

**Protocol of Measures for the Evaluation of the
Webster-Stratton Group Parenting Programme with
Parents of ‘at risk’ Pre-school Children in Sure Start
Centres Across Wales**

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Section 1. Evaluation of the Webster-Stratton BASIC Parent Training Programme

1.1 Purpose of the Protocol

This protocol provides information regarding the tools being used in a research project to evaluate the Webster-Stratton BASIC Parent Training Programme, in a Welsh setting. The programme is one of Webster-Stratton's Incredible Years (IY) programmes developed and researched for parents, children and teachers. The programme is being offered to parents of pre-school children at risk of developing conduct disorder and who are living in identified Sure Start areas across North Wales. The programme is being delivered by certified group leaders through seven participating Sure Start centres across North Wales.

Section 1.2 gives an overview of the literature on child conduct problems and a brief description of the IY BASIC Parent Training Programme. Section 1.3 gives an introduction to the Bangor Child Behaviour Project, describing the background to this work in Wales and to the current evaluation. In section 1.4 the aims of the evaluation are given and an overview of the evaluation method is provided. Section 1.5 provides information on the Health Economics study that is being run in conjunction with the parent training programme evaluation.

Section 2 provides details on participant recruitment criteria, home visit procedures, a detailed description of the measures to be used, including the rationale for their selection and how they will be administered. Where permitted samples of the measures are provided in Appendices D-H and measure availability is detailed in Appendix I.

1.2 Background Literature: Parent Training Intervention for Conduct Disorders in Young Children

Recent figures obtained from a British national survey, based on multiple report sources and diagnostic interview (ICD-10 criteria; World Health Organisation, 1992), indicate that 10% of children aged 5-15 years have had a mental disorder and half of these presented with clinically significant conduct disorders (Office for National

Statistics, 1999). These findings are disproportionate for boys, with 7.4% of boys (aged 5-15) showing evidence of a conduct related disorder, as compared to only 3.2% of girls.

Diagnostic categories of disruptive behaviour/conduct disorder consist of clusters of symptoms used to form broad descriptions of an individual's functioning. Both the World Health Organization's ICD-10 (World Health Organization, 1992) and the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV; American Psychiatric Association, 1994), provide disruptive behaviour/conduct disorder diagnostic categories that reflect patterns of aggression and conduct problems in children (the criteria for diagnosis via each of these classification systems is provided in Appendix A). Conduct disorders¹ are characterised by age inappropriate disruptive and antisocial behaviours, that include high rates of oppositionality, defiance and aggression (Webster-Stratton, 2003). In the school years diagnostic symptoms include violation of classroom and adult authority, including lying and cheating, and in the adolescent years, violations of the law or community authority (Webster-Stratton & Herbert, 1994).

Family and contextual factors influence prevalence rates for conduct disorders. Higher rates tend to be found in families with single parents, frequent changes of parental figures, parental psychopathology, parental substance abuse, marital problems, and poor parenting skills (Bloomquist & Schnell, 2002). For instance, prevalence rates of early-onset conduct disorders in children from low-income Head-Start families in Seattle have been found to be as high as 35% (Webster-Stratton & Hammond, 1998).

Left untreated the prognosis for children with early-onset conduct disorders is poor. Short term, these children typically develop high levels of unhappiness and low self-esteem (Scott, 1998), display low levels of social competence (Webster-Stratton & Lindsay, 1999), and may have difficulty in forming and maintaining friendships (Coie, 1990). Long term, children displaying early-onset conduct problems are also at

1. Throughout this report the generic term "conduct disorders" is used to refer to clinically diagnosed behavioural disorders. The term "conduct problems" will be used to describe the behavioural patterns typical of these disorders.

heightened risk for drug abuse and depression in their adolescent and adult years (Kazdin, 1995; Loeber, 1991). In addition early-onset of aggressive behaviour, at least for boys, is one of the best predictors of antisocial and criminal behaviour in adolescence and adulthood, including violent offending (Farrington, 1995; Broidy et al., 2003).

In terms of the economic impact of conduct disorders, there are severe financial implications for the individual, family, and society. Such costs are evident in increased utilisation of health, social, education and legal services, and may amount to an average cost per family of £15,382 per year (Knapp, Scott, & Davies, 1999), with Scott, Knapp, Henderson and Maughan (2001) estimating that costs may total up to £1 million over an individual's lifetime. Much of this cost is borne by publicly-funded services, this is particularly the case in areas of social exclusion where families are already most likely to rely upon state-provided services.

Although the economic impact of conduct disorders to children, their families and society is considerable, no economic evaluation has yet been conducted as part of a randomised clinical trial of this programme in Britain. The current clinical trial provided an ideal opportunity to design a bolt-on economic evaluation to run alongside the main clinical evaluation.

Conduct disorders become increasingly difficult to treat as children grow older (Webster-Stratton & Herbert, 1994). This may be due to problem behaviour becoming embedded overtime and reinforced by exposure to additional risk factors such as school failure, social rejection and deviant peer groups (Hartman, Stage, & Webster-Stratton, 2003). Without intervention early aggressive tendencies become established patterns of responding at about age 8 years (Eron, 1990). There is also evidence that conduct disorders in young children are on the increase (Webster-Stratton & Hammond, 1997). Accordingly, Webster-Stratton (2003) argues for the need to provide both treatment *and prevention* interventions during the toddler and preschool years.

Risk Factors for the Development of Conduct Disorders

Bloomquist and Schnell (2002) suggest that “effective” interventions increase the likelihood of a child moving towards a more positive outcome by reducing risk factors and promoting protective factors.

A risk factor is defined as a correlate found to come before an outcome (Kraemer, Stice, Kazdin, Offord, & Kupfer, 2001). In terms of child conduct disorders, a risk factor may be defined as “a characteristic within an individual (e.g. deficits in attention) or a circumstance (e.g. poverty) that increases the probability of a maladjusted developmental outcome” (Bloomquist & Schnell, 2002, p. 36). Child, family and contextual risk factors contribute to the development of early-onset conduct disorders, and may do so in a cumulative manner (Webster-Stratton, 2003).

Child Factors.

Reading problems and poor academic achievement have been linked to conduct disorders (Kazdin, 1995). Such problems may create barriers to school adjustment in the early years by decreasing effective child-teacher and child-peer interaction (both discussed later).

Children with conduct disorders typically lack the social skills to maintain friendships and risk being isolated from peer groups (Coie, 1990; Kazdin, 1995; Marshall & Watt, 1999). They are more likely to interpret social cues as provocative, to anticipate fewer consequences for their actions, to generate fewer problem-solving solutions compared to other children, and to favour more aggressive solutions to solve their social problems (Crick & Dodge, 1994). Rejection by peers is often a prelude to deviant peer group membership making the risk for drug abuse and antisocial behaviour even higher (Dishion, Patterson, Stoolmiller, & Skinner, 1991).

Parenting Factors.

There is abundant evidence that many children learn and establish conduct problems because parents lack key parenting skills, use them inconsistently, or fail to use them at the appropriate times (Gardner, 1992; Patterson, 1982). Many studies have demonstrated that parenting which involves inconsistent discipline, nagging, ineffectual commands and punishment, plays a significant role in the development

and maintenance of child conduct problems (Campbell, 1995; Gardner, 1992; Kochanska & Aksan, 1995).

Contextual & Family Factors.

Children are at greater risk of developing conduct disorders if the child's biological parent has an anti-social personality (Kazdin, 1995) and/or is involved in substance misuse or criminal activities (Patterson, DeBaryshe, & Ramsey, 1989; Frick et al, 1991). This association maybe indicative of a genetic predisposition to conduct problems. Alternatively, it may be that parents involved in crime provide deviant role models for children and substance misuse compromises parents' capacity to care for their children correctly (Carr & Carr, 1999).

Maternal mental health problems are strongly associated with child conduct problems with 50% of children with conduct disorders having parents with significant mental health problems, particularly depression (Alpern & Lyons-Ruth, 1993; Hutchings, 1996a, 1996b). There are differences in the behaviour of depressed mothers towards their children from early in their child's lives (Loeber, 1990). If these persist they may contribute to the development of conduct disorders (Patterson, 1982).

Marital conflict may have an indirect effect on child conduct problems through increased parental stress and depression (Webster-Stratton & Herbert, 1994). There is also evidence to suggest that marital conflict can have a direct effect on child conduct problems. This may occur through the child learning antisocial habits of conflict resolution and seeing fewer examples of prosocial skills and negotiation (Scott, 2003; Webster-Stratton & Hammond, 1998).

Socio-economic disadvantage has long been associated with child conduct disorders, subsequent delinquency and adult mental health problems (Farrington,1995; Kazdin & Wassell, 2000). Research indicates that major life stressors such as poverty, unemployment, cramped living conditions and illness have a negative impact on parenting and are related to many childhood problems including conduct disorders (Kazdin, 1995; Patterson, 1992).

School Experiences.

Conduct problems can lead to poor relations with teachers. Children with conduct problems become known as “troublemakers” and receives less encouragement and support and more criticism and disciplinary action (Campbell & Ewing, 1990).

Webster-Stratton (1994) reported that 50% of the conduct-disordered children with whom she had worked had been excluded from three or more classes by the time they reached the second grade (8 years of age). Excluded children often attend special educational units where they interact with children with similar behaviour problems and, without specialist intervention, have little opportunity to experience the modelling of more appropriate behaviour.

The Developmental Pathway Towards Conduct Disorders

A diagrammatic representation of these risk factors is summarised in Figure 1.

Webster-Stratton and Taylor (2001) suggest that conduct problems beginning in the toddler years may result from ineffective parental responses to a child whose temperament is more demanding (i.e. impulsive, hyperactive, quick to anger). Some parents respond to the child with harsh and punitive discipline, others respond by frequently giving in to the child’s demands. Harsh parenting provides a negative role model, further exacerbating existing maladaptive social-cognitive skills within the child. Inconsistent parenting serves to reinforce early conduct problems so that it becomes a more stable pattern of behaviour (Patterson, Chamberlain, & Reid, 1982). High levels of family stress may compound these problems, and may contribute to low cognitive stimulation and poor support for the child’s academic and social development.

**Toddler/Preschool Age
years)**

Elementary School Age (6-11

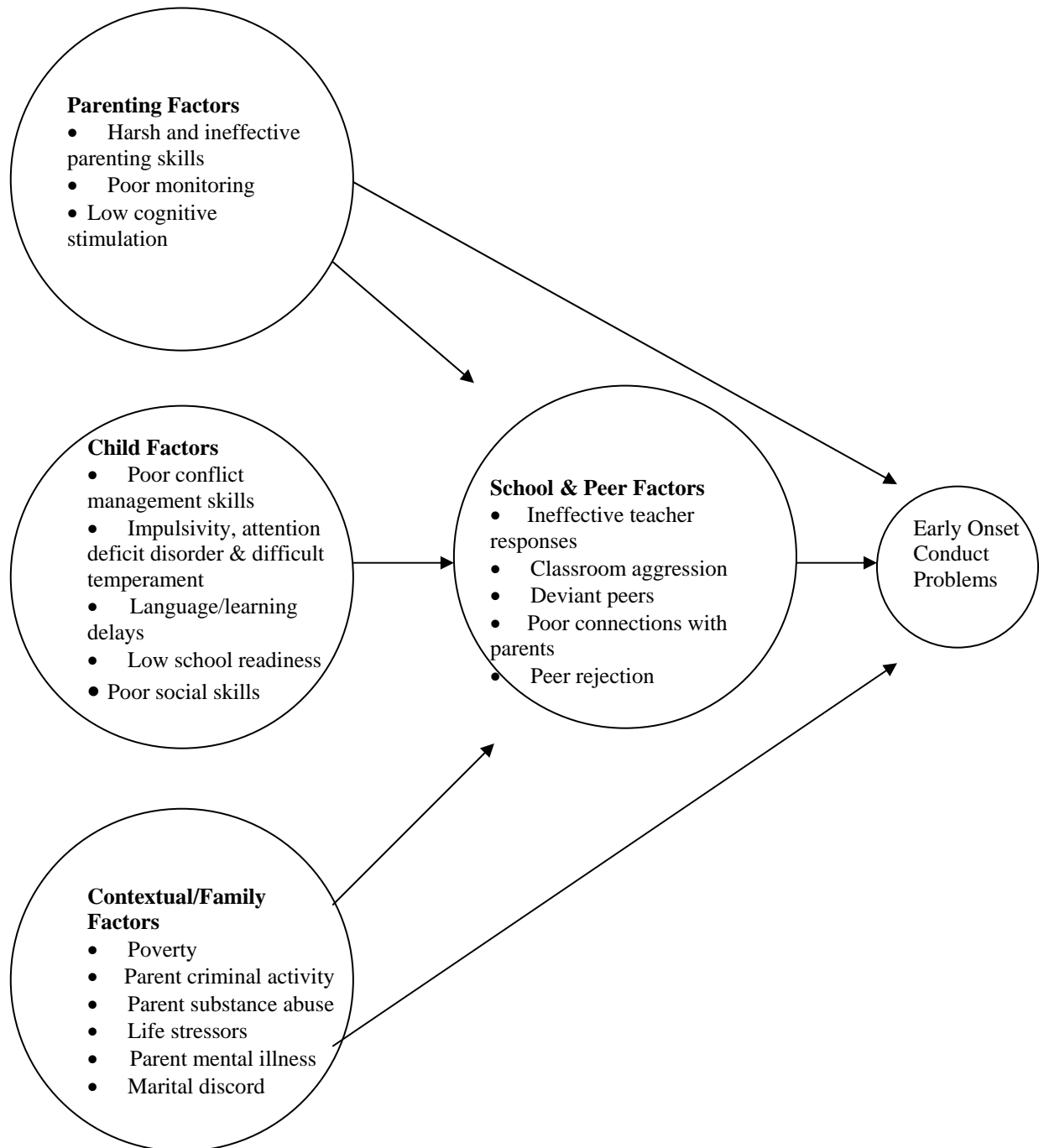


Figure 1. Risk Factors Related to Conduct Problems Webster-Stratton & Taylor (2001).

Parent Training Interventions

Parent training (PT) interventions are the most widely researched and most effective intervention strategies available for the treatment and prevention of conduct disorders in young children (Brestan & Eyberg, 1998; Kazdin, 1997). The purpose of PT is to reduce conduct problems by strengthening parent management skills and improving their timing in the use of parenting skills. PT is based on the core assumption that deficits in parental skills are the major factor in the development and maintenance of conduct problems. In PT parent-child interactions are modified with the aim of increasing child prosocial behaviour and decreasing child oppositional or antisocial behaviour (Kazdin, 1997).

PT is grounded in extensively researched models of parent-child interaction (Scott, 2003). Most PT is drawn from Patterson's model of coercive-interaction (Patterson, Chamberlain, & Reid, 1982) and Social Learning Theory (Bandura, 1977). Social learning techniques rely strongly on principles of operant conditioning. The basic premise driving both these theories is that behaviour that is rewarded (reinforced) will increase in frequency and be repeated, whereas that which is not rewarded, or is punished, will decrease in frequency and not be repeated. Accordingly, the key components of PT involve parents learning to change the antecedents that are eliciting, and the consequences that are maintaining, the child's negative behaviours, and to develop techniques to maintain and increase positive behaviours. Parents learn effective behaviour management principles and sessions generally follow a structured curriculum over several weeks.

Evidence Based Parent Training Programmes

Studies indicate that between 70% and 90% of children who need treatment for conduct disorders do not receive them (Brestan & Eyberg, 1998). Of the minority of children that do receive treatment, there is wide variation in the type and level of service provided, with few likely to receive empirically validated treatments (Webster-Stratton, 2003) and many receiving treatment from practitioners who do not specialise in child emotional and behavioural disorders (Kurtz, Thornes, & Wolkind, 1994). This situation is now changing as funding bodies increasingly require evidence of a programmes effectiveness, for example there is a requirement in Sure Start Services in England and Wales that they evaluate their services. In addition there

exists a significant body of recent systematic reviews identifying the components of effective evidence and reporting on programmes that reach these criteria. Three such reviews are discussed next.

Brestan and Eyberg (1998) reviewed 82 psychosocial interventions for children and adolescents to identify empirically supported treatments that show reduction in conduct problems. The Blueprints for Violence Prevention Series was developed by the Center for the Study and Prevention of Violence at the University of Colorado, now funded by the Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice. The aim of the Blueprints series is to identify and disseminate information on outstanding programmes for the prevention of crime and violence, “programmes that could provide an initial nucleus for a national violence prevention initiative” (Webster-Stratton et al., 2001, p. xiv). A third review, conducted by Webster-Stratton and Taylor (2001), aimed to identify effective universal and selective programmes for the prevention of substance abuse, delinquency, and violence in adolescence, through interventions targeted at children aged 0-8 years. Identified interventions were also required by these latter reviewers to be accessible for use and replication by service providers (Barlow, Parsons & Stewart-Brown, 2002).

Although these three reviews differ slightly in investigative focus, and accordingly outcome focus, the criteria used to identify exemplary programmes show considerable overlap. First, these reviews are in agreement that a detailed scientific report must be available. Second, these reviews are in agreement that to be identified as efficacious, a programme must demonstrate effects under conditions of random controlled trial (RCT) testing. In RCT designs participants (families) are assigned, at random, to receive the intervention, another treatment, or no treatment at all. Third, these reviews are in agreement that changes must be demonstrated on outcomes that have important consequences for families, such as reduction in child temper tantrums, delinquency, or aggressive responding. Two of the reviews agreed that these effects should be maintained at least one year post intervention, which given the long trajectories of conduct disorders is essential (Kazdin, 1997).

For PT interventions for young children (up to 8 years) Webster-Stratton's Incredible Years (IY) Parent Training Programme was the only programme to satisfy the highest criteria in all three reviews.

The Incredible Years Series

Professor Webster-Stratton, at the University of Washington in Seattle, has been developing the IY Series over the last 30 years. The series comprises three linked programmes for children, teachers, and parents. The programmes have been rigorously researched over the last 20 years using randomised controlled trial studies with positive results which have been replicated by independent researchers. The accumulated research evidence has demonstrated the effectiveness of these programmes in both preventing and treating conduct disorders in young children and increasing their social competence.

There are three parent-focused programmes. The first to be developed was the BASIC programme (Webster-Stratton, 1981), this has since been supplemented by the ADVANCE and the SCHOOL (Supporting Your Child's Education) programme (for an over view of these programmes see Webster-Stratton et al., 2001). The ADVANCE programme was developed to address other family risk factors, such as depression, marital distress, poor coping skills, and lack of support (Webster-Stratton & Hancock, 1998) that are often present with the parents of clinically referred children. The SCHOOL programme was developed to address risk factors associated with children's lack of academic readiness and poor home-school connections (Webster-Stratton & Hancock, 1998).

Incredible Years BASIC Parent Training Programme.

The IY BASIC Parent Training Programme consists of 12-14 weekly sessions for parents, involving facilitator-lead group discussion, videotape modelling and rehearsal of taught intervention techniques. The programme is delivered in a group format with groups of 12-15 parents. There are two versions of this programme, one for children aged 2-7 years (early childhood version), and one for children aged 5-12 years (school-age version). These two versions share the same programme content with the exception that the school-age version has less emphasis on play and more emphasis on problem-solving.

The first half of the programme focuses on play and relationship building, praise and rewarding positive behaviour. The objective is to enhance positive relationships between parent and child and to help parents encourage more appropriate social behaviours in their children (Webster-Stratton & Hancock, 1998). These sessions enable parents to establish a positive base upon which strategies to decrease inappropriate behaviour can be built. Parents are reminded of the importance of this base throughout the subsequent sessions through reference to the parenting pyramid (Figure 2). The remaining sessions focus on instruction giving and effective limit setting strategies for handling misbehaviour (including *Ignoring*, *Time Out* and the use of natural and logical consequences).

QuickTime™ and a
Photo - JPEG decompressor
are needed to see this picture.

Figure 2. The Parenting Pyramid (Webster-Stratton & Hancock, 1998).

Programme Delivery.

The programme relies upon performance training methods, which include video-tape modelling, role-play, practice activities during the session and at home, and feedback during the session from the group leader and other group members (Webster-Stratton

& Reid, in press). Use of video tapes, developed to be culturally diverse, provide a wide variety of models and situations. This approach is hypothesized to result in greater generalisation of training content and to provide a better opportunity for learning for less “verbally orientated learners” (Webster-Stratton & Reid, in press, p. 230).

A collaborative approach to programme delivery is fundamental. This approach is described in detail in Webster-Stratton and Herbert (1994). The core theme is a reciprocal relationship between parent and group leader. The group leader seeks to utilize, equally, their own knowledge and the parent’s unique strengths and perspectives. Respect for each person’s contribution is paramount in order to foster a non-blaming relationship built on trust and open communication. Due to the reciprocal nature of the approach, both parents and group leaders have important roles in facilitating change and, consequently, a stake in the outcome (Webster-Stratton & Herbert, 1994).

Barriers to Attendance Addressed.

Much research has been conducted examining the factors that pose as barriers to treatment delivery, such as parental factors (e.g. high parent stress), family factors (e.g. socio-economic disadvantage), and those centred on the child (e.g. comorbidity) (Kazdin, 1997).

However, Webster-Stratton (1998a) argues for a reframing of the problem of parent engagement in programmes. She suggests that instead of focusing on the characteristics of the family as the reason for programme failure, programme designers should examine the characteristics of the programme and seek to develop intervention characteristics that will enable families to remain engaged in the intervention and thereby benefit from it. Therefore, the IY programme includes strategies that facilitate the engagement of socio-economically disadvantaged families, such as the provision of child care, the provision of meals and snacks, transport to and from parent groups, holding of groups in highly accessible locations (e.g. schools, churches) and holding sessions at convenient times (e.g. evening sessions). In addition to these incentives tangible benefits (such as prizes for

attendance and completion of homework) are also incorporated into the weekly sessions.

Supporting Research.

Over the past 20 years, the IY BASIC Parent Training Programme has been evaluated extensively, initially as a treatment programme for children referred with conduct disorders and more recently as a prevention programme with high-risk families. The efficacy of the BASIC programme has been strongly supported by the programme designer through six published treatment-focused RCT studies and two published prevention-focused RCT studies. Outcome measures included parent and teacher reports and direct observation of child behaviour and parenting style.

When used as a treatment programme, results have demonstrated significant improvement in parent-child interaction, a reduction in parents' use of violent forms of discipline, and a reduction in child conduct problems (Webster-Stratton, 1984, 1990a, 1994; Webster-Stratton & Hammond, 1997; Webster-Stratton, Hollinsworth, & Kolpacoff, 1989; Webster-Stratton, Kolpacoff, & Hollinsworth, 1988). In a three year follow-up of 83 families who had received BASIC intervention, approximately two-thirds of the children previously assessed showed clinically significant behavioural improvements (Webster-Stratton, 1990).

The two prevention-focused studies were conducted in Head Start settings with multi-ethnic, socio-economically disadvantaged families. Again, results demonstrated positive outcomes in terms of parent-child interaction, parental discipline strategies, parent involvement in child's education, child conduct problems, both at home and at school, and child social competence (Webster-Stratton, 1998b; Webster-Stratton, Reid, & Hammond, 2001). Multiple report sources were used in both studies and a majority of the improvements were maintained one year post intervention, particularly for parents who had attended at least 6 out of the 12/14 group sessions.

Treatment dropout is a significant problem in PT intervention (Kazdin, 1997), and is estimated that 40-60% of families who receive treatment for child and adolescent

conduct disorders fail to finish the programme (Armbruster & Kazdin, 1994). The effectiveness of the BASIC programme is also evidenced by programme attendance rates of up to 88% with socio-economically disadvantaged families (Webster-Stratton 1998a).

A number of independent replication studies have also been conducted, evaluating the BASIC programme in both a preventative and a treatment context, and being delivered in a variety of settings including schools, Head Start centres, and mental health clinics. These studies have been conducted with different ethnic populations and age groups in the United States, Canada and the United Kingdom, and have largely supported the efficacy of the BASIC programme.

1.3 The Bangor Child Behaviour Project

The Bangor Child Behaviour Project was founded in 1995 by the first author as a collaborative project between the North West Wales NHS Trust and the University of Wales, Bangor. Its aim was to promote evidence based practice in clinical and preventive work with children with behavioural difficulties, or those at risk of developing such problems.

In recent years a major focus of the project has been in the evaluation of the IY Series for parents, teachers and children. Since 1998 over one hundred people from services across North Wales have completed the BASIC programme group leader training. Although initially implemented as a CAMHS intervention, interest in the programme has rapidly spread to Social Services departments, health visitors, school nurses, and to the developing Sure Start services.

The rapid take-up of the IY programmes across North Wales has probably occurred for three reasons: (1) the existence of the Bangor Child Behaviour Project and the research traditions associated with it; (2) the availability of trainers from Seattle to provide training in use of the programmes; and (3) the early establishment, through the Bangor Child Behaviour Project, of an IY interest group, which has met every three months since 1998 as a forum of support for people seeking to implement the programmes.

When Sure Start services were established there were clear government requirements for these services to collect evidence of their effectiveness. By 2002, the majority of Sure Start services in North Wales were implementing the BASIC programme and those services required evidence of their effectiveness.

It was in the context of all of these developments that a proposal to evaluate the BASIC programme in Sure Start services in North Wales was originally grounded. The Bangor Child Behaviour Project was encouraged by Professor Webster-Stratton's willingness to act as a collaborator in the project and to help to train people in her observational coding scheme for evaluating, through direct observation, the predicted changes in parent-child interactions. This proposal received grant funding from the Health Foundation (formally the PPP Health Care Trust) in 2002.

1.4 Evaluation Aims

This project was designed as a replication of Webster-Stratton's evaluation of the BASIC Parent Training Programme delivered as a selective prevention intervention to "at risk" families from Head Start Centres in Seattle (Webster-Stratton, 1998b). Although an evaluation of the BASIC programme with clinically referred populations had been undertaken in the UK by Scott and colleagues (Scott, Spender, Doolan, Jacobs, & Aspland, 2001) there has been no UK evaluation of the programme used as an early intervention/preventive intervention; and, no examination of the special challenges posed to programme implementation to a largely bi-lingual and rural based population such as that found in Wales. The current evaluation seeks to provide answers to the following questions:

- (1) Can we achieve similar results to Webster-Stratton (1998b) delivering the programme in a rural Welsh setting using health, social services and voluntary sector staff?
- (2) How effective is the programme in improving parental skills and reducing the risk of child conduct problems?
- (3) How do participants and leaders respond to the programme and what, if any, difficulties are experienced in using the programme?
- (4) What specific problems or issues arise in delivering the programme to socially excluded, largely rural, and in some cases, bilingual populations?

1.5 Aims of the Bolt-on Health Economics Study

A bolt-on economic evaluation has been designed to complement the main clinical trial described above to investigate the cost-effectiveness of the Webster-Stratton group parenting programme with parents of at risk pre-school children in socially deprived areas of North Wales. This has also been grant funded by the Health Foundation.

The economic evaluation aims to:

- (1) Measure the relative cost-effectiveness of the Webster-Stratton programme as compared with a control group.
- (2) Analyse changes in the frequency and cost of both child and maternal (primary carer) contacts with health services, local education services and social services over the study period in response to any observed improvement in child behaviour.
- (3) Measure any health-related quality of life improvements to mothers (or primary carers), measured in terms of Quality Adjusted Life Years (QALYs) which may accompany any observed improvements in child behaviour.

To achieve these goals a client service utilisation inventory and the EQ-5D health-related quality of life questionnaire will be used, details of which are given in Section 3.7 of this report.

Section 2. Overview of Evaluation Method

2.1 Participants

Families living in Sure Start areas are recruited by their local health visitor. For inclusion, families must meet the following criteria:

- Low income²/dependent upon benefits
- Living in a Sure Start area
- Having a child aged between 36 and 58 months (index child)
- Index child to score above the clinical cut-off on the Eyberg Child Behavior Inventory (Eyberg & Ross, 1978) on *either* the Intensity scale (127) *or* the Problem scale (11).
- At least one parent must be able to attend the parent group sessions that will be run during school hours.

As an incentive to complete the assessment sessions participants are given a £25 cash payment for the completion of each data collection point. Parents in the intervention condition collect their initial £25 at the first parent group session. As an added incentive intervention participants are given an additional £25 if they attend more than 8 of the parent group sessions. This payment method is comparable to that employed by Webster-Stratton (1998b).

2.2 Evaluation Measures: Rationale for Selection

The measures were chosen to be compatible with those selected by Webster-Stratton (1998b). Therefore, in terms of the effectiveness of the programme for reducing conduct problems, the following outcome domains are examined: child conduct problems, child social competencies, and parenting competencies. These domains are investigated through a combination of direct behavioural observation, semi-structured interview and questionnaire. In order to collect data for attrition analysis and equivalency of intervention and control groups, data on demographic and family risk factors is collected via semi-structured interview and questionnaire. Participant and

2. The most commonly used threshold of low income is 60% of the median income after deducting housing costs. Housing costs include rent, water rates, mortgage interest payments, structural insurance premiums, ground rent and service charges. Government statistics for nationwide sample for 2001 published by the DSS Household Below Average Income Survey, determine this amount to be £257 a week for a couple with two children.

leader responses to the programme are evaluated through questionnaire and individual feedback.

2.3 Design

The study employs random allocation of families (with restriction of age and sex) to either intervention or waiting list control groups. Power calculations stipulated that a minimum of 7 x 12 intervention participants (84) and 7 x 6 control participants (42) were required³. Family assessment occurs at baseline and six months after baseline (intervention taking place during this interval). For the intervention group further follow-up is conducted at 12 months post baseline, and at 18 months post baseline for 35% of the sample. Control participants are given the opportunity to take part in the parent training programme after their six month follow-up assessment.

2.4 Intervention and Programme Integrity

The intervention is the 12-week IY BASIC Parent Training Programme, for children aged 2-7 years, run with groups of up to 12 parents (Webster-Stratton, 1981). Groups are run in Sure Start centres by certified group leaders who adhere to the programme delivery as specified in the programme manual. Strategies aimed at engaging and maintaining parental participation on the course include: buffet lunch for the family at the Sure Start Centre before each session begins, provision of crèche facilities, provision of materials, and/or visits to parents who miss a session. All parent group sessions are videotaped and all group leaders attend weekly supervision with the first author who is a programme mentor. Randomly selected videotapes are rated for programme integrity by a programme trainer. The integrity of a programme may be compromised if the programme is not adhered to in its entirety with all components applied, such adherence is necessary in order to preserve the behaviour change mechanisms that made the original model effective (Mihalic, Fagan, Irwin, Diane, & Elliot, 2002).

3. Webster-Stratton (1998b) reports that in the Head Start study over 85% of those who participated attended 8 or more of the group sessions and only 12% dropped out, or attended fewer than four sessions. A more recent study by Scott et al. (2001), using a British sample, reported drop out rates of 18%. Participant numbers given in this design represent the minimum required to adequately satisfy power requirements.

2.5 Home Visits Procedure

At each data collection point participating families are visited in their home on two occasions with a (preferred) maximum 3-day interval. At the first visit interview questionnaire measures are administered to the parent and the verbal ability task completed with the index child. At the end of this visit parents are prepared for the observational session during which they are required to adhere to the following rules:

- (1) All usual family members to be present.
- (2) No visitors.
- (3) The family should stay in one room so that the observer is able to see all family members.
- (4) No outgoing telephone calls – answer incoming calls briefly.
- (5) No television watching. No computer games. No reading.
- (6) No talking to observer whilst they are coding (30 minutes of visit).

The second visit comprises the observational coding session. This visit takes place between the hours of 4 and 7pm at the family home and last for approximately 40 minutes.

In order to standardise home visits a Home Visits Manual was developed detailing visit materials and procedure for all researchers and observers. The manual is included in Appendix B.

2.6 Ethical Considerations

Prior to requesting consent a bilingual leaflet in Welsh and English is given to each participant (see Appendix C). The leaflet explains the purpose of the study, why the participating family was chosen and what will happen should they decide to take part. The participant is reassured that all information provided by the family will remain confidential and available to members of the research team only. The leaflet also makes it explicit that participants, having given their consent, are free to withdraw from the study at any time without this affecting their access to either other Sure Start services or to future parent programmes.

In order to ensure that all information remains confidential, participants are assigned an identification number that is used on all measures and schedules instead of names.

The database relating participants to their identification number is stored on protected computer files, only accessible to members of the research team. The research team and the implementation team are entirely different sets of people.

2.7 Expected Outcomes

It is predicted that the measures will provide evidence that the BASIC Parent Training Programme is effective in improving parenting skills and reducing child behaviour problems with high risk pre-school children in rural communities in North Wales. Feedback from group leaders will provide valuable information that is needed for the programme to be tailored to meet the needs of people in North Wales. To this end two areas will be examined:

- (1) How do participants and leaders respond to the programme and what, if any, problems were experienced in delivering the programme?
- (2) What specific problems are experienced in delivering the programme to socially excluded largely rural, bilingual populations?

Section 3. Protocol of Measures

Sample items from most of the measures reviewed here are shown in Appendices D-G. Measure availability is detailed in Appendix I.

3.1 Demographics and Family Risk Factors

3.1 (i) Personal Data and Health Questionnaire (PDHQ, Hutchings, 1996a)

The PDHQ comprises of a semi-structured interview based on the work of Herbert (Herbert, 1993), and is aimed at attaining basic socio-demographic and general health data on family members. The interview is typically carried out with the mother and covers aspects of the child's health and development, including birth complications, mother's health during pregnancy and the birth. The PDHQ also includes questions about other residents in the child's home, quality of relationship between parents where applicable, quality of housing, and primary carer's education.

For the purposes of the current evaluation one item pertaining to drug use and one pertaining to criminal activity were also added. The items are worded such that they refer to other members of the family, however, if the parent is perceived to be open to this line of questioning then the researcher will probe further to ascertain the situation for the parent also.

Rationale for use

The literature suggests that the risk of a child developing conduct problems is increased by the prevalence of a variety of family factors (Farrington, 1995; Webster-Stratton, 1999), for example parental substance abuse (Patterson et al, 1989). The inclusion of this measure serves two important functions. First, to provide data for attrition analysis and equivalency of intervention and control groups. Second, to establish rapport with the parent, and, important in terms of assessment contiguity, for the parent to have the opportunity to express matters concerning their child prior to being asked to complete the subsequent questionnaires.

Administration

The PDHQ represents a semi-structured interview administered by the researcher, completed by the mother/primary caregiver. It takes 5-10 minutes to complete.

3.1 (ii) Socio-economic disadvantage (SED 6; Hutchings, 1996a)

Data for the SED 6 is derived from answers provided on the PDHQ. The SED 6 is designed to attain basic data concerning family socio-economic status. Six socio-economic risk factors are measured: employment status, marital status, number of children, maternal education, housing, area of residence (high/low crime); these were selected based on the findings of Dumas and Wahler (1983) and Rutter and Quinton (1977).

Rationale for use

Socio-economic disadvantage has been identified as an associated risk factor for the development of child behavioural problems (Farrington, 1995; Webster-Stratton, 1999). Further, the literature suggests that parent training is less effective with socio-economically disadvantaged families (Webster-Stratton, 1998a). This measure is included to provide data for attrition analysis and equivalency of intervention and control groups.

Administration

Completion of the PDHQ by the researcher takes 5-10 minutes.

Scoring

Based on the answers provided to the PDHQ, the six SED 6 factors are coded as follows:

- Employment status of primary provider: employed = 0, dependent on benefits = 1
- Marital status: married/cohabiting = 0, single parent = 1
- Number of children: small family size = 0, large family size = 1 (based on the findings from Brown and Harris (1978), three or more children represent large family size).
- Maternal education: education up to sixteen = 1, education beyond 16 = 0

- Housing circumstances: poor quality/overcrowded/insecure = 1, this rating is made on the basis of responses given in the interview and the interviewers observations.
- Area of residence: high crime = 1, low crime = 0

Each of the six items is given a 0 or 1 score and this is summed into an index of socio-economic disadvantage. It is likely that given the criteria for identification of Sure Start families that a high score will be achieved by most, if not all, of the families and that by definition most families will be living in a high crime area.

3.1 (iii) Index of Major Life Events

This semi-structured interview was developed by researchers at the Parenting Research Group, University of Oxford. It assesses the number of objectively serious stressors that have impacted the family over the *last few years*. Six stress domains are identified: Work, Finance, Health, Housing, Bereavement, and Relationships (including marital, family and social). There is also the opportunity for the respondent to comment on stressors not covered and to comment on chronic stressors and long-term family problems.

Rationale for use

Webster-Stratton (1985) found that in addition to socio-economic disadvantage, major life crisis following parent training was significantly related to a family's ability to maintain intervention effects. Use of this scale will provide background information on participating families, providing data for attrition analysis and equivalency of intervention and control groups.

Administration

The full interview will be conducted at baseline (taking approximately 10 minutes). In the subsequent follow up sessions participants will be reminded of the life stress domains and asked if any thing has changed or occurred in relation to these since the last research session.

3.1 (iv) Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961)

This is a 21-item inventory measuring the severity of characteristic attitudes and symptoms associated with depression. Such attitudes and symptoms are reflected by the items, which are: sadness, pessimism/discouragement, sense of failure, dissatisfaction, guilt, expectation of punishment, self-dislike, self-accusation, suicidal ideation, episodes of crying, irritability, social withdrawal, indecisiveness, body-image distortion, work retardation, insomnia, fatigability, loss of appetite, loss of weight, somatic preoccupation, and loss of libido. Each item contains four possible responses which range in severity from 0 (e.g. *I do not feel sad*) to 3 (e.g. *I am so sad or unhappy that I can't stand it*). For each item the respondent is required to select the one statement that best describes the way that he/she has been feeling over the previous week.

Rationale for use

The co-occurrence of maternal depression and child conduct problems is well documented (e.g. Murray & Cooper, 1997). Although pre-treatment levels of maternal depression (assessed using the BDI) have been found to be significantly related to poor outcomes in some parent training interventions (e.g. Forehand, Furey, & McMahon, 1984), there is also evidence to suggest that levels of depression in mothers of children with conduct disorders may decrease following parent training intervention (Webster-Stratton & Spitzer, 1996; Hutchings, Appleton, Smith, Lane, & Nash, 2002). Therefore, the monitoring of maternal depression in this study is of particular importance considering the potential impact on treatment outcome and parent training completion.

In accordance with Webster-Stratton (1998b), a measure of depression was included in the current evaluation to provide data for attrition analysis and equivalency of intervention and control groups. However, depression monitored over the course of the evaluation may provide data supporting the secondary benefits of parent training intervention, i.e. improvement in maternal mental health. The BDI was chosen over the CES-D (Radloff, 1977; as used by Webster-Stratton, 1998b) because the BDI focuses more on intensity of symptoms and was designed to assess clinical levels of mood disturbance, whereas the CES-D focuses on duration, detecting short-term

changes in mood disturbance as they occur in the general population. Monitoring maternal depression over a period of time using the BDI will give a better indication of real change rather than mood-sensitive fluctuation. The BDI was chosen over other well-standardised measures of depression, such as the Hamilton Rating Scale for Depression (Hamilton, 1967), for two reasons. First, the BDI displays less over-reactivity to changes in depression (Edwards et al., 1984). Second, the BDI has been used extensively in studies of mothers with young children (e.g. Forehand et al., 1984; Webster-Stratton & Hammond, 1990; Webster-Stratton & Spitzer, 1991; Hutchings et al., 2002).

Administration

Respondents are asked to provide answers based on the way they have been feeling over the previous week. The inventory is self-administered and takes approximately 10 minutes to complete.

Scoring

The scores from each of the 21-items are summed to achieve a total score (minimum score = 0, maximum = 63). If more than one statement on an item has been circled the highest scored statement is chosen.

