

## PATHFINDER EVALUATION MEASURES: SCORING INFORMATION

### List of measures:

Beck's Depression Inventory  
Eyberg Child Behaviour Inventory  
Strengths & Difficulties Questionnaire x2, one for Parent & one for Teacher  
Arnold & O'Leary et al., Parenting Scale  
A Demographic Questionnaire  
O'Leary-Porter Scale  
Teacher Questionnaire/brief report on child behaviour at school

### 1. 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. 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*).

#### 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.

- 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

### 2. Eyberg Child Behavior Inventory (ECBI; Eyberg & Ross, 1978; Eyberg, 1980)

This is a 36-item inventory 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.

#### 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 totaled 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 totaled 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.

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.

### 3. 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. The respondent 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.

#### 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](http://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).

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](http://www.sdqinfo.com)).

**Table 1.**

	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

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

This 30-item inventory is designed to measure dysfunctional discipline practices. 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).

##### 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.

Table 2.

Parenting Scale Scores for Clinic and Non-clinic Groups

	Clinic group (n = 26)		Non-clinic group (n = 51)	
	M	SD	M	SD
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**

#### 5. O’Leary-Porter Overt Hostility Scale (Modified by Johnson & O’Leary 1987)

The scale is a 10-item scale using a 5-point rating ranging from “never” to “very often”. The scale is designed to assess the amount that parents openly argue in the presence of their children.

##### Administration

This questionnaire is completed by the parent and takes approximately 5 minutes.

##### