and stress, and improve the couple relationship
The clear independent and additional association of parental wellbeing and partner violence with child problems shows that interventions to improve these issues would help. There are effective interventions available for depression (CBT; medication) and some for parental stress. There are interventions that are proven to be effective for the couple relationship, but their availability in England at present is limited.

Opportunity to use simple questionnaires to detect child problems and parenting styles
The study showed that simple questionnaires are good at detecting child problems (antisocial behaviour, poor concentration and restlessness) and parenting styles, as tested against the higher quality interview measure. This means that in addition to picking up child antisocial behaviour that is potentially amenable to intervention, as discussed above, it is easy to also pick up child inattention and restlessness, which considerably exacerbates antisocial behaviour and is also a risk factor in itself for poorer outcomes, especially educational. This is important since there are effective
interventions for inattention and restlessness, notably parenting, and for severe cases, medication.

**Further research**
Further questions that arise in the light of this study include the extent to which questionnaire and interview measures of parenting are confirmed by direct observation in the home, the proportion of parents that would be willing to take up parenting programmes, and the effectiveness of programmes in improving antisocial behaviour for children recruited by screen. The National Academy for Parenting Research aims to answer all these questions over the next year.
References


ANNEX 1

Factors associated with parenting styles

Family characteristics in relation to parenting style
Mothers who were single parents, had lower levels of education or were less advantaged socio-economically were more likely to use negative parenting practices: Single parent and negative parenting on questionnaire ($r=.16^*$) and Interview ($r=.24^{**}$); Less education and neg. parenting questionnaire ($r=.15^*$); lower SES and neg. parenting questionnaire ($r=.17^*$). These findings (although not showing strong effects) indicate the importance of considering social disadvantage in relation to parenting.

Parental wellbeing in relation to parenting style
Mothers who reported more depression ($r=.15^*$), anxiety ($r=.25^{**}$), and stress ($r=.23^*$) were more likely to use negative parenting practices, as were those who reported violence from their partner ($r=.29^{**}$). In contrast, satisfaction with the partner relationship was found to be associated with positive parenting ($r=.34^{**}$). These findings were in line with prediction and show the importance of maternal well being and partner relationship for parenting.