Interpretation

The total score provides an index of overall severity of depression. By convention, total score levels of depression are interpreted in the following way:

- Score 05-09 = normal ups and downs
- Score 10-18 = mild to moderate depression
- Score 19-29 = moderate to severe depression
- Score 30-63 = severe depression

However, it is important to note that a score of below four may represent possible denial of depression, or “faking good”, as this score is unusual even in non-depressed respondents. In addition, a score of over 40 may represent possible exaggeration of depression, alternatively, although significant levels of depression may be present, this high score may also reflect histrionic or borderline personality disorders (Groth-Marnet, 1990).

Reliability & Validity

The BDI demonstrates high internal consistency with a mean coefficient alpha of .86 reported for psychiatric groups and .81 for non-psychiatric groups (Beck, Steer, & Garbin, 1988). Split-half reliability for the BDI is .93. Due to memory effects and fluctuation in levels of depression, Beck et al. (1961) advised that the conventional test-retest reliability method of questionnaire assessment would be unsuitable for the BDI. Indeed, test-retest reliability coefficients that have been obtained range from a low of .48 to a high of .86 depending upon the interval between re-testing and the population (Groth-Marnat, 1990).

The BDI has shown significant correlation with both clinicians' ratings of depression (Metcalf & Goldman, 1965) and objective behavioural measures of depression (Williams, Barlow, & Agras, 1972). In addition, evidence indicates that the BDI discriminates between subtypes of depression and differentiates depression from anxiety (Beck et al., 1988).

3.1 (v) Parenting Stress Index/Short Form (PSI/SF; Abidin, 1990)

This 36-item inventory measures the stress experienced by the respondent in relation to their role as a parent of a child up to age 12 years. Abidin (1992) argued that the total stress a parent experiences is a function of specific prominent child characteristics, parental characteristics and situational variables associated with the role of being a parent. In reflection of this model the PSI/SF contains three test subscales: Parental Distress (PD), Parent-Child Dysfunctional Interaction (P-CDI), and Difficult Child (DC). The PD subscale indicates the distress a parent is experiencing in his/her parental role as a function of personal factors directly related to parenting. The associated component stressors include: an impaired sense of parenting competence; stressors associated with the restrictions put on other life roles; conflict with the child's other parent; lack of social support; and, presence of depression. A sample item would be: *I feel trapped by my responsibilities as a parent.* The P-CDI subscale focuses on the parent's perception that his/her child does not meet their expectations. In addition the parent-child interaction is not found to be reinforcing to the parent. A sample item would be: *My child is not able to do as much as I expected.* The DC subscale assesses the presence of basic behavioural characteristics that could make children either easy or difficult to manage. These

focus on temperamental characteristics but also include learned patterns of defiant, non-compliant, and demanding behaviour. A sample item would be: *My child seems to cry or fuss more often than most children*. Answers to each item are given by circling a response on a five-item scale, ranging from 5 (*strongly agree*) to 1 (*strongly disagree*).

A Defensive responding subscale (seven items from the PD subscale) is also included. Scores of below 10 on this scale render the test invalid because this low score can imply that the parent is trying to portray him or herself in a favourable light, rather than responding truthfully to the scale items.

Rationale for use

Previous research has indicated that the benefit of parent training can be compromised by high levels of parental stress and distress (Dumas & Wahler, 1983; Webster-Stratton, 1990). The PSI has frequently featured as an outcome measure in parenting intervention studies (e.g. Hutchings et al., 2002; Webster-Stratton & Hammond, 1997) and as a predictor of intervention non-attendance. In the current evaluation the PSI is used as an outcome measure contributing towards the assessment of parental competence. It will also contribute towards a descriptive profile of those who drop out of the parent group.

Administration

The inventory is self-administered and takes approximately 10 minutes to complete.

Scoring

The first 12 items on the scale relate to the PD subscale, items 13-24 to the P-CDI subscale, items 25-36 to the DC subscale; the item score of between 1 (*strongly disagree*) and 5 (*strongly agree*) is summed for each subscale. A Total Stress score is obtained by summing the scores from the three subscales. The Defensive subscale is scored by summing items 1, 2, 3, 7, 8, 9, and 11.

Normative information

Abidin (1995) reports normative data from a sample of 800 mothers, with target children of 10 –84 months in age (mean age = 43 months). Mean scores obtained for the PSI/SF were 25 for PD, 19 for P-CDI, 25 for DC, and 69 for Total Stress.

Interpretation

The normal range of scores for the PSI/SF fall between the 15th and 85th percentile ranges. Interpretation of the PSI/SF is based on clinical judgment and research using the PSI, however as a guide Abidin (1995) suggests the following:

- Total Stress – Scores of 86+ fall above the 85th percentile.

Parents who obtain a total stress score of 90 or above are purported to be experiencing clinically significant levels of stress.

- PD – Scores of 33+ fall above the 85th percentile.

When the PD subscale is the highest of the three subscale scores, it is advised that the parent's personal adjustment be explored, in some cases these problems may be independent of the parent-child relationship.

- P-CDI – Scores of 26+ fall above the 85th percentile.

A high score suggests that the parent-child bond is either threatened or has never been effectively established.

- DC – Scores of 33+ fall above the 85th percentile.

Abidin suggests that regardless of the cause of the problem, parents who score high on this scale may need professional assistance. In combination with a high DC score, the pattern of scores from the other subscales will indicate the focus of the direction of the intervention.

Reliability & Validity

Abidin reports good test-retest reliability for each subscale (ranging from .68) and internal reliability coefficients from .80, obtained from a sample of 800 participants. In an independent validation study assessing data from 103 Head Start parents, Roggman, Moe, Hart, and Forthun (1994) reported PSI/SF alpha reliabilities of .78 to .90.

At the time of constructing the 1995 PSI manual, the PSI/SF did not have a body of independent research supporting its validity. However, Abidin argues that because it

is a direct offshoot of the full-length PSI (and highly correlated at .94 for Total Stress), it is likely that it will also share the validity of the parent scale. The construct and predictive validity of the PSI have been examined through a multitude of studies. For example, in terms of convergent validity, Eyberg, Boggs, and Rodriguez (1992), report high correlation between the PSI domains of Parental Distress and Difficult Child and ECBI Intensity and Problem scores, indicating that maternal stress covaries with child problem behaviour.

3.2 Child Social Competence and Conduct problems at Home: Questionnaires

3.2 (i) Eyberg Child Behavior Inventory (ECBI; Eyberg & Ross, 1978; Eyberg, 1980)

This is a 36-item inventory designed to be completed by the parent for the assessment of problem behaviours occurring in children from age 2-16 years. An example item of problem behaviour would be: *Has temper tantrums*. Each behaviour is rated on two scales: a 7-point Intensity scale that measures how often the behaviour is perceived to occur, ranging in response intensity from 1 (*Never*) to 7 (*Always*); and a *Yes-No* Problem scale that identifies whether the behaviour is currently seen as a problem for the parent.

The ECBI can be used:

- (1) As a screening measure in the clinical identification of children for the diagnosis and treatment of externalising behaviour problems.
- (2) As a selection measure for the identification of “high risk” children for delinquency prevention programmes.
- (3) As a measure of treatment outcome.

Rationale for use

The ECBI has been used extensively within the field of parent training intervention. Following Webster-Stratton (1998b) the ECBI is used in the current evaluation as both a selection measure to identify participants for entry into the study, and as an outcome measure to evaluate the intervention.

Administration

The inventory is a self-administered parent report measure and takes approximately 10 minutes to complete.

Scoring

A total score for each scale is used. For the Intensity scale, circled responses are totalled to give the raw score (minimum score = 36, maximum = 252). Where missed responses occur count as 1 (*Never*) and sum as before. If four or more items are missed the scale becomes invalid and cannot be scored. For the Problem scale circled

Yes responses are totalled to give the raw score (minimum score = 0, maximum score = 36). Where missed responses occur count as a *No* response and sum as before. When there are four or more items missed the scale becomes invalid and cannot be scored.

Normative information

Original standardisation of the ECBI (Robinson, Eyberg, & Ross, 1980), with a sample of 512 children (aged 2 –12 years), yielded norms of 103.8 (*S.D.* = 34.6) for Intensity and 6.9 (*S.D.* = 7.8) for Problem scales. Sub-sample analysis of 57 children identified as having conduct problems yielded mean scores of 137.2 (*S.D.* = 38.8) for Intensity and 15.0 (*S.D.* = 9.6) for Problem scales.

Interpretation

Both scales of the ECBI are continuous such that higher scores on the scale indicate a greater level of conduct-disordered behaviour and greater impact on the parent. Based on the 1980 normative data clinical cut-off scores of 127 or more for Intensity and 11 or more for Problem scales are suggested.⁴

Reliability & Validity

The scale demonstrates good stability and homogeneity, with reliability coefficients from .86 (test-retest) to .98 (internal consistency) (Robinson et al., 1980). The ECBI has shown good convergent validity, with ECBI scores being significantly correlated with scores on the Child Behaviour Check List (CBCL; Achenbach & Edelbrock, 1986) and the Parenting Stress Index (PSI; Abidin, 1990). The ECBI has been shown to discriminate well between children with and without conduct problems (Eyberg & Ross, 1978; Baden & Howe, 1992). In addition the ECBI has proven a sensitive measure of treatment change in both clinically referred children (e.g. Webster-Stratton & Hammond, 1997) and children expressing behaviour problems within normal limits (e.g. Brestan, Eyberg, Boggs, & Algina, 1997).

4. In a more recent standardisation study, Colvin, Eyberg, and Adams (1999) viewed a sample of 798 children in the U.S. aged 2 -16 years and obtained norms of 96.6 for Intensity and 7.1 for Problem scales. Based on this new data clinical cut off scores of 131 or more for Intensity and 15 or more for Problem scales were advised. In the current evaluation however, we have decided to stay with the

3.2 (ii) Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997)

This 25-item inventory (containing five subscales) was designed as a behavioural screening measure to assess the occurrence of particular behaviours that have been associated with conduct problems, hyperactivity, emotional symptoms, peer problems, and pro-social behaviour in children aged 4-16. For children aged 3 (and 4) a slightly modified version has also been developed consisting of 22 identical items to the original, but with the item on reflectiveness softened and the 2 items on antisocial behaviour replaced with items on oppositionality. The respondent (parent or teacher) is asked to rate how true of the index child a particular behaviour is, using a 3-point scale ranging from 0 (*not true*) to 2 (*certainly true*). A sample item would be: *Considerate of other people's feelings*.

In addition to the 25 items on psychological attributes, an impact supplement is also available. This supplement asks whether the respondent thinks the index child has a problem, and if so, asks further questions about chronicity, distress, social impairment, and burden to others.

The SDQ has been used as a screening measure (Goodman, Ford, Simmons, Gatward, & Meltzer, 2000), as part of a clinical assessment (Goodman, Renfrew, & Mullick, 2000), and as a measure of treatment outcome (Garralda, Yates, & Higginson, 2000).

Rationale for use

The SDQ is reported to perform at least as well as its longer-standing counterparts, the CBCL (Achenbach & Edelbrock, 1986) and the Rutter questionnaires (Rutter, Tizard, & Whitmore) correlating highly with these scales (Goodman, 1997; Goodman & Scott, 1999). However, the SDQ has some advantage over these other measures. First, the SDQ represents a brief measure taking only 5 minutes to complete. Second it has been developed and standardised using a British sample. Third, in comparison to the Rutter questionnaires, the SDQ focuses on strengths as well as difficulties, and gives better coverage of inattention, peer relationships and pro-social behaviour (Goodman, 1997). Fourth, as judged against a semi-structured interview, the SDQ was significantly better than the CBCL at detecting inattentivity and hyperactivity,

previous cut-off recommendations since, when cut-off criterion have been applied, previous

and at least as good at detecting internalising and externalising problems (Goodman & Scott, 1999).

Administration

Respondents are asked to provide answers based on the child's behaviour over the last six months. For young children the inventory is a self-administered parent (or teacher) report measure and takes approximately 5 minutes to complete.

Scoring

Scoring may be done by hand by summing the items within each of the five subscales (5 items per subscale, minimum score = 0, maximum score = 10). A total Difficulties score is calculated by summing the scores from all scales except the pro-social scale (minimum score = 0, maximum score = 40). For more detail on scoring see the SDQ website (www.sdqinfo.com) where a syntax file for SPSS is also available.

When using a version of the SDQ that includes an "impact supplement", the items on overall distress and social impairment can be summed to generate an impact score that ranges from 0-10 for the parent-completed version and 0-6 for the teacher-completed version. Responses to the questions on chronicity and burden to others are not included in the impact score. If the answer is "no" to the first question on the impact supplement, i.e., when the parent does not perceive the child as having any emotional or behavioural difficulties, they do not proceed to the subsequent questions and automatically receive a score of zero. Total impact scores can be classified as 'abnormal' (a score of 2 or more), 'borderline' (a score of 1), or 'normal' (a score of zero).

Normative information

To date there is no normative information available for children aged 3/4. However, data from a sample of 5855 children aged 5-10 years yielded the following means for total scores and sub-scales: Total score = 8.6 ($SD = 5.7$); Emotional Symptoms = 1.9 ($SD = 2.0$); Conduct Problem = 1.6 ($SD = 1.7$); Hyperactivity = 3.6 ($SD = 2.7$); Peer Problem = 1.4 ($SD = 1.7$); Pro-social = 8.6 ($SD = 1.6$); Impact score = 0.3 ($SD = 1.1$).

researchers in this field have specified these original values (e.g. Hutchings et al., 2002).

Interpretation

SDQ symptom scores can be used as continuous variables or classified as within normal range, borderline and abnormal. As a rough guide to identifying “cases” with mental health disorders, Table 1 gives details of a guide that may be used for interpretation of scores, for more information see the SDQ website (www.sdqinfo.com).

Table 1.

Guide to Assist Interpretation of SDQ

	Normal	Borderline	Abnormal
Parent completed			
• Total Difficulties score	0-13	14-16	17-40
• Emotional Symptoms score	0-3	4	5-10
• Conduct Problems score	0-2	3	4-10
• Hyperactivity score	0-5	6	7-10
• Peer Problems score	0-2	3	4-10
• Pro-social score	6-10	5	0-4

Reliability & Validity

The scale has demonstrated good stability, whether judged by internal consistency (mean Cronbach's alpha: 0.73), cross-informant correlation (mean: 0.34), or re-test stability after 4-6 months (mean: 0.62) (Goodman, 2001). The SDQ has good convergent validity, showing significant correlation with long-standing measures such as the CBCL ($r = .87$). In terms of discriminative validity, high SDQ scores have been associated with a strong increase in psychiatric risk (Goodman, 2001).

3.2 (iii) Conners Abbreviated Parent/Teacher Rating Scale (Conners, 1994)

This 10-item scale assesses the incidence of hyperactivity observed by the parent in children aged 3-7 years. It comprises of the most highly loaded symptoms from the factor scales of the Conners Parent and Conners Teacher Rating Scale. The respondent (parent/teacher) is asked to rate the degree to which a particular behaviour

occurs in the index child by marking a response from a 4-point scale ranging from 1 (*not at all*) to 4 (*very much*). An example item includes: *Restlessness or overactive*.

Rationale for use

This measure was employed in the current study because it is a quick and simple measure and enhances sample description by adding to the data obtained from the SDQ hyperactivity subscale (only 5 items).

Administration

The scale is a self-administered parent report measure and takes approximately 5 minutes to complete.

Scoring

The 10 items are summed to produce a total hyperactivity index (minimum score = 10, maximum score = 40).

Interpretation

Conners (1994) recommends a clinical cut-off score for hyperactivity of 15.

3.2 (iv) Kendall Self Control Rating Scale (SCRS; Kendall & Wilcox, 1979)

This is a 33-item scale that provides an indication of the degree to which a child's behaviour can be described as self-controlled versus impulsive. The scale is standardised for children aged 3-12 years. Ratings are made along a 7-point scale, where 1 indicates the maximum self-control and 7 indicates the maximum impulsivity. Of the 33 items 10 describe self-controlled behaviour (e.g. *Does the child work for long range goals?*), 13 describe impulsive behaviour (e.g. *Does the child grab for the belongings of others?*), and 10 are worded to suggest both possibilities (e.g. *Does the child do too many things at once, or does he or she concentrate on one thing at a time?*).

The SCRS was developed around a cognitive-behavioural definition of self-control, with cognitive components such as deliberation, problem-solving, planning and evaluation, and behavioural components such as the ability to execute the behaviour that is chosen or to inhibit the behaviours that are cognitively disregarded.

The SCRS was designed to measure: (a) self-control in children; (b) sensitivity to treatment change; and, (c) correlates of self-control, individual variation and the effects of different treatments.

Rationale for use

The SCRS was selected for the current evaluation to provide data for the assessment of parent rated child competence and conduct.

Administration

The inventory is a self-administered parent report measure and takes approximately 10 minutes to complete.

Scoring & Interpretation

The SCRS score is the sum of the 33 items, with a higher score representing a greater lack of self-control (minimum score = 33, maximum score = 231). Kendall and Brasswell (1985) recommend a score of 160 or more for the identification of children showing significant deficits in self-control that require treatment.

Reliability & Validity

Kendall and Wilcox (1979) report good evidence of internal reliability (Cronbach's alpha = .98) and test-retest reliability ($r = .84$). The measure was also found to be significantly correlated with other measures (e.g. Peabody Picture Vocabulary Test) and with behavioural observations. In the same study the SCRS was negatively correlated with age, reflecting the developmental notion that self-control increase with age. In terms of discriminative validity, the SCRC has proved useful in discriminating between levels of self-control in referred and non-referred children (Kendall & Wilcox, 1979; Kendall, Zupan & Brasswell, 1981), as well as being sensitive to treatment change (Kendall & Wilcox, 1980; Kendall & Brasswell, 1985).

3.2 (v) Social Competence Scale – Parent (Fast Track Project)

This 12-item scale assesses the child's positive social behaviours as perceived by the parent. Items include frustration tolerance, communication skills, pro-social skills,

and self-control. The parent is asked how well each of the statements describes their child. An example item would be: *Your child is very good at understanding other peoples feelings*. Responses are made on a 5-point scale ranging from 0 (*not at all*) to 4 (*very well*).

Rationale for use

The literature suggests that children with conduct problems have difficulty with social relationships (Asher & Coie, 1990). More recently it has been found that they have deficits in their ability to interpret social cues (Webster-Stratton & Lindsay, 1999). The Social Competence Scale was used by Webster-Stratton (1998b) and will be used in the current evaluation to provide an index of social competence for outcome assessment and to enhance the data derived from the SDQ Peer Problems and Pro-social Behaviour subscales.

Administration

The scale is a self-administered parent report measure and takes approximately 5 minutes to complete.

Scoring

Responses from all items are summed to give a total social competence score ($\alpha = .87$).

3.3 Child Verbal Ability

British Picture Vocabulary Scale (BPVS-II; Dunn, Dunn, Whetton, & Burley, 1997)

The BPVS-II is an Anglicised version of the Peabody Picture Vocabulary Scale Revised (PPVT-R; Dunn & Dunn, 1981). The BPVS was first introduced in 1982 by Dunn and colleagues and revised in 1997 (BPVS-II). The BPVS-II is designed to measure receptive (hearing) vocabulary in children age 3-15 years. The test involves the presentation of a series of picture plates (pages) from which the child must identify a target picture as verbally indicated by the examiner, such as in a multiple-choice test. Each plate consists of four clearly drawn pictures free of fine detail, from which the child is asked to identify one item. There are 14 sets of 12 items, making 168 possible stimulus words altogether. The items get progressively harder through the course of the test.

The scale has been used as an initial screening device to identify high and low ability, language impaired children and as an assessment of basic English vocabulary for children whose first language is not English. The BPVS-II manual contains details of a supplementary study of the validity of the scale for children who have English as a second language, with corresponding data and norms.

Rationale for use

A measure was needed to track child intellectual development over the course of the study, however due to testing time constraints, administration of a full measure of IQ was not feasible. Since, certainly in Western culture, verbal ability has been suggested to be the single best indicator of crystallized intelligence (Kline, 2000), and features in both the Wechsler (1958) and the Stanford-Binet (Terman & Merrill, 1960) intelligence scales, a compromise was made and a verbal ability test was selected. The BPVS-II was selected because it has been standardised on data obtained from children living in both England and Wales. This is an important consideration given that our study will focus on a largely bi-lingual Welsh-English population.

Administration

After completion of some training plates, the participants starting point and basal level is established. The test progresses, set by set, until the ceiling level is

established. This procedure ensures that testing only takes place over the participants “critical range”, so that the test items are neither too easy nor too difficult. The test is not formally timed, but administration typically takes between 5 to 8 minutes.

Scoring

Raw scores are converted to standardised scores based on age related norms.

Standardisation

Standardisation of the BPVS-II was conducted on a stratified sample of 2571 pupils drawn from schools in both England and Wales. The manual provides detailed information concerning item selection, raw score standardisation and norms development. For children aged 3 to 5 years the mean adjusted raw score was 39.1 ($SD = 16.8, n = 182$).

Reliability & Validity

The scale demonstrates good internal consistency, for example for the pre-school age group (3-5 years) reliability coefficients ranged from .89 (split-half reliability) to .96 (Cronbach’s Alpha). The BPVS-II has shown high positive correlation with other language tests (Lewis, 1987; Howlin & Cross, 1994) including the British Ability Scales Word Reading Test (Elliott, 1983), and the Reynell Comprehension Scale (Reynell, 1977). The manual offers further discussion regarding content and construct validity.

3.4 Parental Competencies (Questionnaires)

The Parenting Scale (Arnold, O’Leary, Wolff & Acker, 1993)

This 30-item inventory is designed to measure dysfunctional discipline practices in parents of children aged 18-48 months. The scale targets specific aspects of parental discipline practice rather than providing a global measure of such attitudes and beliefs. The measure contains three sub-scales: Laxness, Overreactivity and Verbosity. Responses are made using a 7-point scale anchored between two alternative responses to a situation, where a score of 7 represents the highest score in terms of ineffectiveness. An example from the Laxness sub-scale would be: *When I say my child can’t do something, (situation) I let my child do it anyway* (most ineffective response, score 7), or *I stick to what I said* (most effective response, score 1).

Rationale for use

Arnold et al. (1993) argue that since the presence of poor discipline practices is likely to maintain or further exacerbate the child’s difficulties, accurate assessment of parental discipline strategies should be an important component of all intervention endeavours. To this end, this scale was chosen because it has proven to be effective with mothers of very young children (Arnold et al., 1993), and has been used in previous parent training intervention studies (e.g. Hutchings et al., 2002). The Parenting Scale was chosen over other short scales, such as the Parent Behavior Inventory - Part 11 (Budd, Riner, & Brockman, 1983), because, due to its format, it asks specifically about parenting practices and is not tied to the frequency of the child’s misbehaviour.

Administration

This questionnaire is completed by the parent and takes approximately 10 minutes.

Scoring

Each item receives a 1-7 score, where 7 represents the most ineffective response. The following items have 7 on the left-hand side: 2, 3, 6, 9, 10, 13, 14, 17, 19, 20, 23, 26, 27, 30. The following items have 7 on the right-hand side: 1, 4, 5, 7, 8, 11, 12, 15, 16, 18, 21, 22, 24, 25, 28, 29. To calculate the total score add the responses on all items

and take the mean score. To calculate a factor score, take the mean for the sum of responses on that factor. Laxness contains 11 items: 7, 8, 12, 15, 16, 19, 20, 21, 24, 26, 30. Overreactivity contains 10 items: 3, 6, 9, 10, 14, 17, 18, 22, 25, 28. Verbosity contains 7 items: 2, 4, 7, 9, 11, 23, 29. Four items not on a factor are items 1, 5, 13, 27.

Normative information

Arnold et al. (1993) examined data from 168 mothers of children aged 18-48 months collected by recruitment from clinically referred cases (self-referred due to extreme difficulties in coping with the index child) and from volunteers to participate in parenting studies. From these two groups of participants 77 pairs were derived (matched for demographic characteristics), their data was used to compare mean scores on the Parenting Scale for clinic and non-clinic groups (see Table 2).

Table 2.

Parenting Scale and CBCL Scores for Clinic and Non-clinic Groups

	Clinic group (<i>n</i> = 26)		Non-clinic group (<i>n</i> = 51)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Child's age (months)	29.9	4.5	28.6	3.3
Mother's age (years)	29.6	6.7	31.7	3.9
Parenting Scale				
Laxness	2.8	1.0	2.4	0.8*
Overreactivity	3.0	1.0	2.4	0.7**
Verbosity	3.4	1.0	3.1	1.0
Total score	3.1	0.7	2.6	0.6**
CBCL Externalising <i>T</i> score	58.7	10.3	47.7	8.4***

Note. CBCL = Child Behavior Checklist.

p* < .05, *p* < .01

Interpretation

Although the preliminary data demonstrates the ability of the Parenting Scale to distinguish between clinical and non-clinical groups, the results are based on small samples. Arnold et al. (1993) note that normative data from a larger sample is required before conclusions can be drawn about the parenting style of individuals.

Reliability & Validity

The scale demonstrates adequate internal consistency, with coefficient alpha for the factor and total scores ranging from .63 to .84. Test-re-test reliability over a 2-week period yielded correlations of .79 to .84. In terms of convergent validity, the Parenting Scale has shown significant correlational overlap with measures considered to assess analogous constructs, such as the Child Behavior Check list ($r = .22$ to $.54$), Marital Adjustment test (Locke & Wallace, 1959; $r = -.35$ to $-.53$), and Beck Depression Inventory ($r = .30$ for Overreactivity). Further, Parenting Scale scores showed significant correlation with observational assessments of parenting ($r = .53$ to $.65$). The factors Overreactivity and Laxness have also proven stable across different samples, i.e. school aged children with ADHD (Harvey, Danforth, Ulaszek, & Eberhardt., 2001).

3.5 Direct Observation of Parent-Child Interaction

Only a brief description of the observation coding system used in the current evaluation is given here. The full coding manual is available at request from The Parenting Clinic, Seattle: <http://www.son.washington.edu/centers/parenting-clinic/forms.asp>. A coder training manual developed by Karen Jones at the Bangor Child Behaviour Project is also available on request (see Appendix I for contact details). This manual was developed to aid continuous coder training, which is an essential requirement to maintain coding reliability through the course of a study.

3.5 (i) Dyadic Parent-Child Interaction Coding System (DPICS; Eyberg & Robinson, 1981, 1986, 1989, 1992, 1996, 2000)

This is an observational measure designed to assist with the assessment of the quality of parent-child social interaction. Twenty-four parent and child behaviour categories are employed, summarised in terms of parent behaviours, child deviance, child responses to commands and parent and child affect. Observational coding is continuous and records the total frequency of each behaviour per specified interval. Each behavioural category is clearly defined and accompanied by a series of examples, specific guidelines to aid discrimination between categories and decision rules designed to aid decision making when there is uncertainty between categories.

Rationale for use

The DPICS represents an extensively researched observational measure; moreover Webster-Stratton (1998b) employed this coding methodology.

Coding/Procedure

Following Webster-Stratton (1998b), the current evaluation used four parent summary variables: (1) positive parenting (including, praise, both labelled and unlabelled, positive affect, and physically positive behaviour, problem-solving); (2) total critical statements; (3) total commands; and, (4) parent non-verbal affect (valence). Three child summary variables were used: (1) total child deviance and non-compliance (sum of cry, whine, yell; physical negative behaviour; smart talk; destructive behaviour; and, non-compliance); (2) total positive affect and pro-social behaviours (sum of smiles, laughs, hugs, affectionate behaviours, and positive statements to others); and (3) child non-verbal affect (valence).

The parent (typically the mother) is observed interacting with their child in their own home for 30 minutes. The following conditions are required of the family during the coding interval: television to be switched off, no telephone calls out, incoming calls answered briefly, unexpected visitors asked to call back later, child to remain downstairs and inside the house/flat. Aside from these changes in family routine, the parent is asked to do what they would normally do at that time of day.

Scoring

The total frequency of each behaviour is taken as the dependent variable. Reliability checks of observational assessment are carried out at random by a second coder (20% of visits); these checks occur at each assessment phase and include both intervention and control conditions. Observers are blind to the experimental condition of each family.

Reliability & Validity

The DPICS has shown good reliability as evidenced by a number of studies. For example, Robinson and Eyberg (1981) demonstrated mean reliability between coders of .91 for parent behaviours and .92 for child behaviours.

The discriminant validity of the DPICS has been established through a number of studies. For example, Eyberg and Matarazzo (1980) found significant differences in behaviour between pre- and post-intervention observation of parents of speech and language disordered children. In addition, the DPICS differentiated a referred sample of parents with children with conduct problems from a matched comparison group of parents with developmentally normal children (Webster-Stratton & Lindsay, 1999).

3.5 (ii) Dyadic Parent-Child Interaction Coding System – Coder Impressions Inventory (DPICS-CII)

This 81-item inventory is an adaptation of the Oregon Social Learning Center's Impressions Inventory (Capaldi & Patterson, 1989). It was developed as a supplementary measure to the DPICS to generate observer ratings or impressions of parent-child interactions. It is completed by an observer following a home based

observation session. The inventory assesses three domains of parenting behaviour: Nurturing/Supportive (13 items pertaining to acceptance, appreciation and respect for the child; positive encouragement; patience; and, verbal and physical affection); Harsh/Critical (11 items pertaining to lack of acceptance, condemnation, disregard for the child, criticisms, sarcasm, neglect, and lack of acknowledgement of the child's abilities); and, Discipline Competence (13 items pertaining to the parent's ability to gain compliance through a variety of discipline techniques, clear limit setting, realistic expectations, consistent follow-through, and general confidence). Three domains of child behaviour are also assessed: Child Misbehaviour and Negative Affect (8 items including non-compliance, irritability, aggression, and shouting); Child Positive Affect and Pro-social Behaviour (6 items including physical or verbal affection and cooperation); and, Overall Poor Conduct (1 item). The remainder of the 81 items refer to conditions pertaining to physical aspects of the home environment. Responses are made on a 5-point Likert scale ranging from *no basis* and *did not occur* to *multiple examples*.

Rationale for use

The inventory was designed to complement the DPICS method of observational coding, and thus it forms an essential part of the chosen methodology.

Scoring

Items within each domain are summed to give a total score per domain.

Reliability

Each of the scales has demonstrated adequate internal consistency, with Cronbach's alpha of .91 for Nurture/Supportive, .88 for Harsh/Critical, .84 for Discipline Competence, .74 for Child Misbehaviour and Negative Affect, and .67 for Child Positive Affect and Pro-social Behaviour.

3.6 Parent Group Evaluation Questionnaires

3.6 (i) Parent Group Weekly Evaluation

This 4-item scale, designed by Webster-Stratton (1981), is administered on a weekly basis to parents attending the group. The scale covers parents perception of the usefulness of session content, group discussion and interaction, and the use of role plays. Responses are made on a 4-point scale ranging from *Not helpful* to *Very helpful*. In addition, the scale asks for parents perception of the leaders teaching and leadership skills, with responses made on a 4-point scale ranging from *Poor* to *Above average*.

3.6 (ii) Parents Satisfaction Questionnaire

This 55-item questionnaire is designed to be completed by the parent following completion of the programme. It was designed by Webster-Stratton and was adapted from the work of Forehand and McMahon (1981). Parents are asked to rate the programme overall, the usefulness of the programme, the difficulty of implementing the parenting techniques taught, the usefulness of the parenting techniques taught, and the group leader. Parents are also asked to comment on their feelings concerning their group, e.g. whether they would continue meeting as an ongoing support group, and to indicate which aspects of the group sessions were the most helpful and most favoured/disliked. Finally, parents are asked to give their opinion about the format of the questionnaire.

Rationale for use

This measure provides valuable information concerning participant experience of the parent group sessions.

Administration

The scale is self-administered and takes approximately 10 minutes to complete.

Scoring

Items within the following sub-scales can be summed to produce a total score for that sub-scale: General satisfaction (items 1-5); Programme usefulness (items 6-13);

Techniques difficulty (items 14-22); Techniques usefulness (items 23-31); and, Satisfaction with leader (items 32-36).

Reliability

The scale shows good internal consistency, with coefficient alpha of .56 for General satisfaction, .95 for Programme usefulness, .92 for Techniques difficulty, .92 for Techniques usefulness, and .93 for Satisfaction with leader.

3.7 Health Economics Measures

3.7 (i) Service Utilisation Questionnaire

The economic evaluation component of this study uses a service utilisation questionnaire to measure the frequency and cost of health, social and educational services used by children in the intervention and control arms of the trial. The service utilisation questionnaire is a type of client service receipt inventory (CSRI). The CSRI has been used in over 100 studies since it was first developed in the mid-1980s (Chisholm et al., 2000; Beecham, 1995) and can be used alone or in conjunction with other data collection methods such as patient record data.

The service utilisation questionnaire used in this study is retrospective, that is it asks about service contacts over a time period preceding the date of the interview. In this case, the time period asked about is the preceding six months. A period of six months is sufficient for a representative picture of service usage to be gauged, yet recent enough for the respondent to recall accurately the frequency and nature of contacts (Roberts, Bergstralh, Schmidt, & Jacobsen, 1996).

This questionnaire is administered by face-to-face interview with the main caregiver who answered questions about the child's use of a range of health services, social services and special educational services. Respondents are specifically asked about their utilisation of the following:

- GP
- Nurse
- Health visitor
- Speech therapist
- Physiotherapist
- Social worker
- Sessional worker
- Child and Adolescent Mental Health Service (CAHMS) team member
- Community paediatrician
- Homestart service
- Extra parent consultation with head teacher

- Extra parent consultation with class teacher
- School nurse
- One-to-one help
- Small group work
- Special teaching
- Educational needs statements issued
- Psychological assessments
- Attendance of a special school
- Respite foster care
- Casualty department (Accident and emergency)
- Ambulance use
- Outpatient consultant appointments
- Inpatient stays in hospital

The questionnaire also asks respondents to report the location of the contact, e.g. GP surgery, in the home, health clinic or school/nursery. Space is left for the inclusion of other services or locations the respondents may have used which were not specifically included in the questionnaire.

The questionnaire also asks the main carer to recall over the preceding six months the type and frequency of their own contacts with health care services due to the evidence in the literature of the links between child behaviour and maternal health. Respondents are asked to recall their own usage over the preceding six months of:

- GP
- Nurse
- Health visitor
- Social worker
- Community psychiatric nurse
- Mediation services (e.g. Relate)
- Counsellors
- Hospital consultant appointments
- Casualty (Accident and Emergency department)

Timing

The service utilisation questionnaire will be administered at two time points:

1. At baseline (T1), before the parent/care-giver in the intervention group begins the Webster-Stratton parenting course
2. Up to twelve months after baseline (T2).

Costing

Once frequency and nature of service contacts have been collected at two time points, the economic costs of providing these services may be calculated. Published unit costs for services (e.g. Netten & Curtis, 2002) are used to calculate the total cost of service utilisation for each child over the six month recall period.

Rationale for its use

Once total costs for each participant in the study have been calculated, they are aggregated to produce total costs for the control and intervention groups of the trial. These costs, together with the results of a primary clinical outcome measure, are used to conduct a cost-effectiveness analysis. Cost-effectiveness analysis allows us to assess the dominance of one treatment over another in terms of both its cost and its clinical effectiveness. An incremental cost-effectiveness ratio (ICER) may then be calculated to tell us the how much it would cost per unit of change on a clinical outcome measure to switch from one treatment to the alternative treatment.

3.7 (ii) EQ-5D Health-Related Quality of Life Questionnaire

Due to the link between child behaviour and maternal health, we wanted to find out about the main caregiver's own self-reported health status, we included the EQ-5D, a brief, well validated, internationally recognised instrument. The EQ-5D consists of simple questions about mobility, self-care, usual activities, pain/discomfort and anxiety/depression, plus a thermometer-like visual analogue scale for measuring health. As age and gender adjusted national norms are available for the UK (Kind, Hardman, & Macran, 1995) it will be possible to compare the self-reported health status of main carers in our study with these norms. The questionnaire is administered by face-to-face interviews.

Timing

The EQ-5D will be administered at two time points:

1. At baseline (T1), before the parent/care-giver begins the Webster-Stratton parenting course.
2. Up to twelve months after baseline (T2).

Rationale for use

Besides allowing researchers to compare general self-reported health with national norms (Kind et al., 1995), the EQ-5D can be used to calculate Quality Adjusted Life Years (QALYs) which may accompany any observed changes in child behaviour. QALYs are a monetary measure of the quality of life gained or lost as a result of a change, in this case, in child behaviour.

Scoring

The first part of the EQ-5D which asks about mobility, self-care, usual activities, pain/discomfort and anxiety/depression yields a five-digit number based on which of the three levels for each of the five dimensions the respondent chooses. For example, the number 21133 indicates the respondent chose level 2 (some problems) for the first dimension (mobility), level one (no problems) for the second dimension (self-care), etc. The five-digit number is then converted into a weighted health state index score which is calculated using regression model coefficients (details given in Kind et al, 1995). This section of the questionnaire yields a total of 243 theoretically possible health states.

The second part of the EQ-5D comprises a visual analogue scale. Scores on this scale simply range between 0 for worst possible health state and 100 for best possible health state.

Validity

The EQ-5D has been validated in several countries around the world, including the UK (Agt, Essink-Bot, Krabbe, & Bonsel, 1994; Brazier, Jones, & Kind, 1993; Essink-Bot, Krabbe, Bonsel, & Aaronson, 1997).

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental health disorders* (4th ed.). Washington DC: Author.
- Abidin, R. R. (1990). *Parenting Stress Index*. Odessa: PAR.
- Abidin, R. R. (1992). The determinants of parenting behaviour. *Journal of Clinical Child Psychology*, 21, 407-412.
- Abidin, R. R. (1995). *Parenting Stress Index* (3rded.). Odessa: PAR.
- Achenbach, T. M., & Edelbrock, C. S. (1986). *Child Behavior Checklist and Youth Self-Report*. Burlington, VT: Author.
- Agt, H. M. E., Essink-Bot, M. L. , Krabbe, P. F. M., Bonsel, G. J. (1994). Test-retest reliability of health state valuations collected with the EuroQol questionnaire. *Social Science and Medicine*, 39, 1537-1544.
- Alpern, L. & Lyons-Ruth, K. (1993). Pre-school children at social risk: Chronicity and timing of maternal depressive symptoms and child behaviour problems at school and at home. *Development and Psychopathology*, 5, 371-387.
- Armbruster, P. & Kazdin, A. E. (1994). Attrition in child psychotherapy. *Advances in Clinical Child Psychology*, 26, 81-108.
- Arnold, D. S., O'Leary, S. G., Wolff, L. S., & Acker, M. M. (1993). The Parenting Scale: A measure of dysfunctional parenting in discipline situations. *Psychological Assessment*, 5(2), 137-144.
- Asher, S. R. & Coie, J. D. (Eds.). (1990). *Peer rejection in childhood*. Cambridge MA: Cambridge University Press.
- Baden, A. D. & Howe, G. W. (1992). Mothers' attributions and expectancies regarding their conduct disordered children. *Journal of Abnormal psychology*, 20, 467-485.
- Bandura, A. (1977). *Social Learning Theory*. New York: General Learning Press.
- Barlow, J., Parsons, J. and Stewart-Brown, S. (2002). *Systematic review of the effectiveness of parenting programmes in the primary and secondary prevention of mental health problems*. Oxford: Health Services Research Unit, University of Oxford.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty five years of evaluation. *Clinical Psychology Review*, 8(1), 77-100.

- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An Inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.
- Beecham, J. K. (1995). Collecting and estimating costs. In M. R. J. Knapp (Ed.), *The economic evaluation of mental health services*. Aldershot: Ashgate.
- Bloomquist, M. L. & Schnell, S. V. (2002). *Helping children with aggression and conduct problems: Best practices for intervention*. New York: Guilford Press.
- Brazier J., Jones N., & Kind P. (1993). Testing the validity of the EuroQol and comparing it with the SF-36 health survey questionnaire. *Quality of Life Research*, 2 (3), 169-180.
- Brestan, E.V. & Eyberg, S. M. (1998). Effective psychosocial treatments of conduct-disordered children and adolescents: 29 years, 82 studies and 5,272 kids. *Journal of Clinical Child Psychology*, 27, 180-189.
- Brestan, E. V., Eyberg, S., Boggs, S., & Algina, J. (1997). Parent-child interaction therapy: Parent perceptions of untreated siblings. *Child and Family Behavior Therapy*, 19, 13-28.
- Broidy, L. M., Nagin, D. S., Tremblay, R. E., Bates, J. E., Brame, B., Dodge, K. A., Ferusson, D., Horwood, J. L. Loeber, R., Laird, R., Lynam, D. R., Moffitt, T. E., Pettit, G. S., & Vitaro, F. (2003). Developmental trajectories of childhood disruptive behaviours and adolescent delinquency a six-site, cross-national study. *Developmental Psychology*, 39(2), 222-245.
- Brown, G. W. & Harris, T. (1978). *Social origins of depression: A study of psychiatric disorder in women*. London: Tavistock Publications.
- Budd, K. S., Riner, L. S., & Brockman, M. P. (1983). A structured observation system for clinical evaluation of parent training. *Behavioral Assessment*, 5(4), 373-393.
- Campbell, S. B. (1995). Behaviour problems in preschool children: A review of recent research. *Journal of Child Psychology and Psychiatry*, 36, 113-149.
- Campbell, S. B. & Ewing, L. J. (1990). Follow-up of hard-to-manage preschoolers: Adjustment at age 9 and predictors of continuing symptoms. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 31(6), 871-889.
- Capaldi, D. M. & Patterson, G. R. (1989). *Psychometric properties of fourteen latent constructs from the Oregon Youth Study*. Oregon Social Learning Centre. New York: Springer-Verlag Publishing.
- Carr, N. & Carr, J. (1999). Reinforcement schedules and the management of childhood behaviours. *Behavioural and Cognitive Psychotherapy*, 21(1), 89-96.

- Chisholm, D., Knapp, M. R. J., Knudsen, J. C., Amaddeo, F., Gaitte L., van Wihngaarden B., Epsilon Study Group (2000). Client socio-demographic and service receipt inventory – European version: development of an instrument for international research. *The British Journal of Psychiatry*, 177, 28-33.
- Coie, J. D. (1990). Towards a theory of peer rejection . In S.R. Asher & J.D. Coie (Eds.). *Peer rejection in childhood*. Cambridge MA: Cambridge University Press.
- Colvin, A., Eyberg, S., & Adams, C. (1999). Restandardization of the Eyberg Child Behavior Inventory. Manuscript in progress.
- Conners, C. K. (1994). The Conners Rating Scales: Use in clinical assessment, treatment planning and research. In M. Maruish (Ed.), *Use of Psychological Testing for Treatment Planning and Outcome Assessment*. Hillsdale, New Jersey: Erlbaum.
- Crick, N. R. & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115, 74-101.
- Dishion, T. J., Patterson, G. R. Stoolmiller, M., & Skinner, M. L. (1991). Family, school, and behavioral antecedents to early adolescent involvement with antisocial peers. *Developmental Psychology*, 27, 172-180.
- Dumas, J. E. & Wahler, R. G. (1983). Predictors of treatment outcome in parent training: Mother insularity and socioeconomic disadvantage. *Behavioral Assessment*, 5, 301-313.
- Dunn, L. M. & Dunn, L. M. (1981). *Peabody Picture Vocabulary Test – Revised Manual*. Circle Pines, MN: American Guidance Service.
- Dunn, L. M., Dunn, L. M., Whetton, C., & Buley, J. (1997). *The British Picture Vocabulary Scale – Second Edition*. Windsor, England: NFER-NELSON.
- Edwards, B. C., et al. (1984). A meta-analytic comparison of the Beck Depression Inventory and the Hamilton Rating Scale for Depression as measures of treatment outcome. *British Journal of Clinical Psychology*, 23(2), 93-99.
- Elliott, C. D. (1983). *The British Ability Scales – Technical Handbook (Manual 2)*. Windsor, England: NFER-NELSON.
- Eron, L. D. (1990). Understanding aggression. *Bulletin of the International Society for research on Aggression*, 12, 5-9.
- Essink-Bot, M. L., Krabbe, P. F., Bonsel, G. J., & Aaronson, N. K. (1997). An empirical comparison of four generic health status measures. The Nottingham Health Profile, the Medical Outcomes Study 36-item Short-Form Health Survey, the COOP/WONCA charts, and the EuroQol instrument. *Medical Care*, 35(5), 522-37.

- Eyberg, S. M. (1980). Eyberg Child Behavior Inventory. *Journal of Clinical Child Psychology, 9*, 27.
- Eyberg, S. M., Boggs, S. R., & Rodriguez, C. M. (1992). Relationships between parenting stress and disruptive behaviour. *Child and Family Behavior Therapy, 14*, 1-9.
- Eyberg, S. M. & Matarazzo, R. G. (1990). Training parents as therapists: A comparison between individual parent-child interaction training and parent group didactic training. *Journal of Clinical Psychology, 36*(2), 492-499.
- Eyberg, S. M. & Robinson, E. A. (1981). *Dyadic Parent-Child Interaction Coding System*. University of Washington: The Parenting Clinic.
- Eyberg, S. & Ross, A. W. (1978). Assessment of child behavior problems: The validation of a new inventory. *Journal of Clinical Child Psychology, 7*, 113-116.
- Farrington, D. P. (1995). The development of offending and antisocial behaviour from childhood: Key findings from the Cambridge Study in delinquent Development. *Journal of Child Psychology and Psychiatry, 36* (6), 929-964.
- Forehand, R., Furey, W. M., & McMahon, R. J. (1984). The role of maternal distress in a parent training program to modify child noncompliance. *Behavioral Psychotherapy, 12*, 93-108.
- Forehand, R. & McMahon, R. J. (1981). *Helping the noncompliant child: A clinician's guide to parent training*. London: Guilford Press.
- Frick, P. J., Lahey, B. B., Christ, M. A., Loeber, R., et al. (1991). History of childhood behavior problems in biological relatives of boys with attention-deficit hyperactivity disorder and conduct disorder. *Journal of Clinical Child Psychology, 20*(4), 445-451.
- Gardner, F. (1992). Parent-child interaction and conduct disorder. *Educational Psychology Review, 4* (2), 135-163.
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology, Psychiatry, and Allied Disciplines, 38* (5), 581-586.
- Goodman, R. (2001). Psychometric properties of the Strengths and Difficulties Questionnaire (SDQ). *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 1337-1345.
- Goodman, R., Ford, T., Simmons, H., Gatward, R., & Meltzer, H. (2000). Using the Strengths and Difficulties Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. *British Journal of Psychiatry, 177*, 534-539.

- Goodman, R., Renfrew, D., & Mullick, M. (2000). Predicting type of psychiatric disorder from Strengths and Difficulties Questionnaire (SDQ) scores in child mental health clinics in London and Dhaka. *European Child and Adolescent Psychiatry*, 9, 129-134.
- Goodman, R., & Scott, S. (1999). Comparing the strengths and Difficulties Questionnaire and the Child Behavior Checklist: Is small beautiful? *Journal of Abnormal Child Psychology*, 27(1), 17-24.
- Groth-Marnat, G. (1990). *The Handbook of Psychological Assessment* (2nd ed.). New York: Wiley.
- Hamilton, M. (1967). Development of a rating scale for primary depressive illness. *British Journal of Social and Clinical Psychology*, 6(4), 278-96.
- Hartman, R. R., Stage, S. A., & Webster-Stratton, C. (2003). A growth curve analysis of parent training outcomes: Examining the influence of child risk factors (inattention, impulsivity, and hyperactivity problems), parental and family risk factors. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 44(3), 388-398.
- Harvey, E., Danforth, J. S., Ulaszek, W. R. & Eberhardt, T. L. (2001). Validity of the parenting scale for parents of children with attention-deficit/hyperactivity disorder. *Behaviour Research and Therapy*, 39(6), 731-743.
- Herbert, M. (1993). *Working with children and the children act*. Leicester: BPS Books.
- Howlin, P. & Cross, P. (1994). The variability of language test scores in 3- and 4-year-old children of normal non-verbal intelligence: A brief research report. *European Journal of Disorders of Communication*, 29(3), 279-288.
- Hutchings, J. (1996a). *The personal and parental characteristics of preschool children referred to a child and family mental health service and their relation to treatment outcome*. Unpublished doctoral dissertation, University of Wales, Bangor.
- Hutchings, J. (1996b). Evaluating a behaviourally based parent training group: Outcomes for parents, children and health visitors. *Behavioural and Cognitive Psychotherapy*, 24, 149-170.
- Hutchings, J., Appleton, P., Smith, M., Lane, E., & Nash, S. (2002). Evaluation of two treatments for children with severe behaviour problems: Child behaviour and maternal mental health outcomes. *Behavioural and Cognitive Psychotherapy*, 30, 279-291.
- Kazdin, A. E. (1995). *Conduct disorders in childhood and adolescence* (2nd ed.). Thousand Oaks, CA: Sage.

- Kazdin, A. E. (1997). Practitioner review: Psychosocial treatments for conduct disorder in children. *Journal of Clinical Psychology and Psychiatry*, 38(2), 161-178.
- Kazdin, A. E. & Wassell, G. (2000). Therapeutic changes in children, parents, and families resulting from treatment of children with conduct problems. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39(4), 414-420.
- Kendall, P. C. & Brasswell, L. (1985). Cognitive-behavioral therapy for impulsive children. New York: Guilford Press.
- Kendall, P. & Wilcox, L. (1979). Self-control in children: Development of a rating scale. *Journal of Consulting and Clinical Psychology*, 47, 1020-1029.
- Kendall, P. C., Zupan, B. A., & Braswell, L. (1981). Self-control in children: Further analyses of the Self-Control Rating Scale. *Behavior Therapy*, 12(5), 667-681.
- Kind, P., Hardman, G., & Macran, S. (1995). *UK population norms for EQ-5D (Discussion paper 172)*. York: University of York Centre for Health Economics.
- Knapp, M. J. R. (Ed). (1995). *The economic evaluation of mental health services*. Aldershot: Ashgate.
- Knapp, M., Scott, S., & Davies, J. (1999). The cost of antisocial behaviour in young children. *Clinical Psychology and Psychiatry*, 4(4), 457-473.
- Kochanska, G. & Aksan, N. (1995). Mother-child mutually positive affect, the quality of child compliance to requests and prohibitions, and maternal control as correlates of early internalization. *Child Development*, 66(1), 236-254.
- Kraemer, H. C., Stice, E., Kazdin, A., Offord, D., & Kupfer, D. (2001). *American Journal of Psychiatry*, 158, 8448-856.
- Kurtz, Z., Thornes, R. & Wolkind, S. (1994) *Services for the Mental Health of Children and Young People in England*. London: South Thames Regional Health Authority.
- Lewis, C. M. (1987). Vocabulary, sentences and words: testing for agreement between two recent measures of reading performance and receptive vocabulary. *Educational Psychology*, 2(2), 129-132.
- Locke, H. J. & Wallace, K. M. (1959). Short marital adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living*, 21, 231-235.
- Loeber, R. (1990). Development and risk factors of juvenile antisocial behaviour and delinquency. *Clinical Psychology Review*, 10, 1-41.
- Loeber, R. (1991). Antisocial Behaviour: More enduring than changeable? *Journal of the American Academy of Child and Adolescent Psychiatry*, 30, 393-398.

- Marshall, J. & Watt, P. (1999). *Child Behaviour Problems*. Perth, WA: Interagency Committee on Children's Futures.
- Metcalf, M. & Goldman, E. (1965). Validation of an inventory for measuring depression. *Archives of General Psychiatry*, 27, 330-333.
- Mihalic, S., Fagan, A., Irwin, K., Ballard, D., & Elliot, D. (2002). *Blueprints for Violence Prevention Replications: Factors for Implementation Success*. Boulder, Colorado: University of Colorado, Center for the Study of Prevention of Violence.
- Moffitt, T. E. (1993). Adolescence-limited and life-course persistent antisocial behaviour: A developmental taxonomy. *Psychological Review*, 100, 674-701.
- Murray, L. & Cooper, P. J. (1997). *Postpartum depression and child development*. New York: Guilford Press.
- Netter, A. & Curtis, L. (2000). Unit costs of health and social care 2000. PSSRU, University of Kent at Canterbury.
- Office for National Statistics. (1999). *The mental health of children and adolescents in Great Britain summary report*. Office for National Statistics: Author.
- Patterson, G. R. (1982). *Coercive family processes*. Eugene, OR: Castalia.
- Patterson, G. R. (1992). Developmental changes in antisocial behavior. In R. DeV. Peters, R. J. McMahon, & V. L. Quinsey (Eds.), *Aggression and violence throughout the life span*. Newbury Park, CA: Sage.
- Patterson, G. R., Chamberlain, P., & Reid, J. B. (1982). A comparative evaluation of parent training procedures. *Behavior Therapy*, 13, 638-650.
- Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist*, 44, 329-335.
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1(3), 385-401.
- Roberts, R. O., Bergstralh, E. J., Schmidt, L. & Jacobsen, S. J. (1996). Comparison of self-reported and medical record health care utilization measures. *Epidemiology*, 989-995.
- Robinson, E. A. & Eyberg, S. M. (1981). The Dyadic Parent-Child Interaction Coding System: Standardization and validation. *Journal of Consulting and Clinical Psychology*, 49, 245-250.
- Robinson, E. A., Eyberg, S. M., & Ross, A. W. (1980). The standardization of an inventory of child problematic conduct behaviors. *Journal of Clinical Child Psychology*, 9, 22-28.

- Roggman, L. A., Moe, S. T., Hart, A. D., & Forthun, L. F. (1994). Family leisure and social support: Relations with parenting stress and psychological well-being in Head Start parents. *Early Childhood Research Quarterly*, 9, 463-480.
- Rutter, M, Tizard, J., & Whitmore, K. (Eds.). (1970). *Education, health and behaviour*. London: Longman
- Rutter, M. & Quinton, D. (1977). Psychiatric disorder: Ecological factors and concepts of causation. In H. McGurk (Ed.), *Ecological Factors in Human Development*. Amsterdam: North Holland Publishing Corporation.
- Raynell, J. (1977). *Raynell Developmental Language Scales – Revised*. Windsor, England: NFER-Nelson.
- Scott, S. (1998). Aggressive behaviour in childhood. *British Medical Journal*, 316, 202-206.
- Scott, S. (2003). Parent training programmes. In M. Rutter & E. Taylor (Eds.), *Child and Adolescent Psychiatry* (4th ed.). Oxford: Blackwell Science.
- 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, 191-193.
- Scott, S. Spender, Q., Doolan, M., Jacobs, B., & Aspland, H. (2001). Multicentre controlled trial of parenting groups for childhood antisocial behaviour in clinical practice. *British Medical Journal*, 323, 194-198.
- Terman, L. M. & Merrill, M. A. (1960). *Revised Stanford-Binet Tests of Intelligence*. Boston, MA: Houghton Mifflin.
- Webster-Stratton, C. (1981). Videotape modelling: A method of parent education. *Journal of Clinical Child Psychology*, 10, 93-98.
- Webster-Stratton, C. (1984). A randomized trial of two parent training programs for families with conduct disordered children. *Journal of Consulting and Clinical Psychology*, 52(4), 666-678.
- Webster-Stratton, C. (1985). Predictors of treatment outcome in parent training for conduct disordered children. *Behavior Therapy*, 16, 223-243.
- Webster-Stratton, C. (1990). Stress a potential disruptor of parent perceptions and family interactions. *Journal of Clinical Child Psychology*, 19(4), 302-312.
- Webster-Stratton, C. (1994). Advancing videotape parent training: A comparison study. *Journal of Consulting and Clinical Psychology*, 62, 583-593.
- Webster-Stratton, C. (1998a). Parent training with low-income families. In Lutzker (Ed.), *Handbook of Child Abuse Research*. New York: Platinum Press.

- Webster-Stratton, C. (1998b). Preventing conduct problems in Head Start children: Strengthening parent competencies. *Journal of Consulting and Clinical Psychology, 66*, 715-730.
- Webster-Stratton, C. (1999). Early intervention in family life: Experiences from the United States. In R. Bayley, (Ed.) *Transforming Children's Lives: The Importance of early Intervention*. London: Family Policy studies centre.
- Webster-Stratton, C. (2003). Aggression in Young Children Perspective: Services Proven to be Effective in Reducing Aggression. Retrieved from <http://www.incredibleyears.com/research/article-aggression-in-young-children-perspective.pdf>
- Webster-Stratton, C. & Hammond, M. (1990). Predictors of treatment outcome in parent training for families with conduct problem children. *Behavior Therapy, 21*, 319-337.
- 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*(1), 93-109.
- Webster-Stratton, C. & Hammond, M. (1998). Conduct problems and level of social competence in Head Start children: Prevalence, pervasiveness and associated risk factors. *Clinical Child Psychology and Family Psychology Review, 1*(2), 101-124.
- Webster-Stratton, C. & Hancock, L. (1998). Training for parents of young children with conduct problems: Content, methods, and therapeutic processes. In C. E. Schaefer & J. M. Briesmeister (Eds.). *Handbook of Parent Training*. New York: John Wiley.
- Webster-Stratton, C. & Herbert, M. (1994). *Troubled Families-Problem Children*. Chichester: John Wiley.
- Webster-Stratton, C., Kolpacoff, M., & Hollinsworth, T. (1988). Self-administered videotape therapy for families with conduct problem children: Comparison to two other treatments and a control group. *Journal of Consulting and Clinical Psychology, 56*(4), 558-566.
- Webster-Stratton, C. & Lindsay, D. W. (1999). Social competence and conduct problems in young children: issues in assessment. *Journal of Clinical Child Psychology, 28* (1) 25-43.
- Webster-Stratton, C. & Reid, M. J. (in press). The Incredible Years Parents, Teachers and Child Training Series: A multifaceted treatment approach for young children with conduct problems. In A. Kazdin & J. Weisz, (Eds.), *Evidence-based Psychotherapies for Children and Adolescents*. Guilford Press.

- Webster-Stratton, C., Reid, M. J., & Hammond, M. (2001). Social skills and problem solving training for children with early-onset conduct problems: who benefits? *Journal of Child Psychology and Psychiatry*, 42(7), 943-952.
- Webster-Stratton, C., & Spitzer, A. (1991). Development, reliability, and validity of the daily telephone discipline interview. *Behavior Assessment*, 13(3), 221-239.
- Webster-Stratton, C. & Spitzer, A. (1996). Parenting a young child with conduct problems: New insights using qualitative methods. *Advances in Clinical Child Psychology*, 18, 1-62.
- 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 (0-8 Years). *Prevention Science*, 2(3), 165-192.
- Webster-Stratton, C. et al. (2001). *Blueprints for Violence Prevention Replications: Factors for Implementation Success*. Boulder, Colorado: University of Colorado, Center for the Study of Prevention of Violence.
- Wechsler, D. (1958). *The Measurement of Adult Intelligence*. Oxford: Williams & Wilkins.
- Williams, J. D., Barlow, D. H., & Agras, W. S. (1972). Behavioral measurement of severe depression. *Archives of general Psychiatry*, 27, 330-333.
- World Health Organisation (1992). *International Statistical Classification of Diseases and Related Health Problems: Tenth Revision*. Geneva: Author.

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Appendix A. The Diagnosis of Child Conduct Disorders

A.01 ICD-10 criteria: 10th Revision Vol. 1 World Health Organisation 1992

F91 Conduct disorders

Disorders characterised by a repetitive and persistent pattern of dissocial, aggressive, or defiant conduct. Such behaviour should amount to major violations of age-appropriate social expectations; it should therefore be more severe than ordinary childish mischief or adolescent rebelliousness and should imply an enduring pattern of behaviour (six months or longer). Features of conduct disorder can also be symptomatic of other psychiatric conditions, in which case the underlying diagnosis should be preferred.

Examples of the behaviours on which the diagnosis is based include excessive levels of fighting or bullying, cruelty to other people or animals, severe destructiveness to property, fire-setting, stealing, repeated lying, truancy from school and running away from home, unusually frequent and severe temper tantrums, and disobedience. Any one of these behaviours, if marked, is sufficient for the diagnosis, but isolated dissocial acts are not.

Excludes:

- mood (affective) disorders (F30-F39)
- pervasive developmental disorders (F84.-)
- schizophrenia (F20.-)
- when associated with:
 - emotional disorders (F92.-)
 - hyperkinetic disorders (F90.1)

F91.0 Conduct disorder confined to the family context

Conduct disorder involving dissocial or aggressive behaviour (and not merely oppositional, defiant, disruptive behaviour), in which the abnormal behaviour is entirely, or almost entirely, confined to the home and to interactions with members of the nuclear family or immediate household. The disorder requires that the overall

criteria for F91.- be met; even severely disturbed parent-child relationships are not of themselves sufficient for diagnosis.

F91.1 Unsocialized conduct disorder

Disorder characterised by the combination of persistent dissocial or aggressive behaviour (meeting the overall criteria for F91.- and not merely comprising oppositional, defiant, disruptive behaviour) with significant pervasive abnormalities in the individual's relationships with other children.

Conduct disorder, solitary aggressive type

Unsocialized aggressive disorder

F91.2 Socialized conduct disorder

Disorder involving persistent dissocial or aggressive behaviour (meeting the overall criteria for F91.- and not merely comprising oppositional, defiant, disruptive behavior) occurring in individuals who are generally well integrated into their peer group.

Conduct disorder, group type

Group delinquency

Offences in the context of gang membership

Stealing in company with others

Truancy from school

F91.3 Oppositional defiant disorder

Conduct disorder, usually occurring in younger children, primarily characterised by markedly defiant, disobedient, disruptive behaviour that does not include delinquent acts or the more extreme forms of aggressive or dissocial behaviour. The disorder requires that the overall criteria for F91.- be met; even severely mischievous or naughty behaviour is not in itself sufficient for diagnosis. Caution should be employed before using this category, especially with older children, because clinically significant conduct disorder will usually be accompanied by dissocial or aggressive behaviour that goes beyond mere defiance, disobedience, or disruptiveness.

F91.8 Other conduct disorders

F91.9 Conduct disorder, unspecified

Childhood:

- behavioural disorder NOS
- conduct disorder NOS

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A.02 DSM-IV Criteria

DISRUPTIVE BEHAVIOR DISORDERS

312.8 Conduct Disorder

Diagnostic Features

The essential feature of Conduct Disorder is a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated (Criterion A). These behaviors fall into four main groupings: aggressive conduct that causes or threatens physical harm to other people or animals (Criteria A1-17), nonaggressive conduct that causes property loss or damage (Criteria A8-A9), deceitfulness or theft (Criteria A10-12), and serious violations of rules (Criteria A13-A15). Three (or more) characteristic behaviors must have been present during the past 12 months, with at least one behavior present in the past 6 months. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning (Criterion B). Conduct Disorder may be diagnosed in individuals who are older than age 18 years, but only if the criteria for Antisocial Personality Disorder are not met (Criterion C). The behavior pattern is usually present in a variety of settings such as home, school, or the community. Because individuals with Conduct Disorder are likely to minimise their conduct problems, the clinician often must rely on additional informants. However, the informant's knowledge of the child's conduct problems may be limited by inadequate supervision or by the child's not having revealed them.

Children or adolescents with this disorder often initiate aggressive behavior and react aggressively to others. They may display bullying, threatening or intimidating behavior (A1); initiate frequent physical fights (Criterion A2); use a weapon that can cause serious physical harm (e.g. a bat, brick, broken bottle, knife or gun) (Criterion A3); be physically cruel to people (Criterion A4) or animals (Criterion A5); steal while confronting a victim (e.g. mugging, purse snatching, extortion, or armed robbery) (Criterion 6); or force someone into sexual activity (Criterion A7). Physical violence may take the form of rape, assault, or in rare cases, homicide.

Deliberate destruction of others' property is a characteristic feature of this disorder and may include deliberate fire setting with the intention of causing serious damage (Criterion A8) or deliberately destroying other people's property in other ways (e.g. smashing car windows, school vandalism) (Criterion 9).

Deceitfulness or theft is common and may include breaking into someone else's house, building, or car (Criterion A10); frequently lying or breaking promises to obtain goods or favors or to avoid debts or obligations (e.g. "conning" other people) (Criterion A11); or stealing items of nontrivial value without confronting the victim (e.g. shoplifting, forgery) (Criterion A12).

Characteristically, there are also serious violations of rules (e.g., school, parental) by individuals with this disorder. Children with this disorder often have a pattern beginning before age 13 years, of staying out late at night despite parental prohibitions (Criterion 13). There may be a pattern of running away from home overnight (Criterion 14). To be considered a symptom of Conduct Disorder, the running away must have occurred at least twice (or only once if the individual did not return for a lengthy period). Runaway episodes that occur as a direct consequence of physical or sexual abuse do not typically qualify for this criterion. Children with this disorder may often truant from school, beginning prior to age 13 years (Criterion A15). In older individuals, this behavior is manifested by often being absent from work without good reason.

Subtypes

Two subtypes of Conduct Disorder are provided based on the age at onset of the disorder (i.e. Childhood-Onset Type and Adolescent-Onset Type). The subtypes differ in regard to the characteristic nature of the presenting conduct problems, developmental course and prognosis, and gender ratio. Both subtypes can occur in a mild, moderate, or severe form. In assessing the age at onset, information should preferably be obtained from the youth and from caregiver(s). Because many behaviors may be concealed, caregivers may underreport symptoms and overestimate the age at onset.

Childhood-Onset Type. This subtype is defined by the onset of at least one criterion characteristic of Conduct Disorder prior to age 10 years. Individuals with Childhood-Onset Type are usually male, frequently display physical aggression toward others, have disturbed peer relationships, may have had Oppositional Defiant Disorder during early childhood, and usually have symptoms that meet full criteria for Conduct Disorder prior to puberty. These individuals are more likely to have persistent Conduct Disorder and to develop adult Antisocial Personality disorder than are those with Adolescent-Onset Type.

Adolescent-Onset Type. This subtype is defined by the absence of any criteria characteristic of Conduct Disorder prior to age 10 years. Compared with those with the Childhood-Onset Type, these individuals are less likely to display aggressive behaviors and tend to have more normative peer relationships (although they often display conduct problems in the company of others). These individuals are less likely to have persistent Conduct Disorder or to develop adult Antisocial Personality Disorder. The ratio of males to females with Conduct Disorder is lower for the Adolescent-Onset Type than for the Childhood-Onset Type.

Prevalence

The prevalence of Conduct Disorder appears to have increased over the last decades and may be higher in urban than in rural settings. Rates vary widely depending on the nature of the population sampled and methods of ascertainment: for males under age 18 years, rates range from 6% to 16%; for females, rates range from 2% to 9%. Conduct Disorder is one of the most frequently diagnosed conditions in outpatient and inpatient mental health facilities for children.

Course

The onset of Conduct Disorder may occur as early as age 5-6 years but is usually in late childhood or early adolescence. Onset is rare after age 16 years. The course of Conduct Disorder is variable. In a majority of individuals, the disorder remits by adulthood. However, a substantial proportion continue to show behaviors in

adulthood that meet criteria for Antisocial Personality Disorder. Many individuals with Conduct Disorder, particularly those with Adolescent-Onset Type and those with few and milder symptoms achieve adequate social and occupational adjustment as adults. Early onset predicts a worse prognosis and an increased risk in adult life for Antisocial Personality Disorder and Substance-Related Disorders. Individuals with Conduct Disorder are at risk for later Mood or Anxiety Disorders, Somatoform Disorders, and Substance-Related Disorders.

Diagnostic criteria for 312.8 Conduct Disorder

A. A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least one criterion present in the past 6 months.

Aggression to people and animals

- (1) often bullies, threatens or intimidates others
- (2) often initiates physical fights
- (3) has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife, gun)
- (4) has been physically cruel to people
- (5) has been physically cruel to animals
- (6) has stolen while confronting a victim (e.g. mugging, purse snatching, extortion, armed robbery)
- (7) has forced someone into sexual activity

Destruction of property

- (8) has deliberately engaged in fire setting with the intention of causing serious damage
- (9) has deliberately destroyed others' property (other than by fire setting)

Deceitfulness or theft

- (10) has broken into someone else's house, building, or car
- (11) often lies to obtain goods or favours or to avoid obligations (i.e. "cons" others)
- (12) has stolen items of nontrivial value without confronting a victim (e.g., shoplifting, but without breaking and entering; forgery)

Serious violations of rules

- (13) often stays out at night despite parental prohibitions, beginning before age 13 years
- (14) has run away from home overnight at least twice while living in parental or parental surrogate home (or once without returning for a lengthy period)
- (15) is often truant from school, beginning before age 13 years

B. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.

C. If the individual is age 18 years or older, criteria are not met for Antisocial Personality Disorder.

Specify type based on age at onset:

Childhood-Onset Type: onset of at least one criterion characteristic of Conduct Disorder prior to age 10 years

Adolescent-Onset Type: absence of any criteria characteristic of Conduct Disorder prior to age 10 years

Specify severity:

Mild: few if any conduct problems in excess of those required to make the diagnosis **and** conduct problems cause only minor harm to others

Moderate: number of conduct problems and effect on others, intermediate between "mild" and "severe"

Severe: many conduct problems in excess of those required to make the diagnosis **or** conduct problems causing considerable harm to others

313.81 Oppositional Defiant Disorder

Diagnostic Features

The essential feature of Oppositional Defiant Disorder is a recurrent pattern of negativistic, defiant, disobedient, and hostile behavior toward authority figures that persists for at least 6 months (Criterion A) and is characterised by the frequent occurrence of at least four of the following behaviors: losing temper (Criterion A1), arguing with adults (Criterion A2), actively defying or refusing to comply with the requests or rules of adults (Criterion A3), deliberately doing things that will annoy other people (Criterion A4), blaming others for his or her own mistakes or misbehavior (Criterion A5), being touchy or easily annoyed by others (Criterion A6), being angry and resentful (Criterion A7), or being spiteful or vindictive (Criterion A8). To qualify for Oppositional Defiant Disorder, the behaviors must occur more frequently than is typically observed in individuals of comparable age and developmental level and must lead to significant impairment in social, academic or occupational functioning (Criterion B). The diagnosis is not made if the disturbance in behavior occurs exclusively during the course of a Psychotic or Mood Disorder (Criterion C) or if criteria are met for Conduct Disorder or Antisocial Personality Disorder (in an individual over age 18 years).

Negativistic and defiant behaviors are expressed by persistent stubbornness, resistance to directions, and unwillingness to compromise, give in, or negotiate with adults or peers. Defiance may also include deliberate or persistent testing of limits, usually by ignoring orders, arguing and failing to accept blame for misdeeds. Hostility can be directed at adults or peers and is shown by deliberately annoying others or by verbal aggression (usually without the more serious physical aggression seen in Conduct Disorder). Manifestations of the disorder are almost invariably present in the home setting, but may not be evident at school or in the community. Symptoms of the disorder are typically more evident in interactions with adults or peers whom the individual knows well, and thus may not be apparent during clinical examination. Usually individuals with the disorder do not regard themselves as oppositional or defiant, but justify their behavior as a response to unreasonable demands or circumstances.

Prevalence

Rates of Oppositional Defiant Disorder from 2% to 16% have been reported, depending on the nature of the population sample and methods of ascertainment.

Course

Oppositional Defiant Disorder usually becomes evident before age 8 years and usually not later than early adolescence. The oppositional symptoms often emerge in the home setting but over time may appear in other settings as well. Onset is typically gradual, usually occurring over the course of months or years. In a significant proportion of cases, Oppositional Defiant Disorder is a developmental antecedent to Conduct Disorder.

Diagnostic criteria for 313.81 Oppositional Defiant Disorder

A. A pattern of negativistic, hostile, and defiant behavior lasting at least 6 months during which four (or more) of the following are present:

- (1) often loses temper
- (2) often argues with adults
- (3) often actively defies or refuses to comply with adults' requests or rules
- (4) often deliberately annoys people
- (5) often blames others for his or her mistakes or behavior
- (6) is often touchy or easily annoyed by others
- (7) is often angry and resentful
- (8) is often spiteful or vindictive

Note: Consider a criterion met only if the behavior occurs more frequently than is typically observed in individuals of comparable age and developmental level.

B. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.

C. The behaviors do not occur exclusively during the course of a Psychotic or Mood Disorder.

D. Criteria are not met for Conduct Disorder, and, if the individual is age 18 years or older, criteria are not met for Antisocial Personality Disorder.

312.9 Disruptive Behavior Disorder Not Otherwise Specified

This category is for disorders characterised by conduct or oppositional defiant behaviors that do not meet the criteria for Conduct Disorder or Oppositional Defiant Disorder. For example, include clinical presentations that do not meet full criteria either for Oppositional Defiant Disorder or Conduct Disorder, but in which there is clinically significant impairment.

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Appendix B. Home Visits Manual 2003

Home visits manual 07/01/03

p.1

HOME VISITS MANUAL 2003

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OVERVIEW OF FAMILY CONTACTS

(1) SCREENING

Health visitors (HV) to use client based knowledge to select appropriate (low-income) families (with child aged between 36 and 58 months) who might like to take part in a parenting group and research study. HV to:

- Administer ECBI.
- Say a little about the study, i.e. parenting group being run and the need to evaluate this, participant to receive £25 for completing a research session (two visits).
- Send information regarding ECBI and contact details to research group.

(2) BASELINE APPOINTMENT

Parents are contacted by telephone (for spiel see Appendix A) to ascertain whether or not **they wish to find out more about the study** and if willing, an appointment made.

Basics of call:

- Arrange a convenient time for first baseline visit (**anytime between 9-4pm**). Suggest that it might be best if we visit during school hours if they have other children, and at a time when we are least likely to be disturbed – **ask them to let friends and family know when we are visiting so that disturbance is kept to a minimum.**
- **If they want to take part in the research the interview will take about 1 hour**
- Ask about preferred language for interview.
- Say who will come.
- Get directions to house.

All families to be given an identification number at this stage. This number is to appear at the top of all correspondence and questionnaires. Even if parent is not willing to take part they will still be assigned a number as we need information on exclusions/refusals.

(3) BASELINE VISIT: QUESTIONS SESSION

(4) BASELINE VISIT: OBSERVATION SESSION

(5) ALLOCATION TO GROUP

Following random allocation (with restriction of age and sex) parents are contacted to let them know **when** they will be able to attend the parenting group and **where** the group will be held. Contact may be made by telephone, but preferably by visit.

At this point intervention participants are told that they will receive their £25 at the first parent group session. Control participants are given their £25 there and then.

Remind parent of the **crèche facilities**. Give a **contact name from Sure Start centre**. Any concerns about attending the group can be discussed here. Also:

- Remind parent of when we will visit next (a provisional appointment was made at baseline visit).
- Make clear **how many more visits we will make** (this will only be one more for controls).
- Remind parent that if they move house during this time to please let us know by filling in the change of address form and sending it back and they get £10.00 for doing so.

(6) F1 APPOINTMENT

- Phone to check that the provisional appointment is still OK.
- Remind the parent how long the session will take (up to 1 hour) and what it will involve.
- Say who will make the visit.
- Remind parent to let friends and family know so disturbances are minimised.

(7) F1 VISIT: QUESTIONS SESSION

(8) F1 VISIT: OBSERVATION SESSION

- Same time of day and same coder as baseline (where possible).

**Controls stop here
Thank you and debriefing**

(9) F2 APPOINTMENT

- Phone to check that the provisional appointment is still OK.
- Remind the parent how long the session will take (up to 1 hour) and what it will involve.
- Say who will make the visit.
- Remind parent to let friends and family know so disturbances are minimised.

(10) F2 VISIT: QUESTIONS SESSION

(11) F2 VISIT: OBSERVATION SESSION

- Same time of day and same coder as F1 (where possible).

**Groups 3,4,5,6,7 stop here
Thank you and debriefing**

(12) F3 APPOINTMENT

- Phone to check that the provisional appointment is still OK.
- Remind the parent how long the session will take (up to 1 hour) and what it will involve.
- Say who will make the visit.
- Remind parent to let friends and family know so disturbances are minimised.

(13) F3 VISIT: QUESTIONS SESSION/OBSERVATION

- Might be able to do complete session in one since only a few families.
- Thank you for participation and debriefing.

HOME CONTACT PROCEDURE: QUESTION SESSIONS

I. MATERIALS NEEDED

Baseline	Follow-ups 1,2,3
Researcher information	Researcher information
Participant contact details	Participant contact details
Home visits manual	Home visits manual
Forms	Forms
Participant information sheet (Welsh & English)	X
Consent forms (Welsh & English)	X
Move address slip	Move address slip
Appointment card	Appointment card
Rules for Home Observations	Rules for Home Observations
Questionnaires	Questionnaires
Baseline cover sheet	Follow up cover sheet
PDHQ	Follow-up demographic questions
Major Life Events Questionnaire	X
X	ECBI for index child
BDI	BDI
PSI	PSI
The Parenting Scale	The Parenting Scale
ECBI for sibling	ECBI for sibling
Social Competence Scale-Parent	Social Competence Scale-Parent
SDQ	SDQ
SCRS	SCRS
Conners	Conners
Child verbal ability	Child verbal ability
BPVS-II	BPVS-II

Key: PDHQ = Personal data and health questionnaire; BDI = Beck Depression Inventory; PSI = Parenting Stress Index; ECBI = Eyberg Child Behaviour Inventory
SDQ = Strengths and Difficulties Questionnaire; SCRS = Kendall – Self Control Rating Scale; CII = Coders Impressions Inventory; BPVS = British Picture Vocabulary Scales

N.B. Evaluation of training programme:

Parent and leader responses to the programme must be completed at training sessions and returned to research centre.

II. BASELINE QUESTION SESSIONS

(1) OVERVIEW

- Researcher to provide information on study (for guide spiel see Appendix B) and answer questions.
- If willing to take part parent to sign the consent forms (one for agreeing to take part in the parenting group, the other for research).
- Other administration e.g. get postcode, change address procedure, back up address.
- If participant willing start on questionnaires.
- Researcher and index child to complete child verbal ability test.
- Make appointment for Observation session (**must be between the hours of 4 and 7pm**) and say who will be at the visit.
- Explain and leave sheet on Rules for Home Observations visit.
- Make provisional appointment for 6 month follow-up.
- Say they will be contacted in a few weeks to say which group they are in.

- **HELLOS AND CHAT**

Introduce self and try to put parent at ease.

- **INFORMATION AND CONSENT**

In the research we will be looking at groups for parents to see if they are useful in helping parents who have a difficult child... (for spiel see Appendix B).

Please read this information sheet (Welsh and English copies) which explains all about the study, I can then answer any questions you might have...

A few points which may need to be clarified:

- Participants must agree to attending the parenting group – this is essential, reinforce as the most important thing.
- **During the parenting group there will be a free crèche run by trained carers** (children will not be able to be in the parenting group).
- Participant to receive £25 for each completed research session – which will be split into two visits.
- There are only 12 places in each group, so to be fair who takes part in which group is decided by chance.
- The researcher is not involved with the parenting groups; these will be run at local Sure Start centres. The researcher's job is just to make the visits.
- Although some of the questions are a bit personal, reassure confidentiality.
- Reassure that they can withdraw from the study at anytime and that if they decide not to take part in the research they will not be excluded from taking part in the current parenting group, future parenting groups, or other Sure Start Services.

Complete consent forms

As a member of staff at the University whenever I carry out a research study I have to make sure the people taking part in our research are happy to do so and that they fully

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understand what it is all about. To show that we have done this please could you sign this consent form? Thank you.

Other admin: change address items (**remind: £10 if they send it back**) & back-up address.

(3) QUESTIONNAIRES

Remind parent to:

- Focus on index child when answering child related scales (except sibling ECBI).
- All answers completely confidential only identified by reference number, no name.

Sibling ECBI:

- Note name and age of child closest in age to index.
- Get parent to complete sibling ECBI with this child in mind.

(4) CHILD VERBAL ABILITY

Make sure parent does not interfere with the task. May need to encourage them to take a coffee break, etc.

(5) FINISHING THE VISIT

To finish this research session we need to come back and spend some time just watching how your child is with you and other family members when you are together doing what you might normally do in the afternoon. This observation is not an assessment, it is an alternative to a questionnaire. There are also a few other things that I need you to try to do during this time...

- **Go through Rules for Home Observations for Parents & leave the parent copy**

Make sure you discuss the impact of turning off the T.V. with parent and about all members present staying in one room.

- **Arrange time in next few days between the hours of 4 and 7pm**

We need to visit you for about 40 minutes between the hours of 4 and 7pm. I know this is a difficult and often busy time of day, but apart from the rules we have just gone through you will not be asked to do anything like questionnaires. We just want to watch the effects of X's behaviour on family life.

- **Arrange a provisional date for the next questions visit**

For about 6 months time. Say they will be contacted closer to this time to make sure this appointment is still is OK.

- **Fill in appointment card for 2 visits**

If you cannot make the session for any reason please phone us to let us know.

III. FOLLOW-UP QUESTION SESSIONS

***Before the visit check how many more follow-up visits are due and when; check times, venue and leader contact details for the control parent group.**

- General chat
- Questionnaires
- Researcher and index child to complete child verbal ability test
- Make appointment for Observation session (**must be between the hours of 4 and 7pm**) and say who will be at the visit
- Explain and leave sheet on Rules for Home Observations for Parents visit
- Future sessions/debrief:
 - Controls stop here so debrief*
 - At F1 all intervention groups need a F2 appointment for 6 months time
 - At F2 intervention groups 1, 2, 3 need a F3 appointment for 12 months time
 - At F2 all other intervention groups stop here
 - Where necessary fill in appointment cards, check back up addresses

***Tell them times and venue of parenting group. Remind them of the crèche facilities. Give a contact name at the centre. Discuss any concerns about attending the group.**

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HOME VISIT PROCEDURE: OBSERVATION SESSIONS

I. RULES FOR HOME OBSERVATIONS

- Between (4-7pm).
- All family members present.
- Individuals to be observed should stay in one room.
- Observers can only wait 10 minutes for everyone to be present (if we want the whole family there).
- No visitors.
- No outgoing telephone calls – answer incoming calls briefly.
- No television viewing. No computer games. No reading.
- No interaction with observer whilst they are coding.
- Instructed to continue with normal activities they would regularly engage in at that time of day (even if it is dinner time).

II. MATERIALS NEEDED

- (1) Identification badge
- (2) Home visits manual
- (3) 6 coding sheets stapled together
- (4) Extra coding sheets
- (5) Rules for Home Observations (spare sheet)
- (6) 2 copies of the Coder Impressions Inventories (CII) – but keep them in your car
- (7) Stopwatch / timer

Details to be entered on first sheet:

- Family identification number
- Observer initials
- Circle SO (for single observer visits), and RV (if it is a reliability visit with two coders present)
- Fill in whether you are the primary or secondary coder (Prim/Sec).
- Time: 1 (BL), 2 (F1), 3 (F2), 4 (F3)
- Date

Also complete this information on last page.

III. OBSERVATION SESSIONS PROCEDURE

(1) ON ARRIVAL

- (Confirm appointment by phone on the day of the scheduled observation – if reliability visit, make it clear that two observers will be coming to visit them)
- Arrive on time
- Put family at ease:
 - **Go over their rules (check about any personal schedules re T.V. watching).**
 - Explain that you understand how difficult it must feel to have someone observing you, but say that you'll be as unobtrusive as possible.
 - **Children in the family also need to be made aware of the rules:** Tell them that you will be working really quietly, and so you won't be able to talk with them until you've finished your work. Let them know that you will not forget to tell them when you are finished and are able to talk (do not need to remind them again - ignore).

(2) DURING THE OBSERVATION

- Observe interactions for a total of 30 minutes.
- Observations are completed in 5-minute segments (1 coding sheet represents 5 minutes of observation time).
- Observer(s) are required to identify the time period in relevant space at the top of each coding page (e.g. 5:05-5:10 p.m.).
- When each 5-minute interval is completed, stop the clock, and fill in valence details on the reverse of each coding sheet.
- If any family member absents him or herself from the observation for an extended length of time (over one minute) - for instance to answer the phone: stop the clock and add the time to the top of the form. Also add a note on the coding sheet explaining the extra time added.

(3) FINISHING THE VISIT

- If baseline visit tell them that they will hear from us soon as to which parenting group they can attend.
- If follow up visit just tell them they will hear from us soon.*
- If they have any questions they can contact us at the project office (should have number on appointment card, but check).
 - Bangor 383625/383758

(*They know how many sessions they will be seen for. Depending on which group they are in they will either get a thank you and debriefing letter or a phone call to remind them of their next follow up visit – provisional date arranged at questionnaire session.)

(4) IN THE CAR

- Complete Coder Impressions inventory (focused on index parent and index child).
- Complete a summary of what happened during coding, e.g. child left room, etc.

IV. RELIABILITY OBSERVATIONS (20% of visits)

- When a second coder is present, she will need the same paperwork.
- Both primary and secondary coders will sit / stand together to do the observations.
- Decide who will be the timekeeper (usually the primary coder).
- At the end of a 5-minute interval, the timekeeper should signal to the other observer that the time segment is complete (e.g. by nodding).
- Each observer uses this time to fill out the valence data for parent and then move on to another segment.
- If using marital valence, code this only on the final page (i.e. for the entire 30 minutes of observation).
- In the case of a single parent, code N/A.
- In order that the observation causes minimal distraction to the family, it is important that observers keep communication to a minimum (non-verbal communication is preferable).
- At times, the primary observer will need to stop the clock.
- Observers may want, in some situations to move to another location in the room, to enable a better view. In such instances, stop the clock and add the time to the coding sheet.
- Other times when observer might wish to stop the clock is while they are moving to another part of the room, when they need to unobtrusively remind the family of a rule, when the child needs the bathroom, is sent to time out, or when they need to tack on extra time due to an absent family member.
- It is important that both observers are synchronised during these times.
- The second observer submits the same measures as the primary observer.

V. CODING TIPS AND CONSIDERATIONS

- Keep your pen moving as much as possible during the observations – this way, the family is not aware of what you are doing (if the parent sees you writing only when she speaks, then she may stop speaking).
- Try to observe children and siblings without giving eye contact (or they may begin ‘performing’ for the observer).
- Often, the index child might test the rule about you needing to do some ‘quiet work’. If they talk to you, laugh in your face, etc., IGNORE THEM: Do not look at them, gasp, laugh, or in any way let them know that you’re responding to them.

VI. COMPLETING THE OBSERVATION

- Paperwork should be submitted within 24 hours of home visit.
- Paperwork includes coding sheets representing 30 minutes of observation for each family (at pre-, post-, and follow-up).
- Also Coder Impressions Inventories (CII) from each coder.

APPENDIX A. Baseline Appointment Telephone Call

Hello, this is X from the University in Bangor. I have been given your name by your health visitor who said that you might be interested in attending a support group for parents and helping us evaluate how useful the group is. Would you still like to find out more about the group and the research?

If you are interested in taking part I can visit you at home and give you more information. When I visit if you decide to take part there and then we could also do the questionnaires. If we do the questionnaires the visit will take about 1 hour. I would also want to do a quick reading game with X so we would need to meet when he/she is also at home.

If parent consents to receive more info then make sure you:

- Arrange a convenient time for first baseline visit (**anytime between 9-4pm**). Suggest that it might be best if we visit during school hours if they have other older children, and at a time when we are least likely to be disturbed – **ask them to let friends and family know when we are visiting so that disturbance is kept to a minimum.**
- Ask about preferred language for interview.
- Say who will come.
- Get directions to house.

One last thing if you need to contact me you can do on Bangor 383625 or 383758.

APPENDIX B. Introduction to the Parent Group and Research

About the parent group:

As I said on the phone, a new parent group is starting at X near you. Attending the parent group will involve getting together with other parents once a week for 12 weeks. There will be a free crèche supervised by trained carers which X will be able to go to and the group breaks for school holidays.

The group will be lead by X. Over the weeks the group will look at the importance of playing with children, how to reward children for good behaviour and how to deal better with behaviour that is not so good! Although X will be there to lead the group she is not there to tell you what to do and what not to do. The idea is that parent work together to come up with your own ideas and solutions. The parents who attend the group have a lot of fun and get a lot of support in being a parent – which can be tough job!

Because we are expecting quite a few people to want to go to the group we are going to run two groups, one starting on X day at X time and the other in about six months time. To be fair who gets to attend which group will be decided by chance and we will let parents know which group they are in closer to the time after we have visited all interested parents in the area.

About the research:

Because this is a new programme that has been developed in America, we need to know if it works as well over here. So we are putting on groups with the help of Sure Start and asking parents from all over North Wales to attend the group and take part in the research.

The research will involve us visiting you at home to ask a few questions about you as a parent and your child, to do a quick word naming game with your child, and to watch how your child is around you and other family members. The research session is split into two visits: the questionnaire visit and the observation visit. As a thank you will get £25 for these two visits.

Because children change over time we would like to come back and do another research session in 6 months, and possibly again 6 months after that. Every time you complete a research session (the two research visits) we will give you £25 to say thank you. After the first research session we will contact parents to say which parent group they are in (the one starting soon, or the one in about 6 months time).

Written Information & Consent:

Please could you read this information sheet (offer Welsh and English version)...

Give opportunity for and encourage questions.

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If you want to take part you we need you to agree to make every effort to attend the parent group. It is a great group, but if people don't come we cant prove on paper how good it is and wont get the backing to run more groups to support other parents. We really need your help to do this. To show that you are committed to giving it a go please read and sign this form...

Because of University policy we also need you to give written consent about taking part in the research. Please can you read and sign this form (offer Welsh and English version)...

Reassure about confidentiality of answers and data protection.

Appendix C. Participant Information and Consent Sheets

Both Welsh and English versions of the following participant information sheet and consent form are issued.

Participant Information Sheet

Child Study for Parents Attending the Parenting Group

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with your family and your health visitor if you wish. Ask us if there is anything that is not clear or if you would like more information.

What is the purpose of this study?

The Bangor Child Behaviour Project has been conducting research for several years with parents of young children with the aim of developing ways of supporting parents in the difficult task of child rearing.

We are now beginning a three-year study of children whose parent/s have attended, or are about to attend, a parenting group. Parenting groups are being held in your local Sure Start Centre. These groups are being run as part of the new Sure Start initiative to support families with young children. Each group will consist of a small group of parents like yourself who will attend 12 weekly sessions. The group will be lead by a trained professional who will talk with the parents about ways they can help with their child's development. In the group parents will explore ways that they can use at home to manage their child's behaviour without getting too stressed. Videos of typical family situations will be shown which illustrate common childhood behaviours and ways of dealing with them. Parents will have the opportunity to discuss the videos and also to practice the techniques they learn both in the group and at home. Two groups will be run, one beginning soon, and the other one in about six month's time.

Why have I been chosen?

We are asking all parents in your area who have pre-school children and have experienced some difficulty in managing their child's behaviour to take part in this study. Your health visitor has forwarded your name to the project, with your agreement, because you have said that you would like the opportunity to attend a parenting group and perhaps help us with our study.

What will happen to me if I take part?

If you take part in this study you will be given a place on one of these two parenting groups. A researcher will visit you at home sometime during the next three months and again six months later. Some of the parents taking part will be visited a third time, six months after the second visit. At each visit, the researcher will ask you to complete some questionnaires about your child and yourself. She

will also ask you and your child to take part in some activity such as playing a game and then tidying up so that she can watch and record (write down) what the child does during these activities. Each visit will last about two hours, but may be split into two shorter sessions. You will receive an expenses payment of £25 for each of these visits to thank you for your time and co-operation with the study.

You will be told which of the two groups you will be attending after the researcher has completed the first visit and collected the information provided by you.

All the information you provide will be kept at the University of Wales, Bangor, in such a way that it will not be possible to identify you or your child. When the findings of this study are reported, information from the families taking part will be reported as a group not as individuals.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form.

You may withdraw from the study at any time. If you withdraw from the research part of the study you can still carry on with the parenting group.

If you are unable to complete the parenting course we would still like you to remain part of the study, even if you move from the area, and to continue to assist the researcher during her scheduled visits.

Your withdrawal from any part of this study will not affect your access to other health or Sure Start services

19/11/02 Version 4

Any queries about this research should be addressed to Jessica Eade, Research Officer at the above address.

Complaints about the conduct of this research should be addressed to Professor C.F.Lowe, Head of School of Psychology, University of Wales, Bangor, or to Mr Keith Thomson, Chief Executive, North West Wales NHS Trust, Ysbyty Gwynedd, Penrhosgarnedd, Bangor, LL57 2PW.

Consent Form

Child Study for Parents Attending the Parenting Group

I (name)_____ have read and understood the information sheet dated 19/11/02 (version 4) for the above study and have had the opportunity to ask questions.

I agree to take part in this study and to provide information to the researcher for use in the study.

I understand that I can withdraw from the study at any time and that my withdrawal will not affect my access to any current or future health or Sure Start services.

Signature of participant_____

Date_____

Signature of researcher_____

Date_____

Appendix D. Demographics and family factors: interview schedules and measures

D.01 Personal Data and Health Questionnaire

(1) BACKGROUND DETAILS

1a. Child's DOB Child's Age Sex: M F

1b. Carer's DOB Carer's Age Sex: M F

1c. What is your preferred language for speaking.....for reading.....

1d. What is your child's preferred language for speaking.....

1e. Relationship to child:

Biological parent

Step-parent

Parent's partner (living together)

Adoptive parent

Foster parent

Other adult relative (state)

1f. How old were you when your first child was born?.....

2. PREGNANCY

2a. Did you have any problems during pregnancy?

2b. Were there any problems / difficulties at the time of the child's birth?

3. CHILD'S HEALTH AND DEVELOPMENT

3a. Was your child easy to manage as a baby?

3b. Has your child suffered any health problems so far, apart from normal childhood illnesses) or sustained serious injuries?

3c. Has your child ever been in hospital? (if yes, please state reason, and how many times)?

3d. How would you describe (child's) development so far (in terms of things that most children do - such as walking / talking etc).

- 3e. Do you have any concerns about your child's health / development?
- 3f. (if child has been referred) In terms of the problem your child has been referred for,
what is causing you most concern at the moment?
- 3g. How long have you had these concerns / how long have these problems been going on? Age of onset?
- 3h. Anything else that you would like to tell us about (child's) health or development?

4. CARER'S HEALTH

- 4a. Have you suffered any significant health problems since the birth of your child?
- 4b. Parents of children who display difficult behaviour often report feeling low / helpless / depressed as a result. Do you / have you felt that your child's behaviour has ever had this effect on you?
- 4c. Are you currently on any medication?

5. OTHER HOUSEHOLD / FAMILY MEMBERS

- 5a. What is your marital status?

Single, never married	Living together
Separated	Widowed
Divorced	In relationship but living apart
Married	

- 5b. Spouse / partner's relationship to child:

Biological parent	Step-parent
Parent's partner (living together)	Adoptive parent
Foster parent	Other adult relative

5c. How involved is your partner with the upbringing of your child (index)?

5d. Would they be available to join the parenting group?

5f. Who else shares your household?

(include siblings of index child and ages and DOB)

.....
.....

6. FAMILY HEALTH

6a. Have any other family members had serious health problems?

6b. To your knowledge, has any member of your family ever had problems with drugs?
and/or alcohol?

6c. So what is the current situation?

.....

6d. Have ANY of your children (or any other member of your family) - to your knowledge - been in trouble with the police (or been involved in any form of criminal activity)?

7. RELATIONSHIPS (if applicable)

7a. Parents of children who show some difficult behaviour sometimes claim that these problems have an effect on their adult relationship(s). Do you feel that your child's behaviour is having such an effect on your relationship with your partner?

.....

7b. (If in relationship) How would you rate the quality of your relationship with your partner?

- Bad
- Poor
- Mixed
- Good
- Excellent

8. HOUSING

8a. Is your home:

Owned

Council / housing association rented

Privately rented unfurnished

Privately rented furnished

Other

Please give details.....

8b. Condition of the building (RATED BY RESEARCHER)

Good.....Acceptable.....Substandard

8c. How many bedrooms do you have use of?

9. PRIMARY CARER'S EDUCATION

9a. How old were you when you left school?

9b. Did you gain any qualifications at school?

9c. Did you receive further or higher education after leaving school (e.g. College, NVQs, YTS etc.)?

10. INCOME

10a. Income: Which category would best describe your total weekly income? That is what you actually get in each week to spend on living costs.

£200 or below

£201 - £250

£251 - £300

£301 or above

10b. Is this income made up mostly of:

State benefits (such as Job seeker's allowance / income support)

Other benefits that subsidise wages (e.g. WFTC)

Maintenance payments for child(ren)

Wages

Other -----

D.02 Index of Major Life Events

We are interested in how things have been over the last few years and if you have experienced any particular problems. Although these questions may not seem relevant, they can help us get a better picture of some of the problems parents might face in addition to the demands of parenting.

(1) Work

Any major problems in either you or your partners employment in past couple of years, e.g. Significant increase/decrease in hours

Promotion/demotion

Unemployment/redundancy

(2) Finances

Any major positive or negative changes to your family finance over the past couple of years?

e.g. Have you won the lottery or had any significant financial setbacks?

(3) Health

Any major problems in any one in the family's health over the past couple of years?

e.g. Hospital administrations

Severe operations

Accident/injury

Any sever health concerns

(4) Housing

(a) Have you had any major problems with housing in the past two years?

(b) Have you moved house within the past two years? If yes when and did you experience any problems with the move?

(5) Bereavement

Has anyone close to you died within the last few years?

(6) Marital, Family and Social

(a) Any major or significant changes within either your close family or relatives or in your close friendships over the past few years? (If yes, did things ever turn nasty?)

(b) From time to time most people have arguments with their partners. Have you had any significant arguments/problems in the past two years? (If yes, did things ever turn nasty?)

(7) Stressors/events not covered

Are there any other significant stressors or other major problems that we have not covered that have had an important impact on your life in the past few years?

(8) Chronic

So far we have asked you about any major or significant problems that you may have experienced in the past two years. However, sometimes people can have significant problems that have been going on for a long time, even longer than the last two years. Have you any long-term problem on-going problems in any of the things I've just mentioned, e.g. employment, financial, health, housing, and relationships.

D.03 Beck Depression Inventory

No items reproduced.

Appendix E. Sample items from measures assessing parental competencies

E.01 Parenting Stress Index

Name _____ Gender _____ Date of birth _____ Ethnic group _____ Marital status _____

Child's name _____ Child's gender _____ Child's date of birth _____

Today's date _____

SA = Strongly Agree A = Agree...NS = Not Sure...D = Disagree...SD = Strongly Disagree

SAMPLE ITEMS:

1. I often have the feeling that I cannot handle things very well.
SA A NS D SD etc...

13. My child rarely does things for me that make me feel good.
SA A NS D SD etc...

24. Sometimes my child does things to bother me just to be mean.
SA A NS D SD etc...

30. My child gets upset easily over the smallest thing.
SA A NS D SD etc...

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E.02 The Parenting Scale

Child's Name: _____ Today's Date: _____

Sex: Boy _____ Child's Birth date: _____

Girl _____

At one time or another, all children misbehave or do things that could be harmful, that are "wrong", or that parents don't like. Examples include:

hitting someone

whining

throwing food

forgetting homework

not picking up toys

lying

having a tantrum

refusing to go to bed

wanting a cookie

running into the street

arguing back

before dinner

coming home late

Parents have many different ways of dealing with these types of problems. Below are items that describe some styles of parenting.

For each item, fill in the circle that best describes your style of parenting during the past two months with the child indicated above.

SAMPLE ITEM

At meal time

I let my child decide
how much to eat.

0--0--0--0--0--0--0

I decide how
much my child
eats.

1. When my child misbehaves ...

I do something right away.

0--0--0--0--0--0--0

I do something about
it later.

2. Before I do something about a problem ...

I give my child several
reminders or warnings.

0--0--0--0--0--0--0

I use one reminder
or warning.

3. When I'm upset or under stress ...

I am picky and on my child's
back.

0--0--0--0--0--0--0

I am no more picky
than usual.

- | | | |
|---|---------------------|--|
| 4. When I tell my child not to do something ...
I say very little. | 0--0--0--0--0--0--0 | I say a lot. |
| 5. When my child pesters me ...
I can ignore the pestering. | 0--0--0--0--0--0--0 | I can't ignore the
Pestering. |
| 6. When my child misbehaves ...
I usually get into a long
argument with my child. | 0--0--0--0--0--0--0 | I don't get into an
argument. |
| 7. I threaten to do things that ...
I am sure I can carry out. | 0--0--0--0--0--0--0 | I know I won't
actually do. |
| 8. I am the kind of parent that ...
Sets limits on what my child
is allowed to do. | 0--0--0--0--0--0--0 | Lets my child do
whatever he or she
wants. |
| 9. When my child misbehaves ...
I give my child a long lecture. | 0--0--0--0--0--0--0 | I keep my talks short
and to the point. |
| 10. When my child misbehaves ...
I raise my voice or yell. | 0--0--0--0--0--0--0 | I speak to my child
calmly. |
| 11. If saying no doesn't work right away ...
I take some other kind of
action. | 0--0--0--0--0--0--0 | I keep talking and try
to get through to my
child. |
| 12. When I want my child to stop doing something ...
I firmly tell my child to stop. | 0--0--0--0--0--0--0 | I coax or beg my child
to stop. |
| 13. When my child is out of my sight ...
I often don't know what my
child is doing. | 0--0--0--0--0--0--0 | I always have a good
idea of what my child
is doing. |

24. If my child misbehaves and then acts sorry ...
 I handle the problem like I usually would. 0--0--0--0--0--0--0 I let it go that time.
25. When my child misbehaves ...
 I rarely use bad language or curse. 0--0--0--0--0--0--0 I almost always use bad language.
26. When I say my child can't do something ...
 I let my child do it anyway. 0--0--0--0--0--0--0 I stick to what I say.
27. When I have to handle a problem ...
 I tell my child I'm sorry about it. 0--0--0--0--0--0--0 I don't say sorry.
28. When my child does something I don't like, I insult my child, say mean things, or call my child names ...
 Never or rarely. 0--0--0--0--0--0--0 Most of the time.
29. If my child talks back or complains when I handle a problem ...
 I ignore the complaining and stick to what I said. 0--0--0--0--0--0--0 I give my child a talk about not complaining.
30. If my child gets upset when I say "No", ...
 I back down and give in to my child. 0--0--0--0--0--0--0 I stick to what I said.

Developed by Susan G. O'Leary, David S. Arnold, Lisa S. Wolff & Maureen M. Acker Psychology Dept. University at Stony Brook, Stony Brook, NY 11794.

E.03 Coders Impressions Inventory

1. The child's conduct during this observation session was generally:

(1) Spectacular (2) Very Good (3) Okay (4) Average (5) Below Average (6) Very Poor (7) Awful

For each of the items in the following section, circle the best description. (do one for each parent present)

	No basis	Did not occur	1-3 examples	4 or more examples
2. The child did not comply with at least one parental request/command etc...	0	1	2	3
18. The parent seemed to provoke the child into arguments etc...	0	1	2	3
27 Parent encouraged the child to try something new to promote skill development etc...	0	1	2	3
34. Child was physically affectionate with parent etc...	0	1	2	3
In general which of the following describes the parent?	No basis	Doesn't fit at all	Some-times fits	Fits most or all of the time
42. Parent is a positive and reinforcing parent etc...	0	1	2	3
59. Parent is erratic, inconsistent, haphazard etc...	0	1	2	3

Appendix F. Sample items from measures assessing child social competence etc.

F.01 Social Competence Scale-Parent

I will read to you some statements that could describe your child. Please tell me how well each of the statements actually does describe your child.

	Not at all	A little	Moderately well	Well	Very well
1. Your child can accept things not going his/her way.	0	1	2	3	4
2. Your child copes with failure.	0	1	2	3	4
3. Your child thinks before acting.	0	1	2	3	4
4. Your child resolves problems with friends or brothers and sisters on his/her own.	0	1	2	3	4
5. Your child can calm down when excited or all wound up.	0	1	2	3	4
etc...					
12. Your child can give suggestions or opinions with out being bossy.	0	1	2	3	4

Sample items reproduced by kind permission of The Fast Track Project, Duke University, USA.

F.02 Eyberg Child Behavior Inventory

No items reproduced.

F.03 Strengths and Difficulties Questionnaire

For each item, please mark the box for Not true, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour over the last six months

Child's name.....

Date of birth.....

Male/female

	Not True	Somewhat True	Certainly True
Considerate of others feelings			
Restless, overactive cannot stay still for long			
Often complains of headaches, stomach-aches or sickness			
Shares readily with other children (treats, toys, pencils, etc.)			
Often has temper tantrums or hot tempers			

The full 25 item inventory is available free of charge for non-commercial use from the SDQ web site, <http://www.sdqinfo.com>

F.04 Kendall Self Control Rating Scale

Name of Child _____ Age / Grade _____

Rater's Name _____ Circle one: Parent Teacher

Please rate this child according to the descriptions below by circling the appropriate number. The underlined 4 in the centre of each row represents where the average child would fall on this item. Please do not hesitate to use the entire range of possible ratings.

- | | | | | | | | |
|--|---|---------------|---|----------|---|-------------------|---|
| 1. When the child promises to do something
Can you count on him or her to do it? | 1 | 2 | 3 | <u>4</u> | 5 | 6 | 7 |
| | | <u>always</u> | | | | <u>never</u> | |
| 2. Does the child butt into games or activities
even when he or she hasn't been invited? | 1 | 2 | 3 | <u>4</u> | 5 | 6 | 7 |
| | | <u>always</u> | | | | <u>never</u> | |
| 3. Can the child deliberately calm down when
he or she is excited or all wound up? | 1 | 2 | 3 | <u>4</u> | 5 | 6 | 7 |
| | | <u>yes</u> | | | | <u>no</u> | |
| 4. Is the quality of the child's work all about
the same or does it vary a lot? | 1 | 2 | 3 | <u>4</u> | 5 | 6 | 7 |
| | | <u>same</u> | | | | <u>varies</u> | |
| 5. Does the child work for long range goals? | 1 | 2 | 3 | <u>4</u> | 5 | 6 | 7 |
| | | <u>yes</u> | | | | <u>no</u> | |
| 6. When the child asks a question, does he or she
wait for an answer, or jump to something else
(e.g. a new question) before waiting for an
answer? | 1 | 2 | 3 | <u>4</u> | 5 | 6 | 7 |
| | | <u>waits</u> | | | | <u>jumps</u> | |
| 7. Does the child interrupt inappropriately in
conversations with peers, or wait his or her
turn to speak? | 1 | 2 | 3 | <u>4</u> | 5 | 6 | 7 |
| | | <u>waits</u> | | | | <u>interrupts</u> | |
| 8. Does the child stick to what he or she is doing
until he or she is finished with it. | 1 | 2 | 3 | <u>4</u> | 5 | 6 | 7 |
| | | <u>yes</u> | | | | <u>no</u> | |
| 9. Does the child follow the instructions
of responsible adults? | 1 | 2 | 3 | <u>4</u> | 5 | 6 | 7 |
| | | <u>always</u> | | | | <u>never</u> | |
| 10. Does the child have to have everything
right away? | 1 | 2 | 3 | <u>4</u> | 5 | 6 | 7 |
| | | <u>no</u> | | | | <u>yes</u> | |
| 11. When the child has to wait in line, does
he or she do so patiently? | 1 | 2 | 3 | <u>4</u> | 5 | 6 | 7 |
| | | <u>yes</u> | | | | <u>no</u> | |

F.05 Conners Abbreviated Parent/Teacher Rating Scale

Please answer all questions. Beside *each* item below indicate the degree of the problem with a checkmark (✓). Thank you.

Observation	Not at all	Just a little	Pretty much	Very much
1. Restless or overactive				
2. Excitable, impulsive				
3. Disturbs other children				
4. Fails to finish things he or she starts – short attention span				
5. Constantly fidgeting				
etc...				
10. Temper outbursts, explosive and unpredictable behaviour				

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Appendix G. Parent Group Evaluation Questionnaires

G.01 Parent Group Weekly Evaluation

1. The content of this session was
- | | | | |
|-------------|---------|---------|--------------|
| Not helpful | Neutral | Helpful | Very helpful |
|-------------|---------|---------|--------------|
2. The leader's teaching and leadership skill was
- | | | | |
|--------------|---------------|---------|-------|
| Poor average | Below average | Average | Above |
|--------------|---------------|---------|-------|

etc...

G.02 Parent's Satisfaction Questionnaire

The following questionnaire is part of our evaluation of the treatment program that you have received. It is important that you answer as honestly as possible. The information obtained will help us to evaluate and continually improve the program we offer. Your cooperation is greatly appreciated. All responses will be strictly confidential.

A. The Overall Program

Please circle the response that best expresses how you honestly feel.

1. The major problem(s) that originally prompted me to begin treatment for my child is (are) at this point

considerably worse	worse	slightly worse	the same	slightly improved	improved	greatly improved
etc...						

B. Teaching Format

Difficulty

In this section, we'd like to get your ideas of how difficult each of the following types of teaching has been for you to follow. Please circle the response that most clearly describes your opinion.

- 1. Lecture information by therapist (e.g., when therapist talked about how to praise or how to use Time Out)

extremely easy somewhat neutral somewhat difficult extremely
easy easy difficult difficult
etc...

C. Specific Parenting Techniques

Difficulty

In this section we'd like to get your idea of how difficult it usually is to do each of the following techniques now. Please circle the response that most closely describes how difficult the technique is to do.

- 1. Play

extremely easy somewhat neutral somewhat difficult extremely
easy easy difficult difficult
etc...

Usefulness

In this section, we'd like to get your ideas of how useful each of the following methods is. Please circle the response that most clearly describes your opinion.

- 1. Play

extremely not somewhat neutral somewhat useful extremely
useless useful useless useful useful
etc...

Appendix H. Health Economics Measures

H.01 Service Utilisation Questionnaire

We would like to improve the services available to your child. It would be helpful if you could tell us how many times **in the last six months** your child has had contact with the following list of health, educational and social service professionals. Please include any contacts which you yourself have had with any of these people in regard to your child. We are also interested in *where* the service was provided: at home, at school or nursery, at the GP surgery, at hospital, at the health clinic or at another place.

HEALTH AND SOCIAL SERVICE CONTACTS

Over the last six months how many contacts has your child had with the following health and social care professionals and where were they seen?

<i>Health or social care professional</i>	<i>Number of contacts</i>					Notes
	GP surgery	Home	Health Clinic	School/nursery	Else-where (Please specify)	
GP						
Nurse						
Health visitor						
Speech therapist						
Physiotherapist						
Social worker						
Sessional worker						
CAMHS team member						
Community paediatrician						
Homestart						
Other – Please specify.....						

OTHER SERVICES AT SCHOOL OR NURSERY

Does your child attend school or nursery ? Name of school/nursery.....

If yes, in the last 6 months how many times have you or your child seen the following people?

	No. of times		No. of times
Extra parent consultation with head teacher		Educational social worker	
Extra parent consultation with class teacher		School doctor	
School nurse		Other-Please Specify :.....	

Over the last six months how many hours per week has your child received the following help at school or nursery?

	Hours per week	For whole six-month period? If no, record dates or number of weeks
One-to-one help		YES/NO
Small group work		YES/NO
Special teaching		YES/NO
Other - Please specify:.....		YES/NO

In the last six months, has your child had a:

Special educational needs statement issued at school? YES/NO

Psychological assessment at school? YES/NO

In the last six months, has your child attended a special school? YES/NO

If yes, please give the school's name:

How many days/weeks did your child attend this special school in the last six months?weeks.....days

Has your child been in respite foster care over the last six months? YES/NO

If yes, how many days or weeks in the last six months has your child been in respite foster care?.....weeks.....days

AT HOSPITAL

Over the last six months, how many times has your child visited the following people at a hospital?

	No. of times	Type of consultant /department visited	Reason
Casualty department			
Did they travel by ambulance?	YES/NO		
Outpatient consultant appointment			
Overnight stay in hospital	No. of times: No. of nights:		
Other - Please specify:.....			

NOTES

A large, empty rectangular box with a thin black border, intended for handwritten notes. It occupies the upper half of the page.

PARENT or PRIMARY CARER'S SERVICE UTILISATION

We would also like to find out about *your* personal use of services over **the last six months**. How many times have you had contact with the following service professionals regarding your own health and wellbeing?

<i>Health or social care professional</i>	<i>Number of contacts</i>					Notes
	GP surgery	Home	Health Clinic	At the hospital	Else-where (Please specify)	
GP						
Nurse						
Health visitor						
Social worker						
Community Psychiatric Nurse						
Mediation service e.g. Relate						
Counsellor						
Hospital consultant				No. outpatient visits:		Reason:
				Department:		
				No. nights spent as inpatient:		Reason:
				Department:		
Casualty				No. of visits:		Reason:
Other – Please specify:.....						

In the last six months, because of your child's health or behaviour have you had to:

- take time off paid employment? 0
- reduce your hours of paid work? 0
- give up your job? 0

If yes, please estimate how much income you have lost over the last six months as a result of this? £.....

H.02 EQ-5D Health Questionnaire

By placing a tick in one box in each group below, please indicate which statements best describe your own health state today.

Mobility

- I have no problems in walking about
- I have some problems in walking about
- I am confined to bed

Self-Care

- I have no problems with self-care
- I have some problems washing or dressing myself
- I am unable to wash or dress myself

Usual Activities (*e.g. work, study, housework, family or leisure activities*)

- I have no problems with performing my usual activities
- I have some problems with performing my usual activities
- I am unable to perform my usual activities

Pain/Discomfort

- I have no pain or discomfort
- I have moderate pain or discomfort
- I have extreme pain or discomfort

Anxiety/Depression

- I am not anxious or depressed
- I am moderately anxious or depressed
- I am extremely anxious or depressed

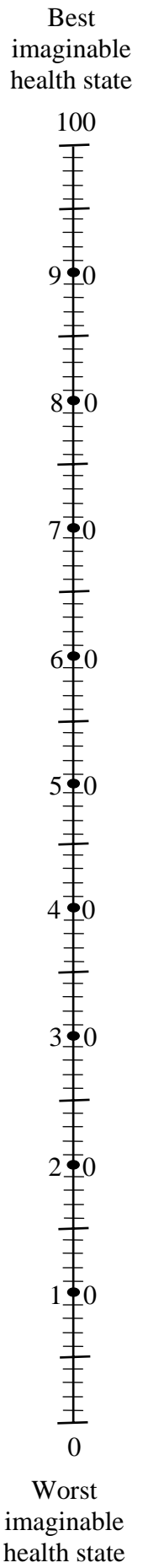
Compared with my general level of health over the past 12 months, my health state today is:

- Better PLEASE TICK
- Much the same ONE
- Worse BOX

To help people say how good or bad a health state is, we have drawn a scale (rather like a thermometer) on which the best state you can imagine is marked 100 and the worst state you can imagine is marked 0.

We would like you to indicate on this scale how good or bad your own health is today, in your opinion. Please do this by drawing a line from the box below to whichever point on the scale indicates how good or bad your health state is today.

**Your own
health state
today**



Appendix I. Availability of Measures

Measure	Contact
<ul style="list-style-type: none">• Personal Data and Health Questionnaire<ul style="list-style-type: none">• Socio-economic deprivation Index• Index of Major Life Events	<p>Dr. Judy Hutchings Child Behaviour Project School of Psychology University of Wales, Bangor BANGOR Gwynedd LL57 2AS</p> <p>E-mail: j.hutchings@bangor.ac.uk http://www.psychology.bangor.ac.uk/research/cbp</p>
<ul style="list-style-type: none">• Beck Depression Inventory<ul style="list-style-type: none">• Parenting Stress Index	<p>The Psychological Corporation 24-28 Oval Road, LONDON NW1 7DX</p> <p>E-mail: tpc@harcourt.com http://www.psychcorp.com</p>
<ul style="list-style-type: none">• The Parenting Scale	<p>Dr. Susan G. O’Leary Department of Psychology SUNY at Stony Brook Stony Brook NEW YORK NY11794-2500</p>
<ul style="list-style-type: none">• Social Competence Scale-Parent	<p>The Fast Track Project Duke University First Union Plaza 2200 W. Main St. Ste. A200 DURHAM NC 27705</p> <p>http://www.fasttrackproject.org</p>
<ul style="list-style-type: none">• British Picture Vocabulary Scales-11	<p>NFER-Nelson Darville House 2 Oxford Road East WINDSOR Berkshire SL4 1DF</p> <p>http://www.nfer-nelson.co.uk</p>

Measure	Contact
<ul style="list-style-type: none"> • Eyberg Child Behavior Inventory 	<p>Psychological Assessment Resources, inc. 16204 N. Florida Avenue LUTZ FL 33549</p> <p>E-mail: custserv@parinc.com http://www.parinc.com</p>
<ul style="list-style-type: none"> • Strengths and Difficulties Questionnaire 	<p>This scale and all relevant information are available free for non-commercial purposes from the SDQ web site.</p> <p>http://www.sdqinfo.com</p>
<ul style="list-style-type: none"> • Kendall Self Control Rating Scale 	<p>Professor P. C. Kendall Division of Clinical Psychology Temple University PHILADELPHIA Pennsylvania 19122</p>
<ul style="list-style-type: none"> • Conners Abbreviated Parent/Teacher Rating Scale 	<p>Multi-Health Systems Inc. P.O. Box 950 NORTH TONAWANDA NY 14120-0650</p> <p>E-mail: international@mhs.com http://www.mhs.com</p>
<ul style="list-style-type: none"> • Dyadic Parent-Child Interaction Coding System • Coder Impressions Inventory • Parent Group Weekly Evaluation • Parents Satisfaction Questionnaire 	<p>Professor Carolyn Webster-Stratton The Parenting Clinic 1107 N.E. 45th St., Suite 305 SEATTLE WA 98 105-4631</p> <p>http://www.son.washnjington.edu/centers/parenting-clinic</p>

Measure**Contact**

- Dyadic Parent-Child Interaction Coding System
Coder Training Manual

Karen Jones
Child Behaviour Project
School of Psychology
University of Wales, Bangor
BANGOR
Gwynedd
LL57 2AS

E-mail: karen.jones@bangor.ac.uk
- Service Utilisation Questionnaire

Dr. R.T. Edwards
Centre for the Economics of Health
Institute of Medical and Social Care Research
Wheldon Building
University of Wales, Bangor
BANGOR
Gwynedd
LL57 2UW

E-mail: r.t.edwards@bangor.ac.uk
<http://www.bangor.ac.uk/healthconomics>
- EQ-5D Health-Related Quality of Life Questionnaire

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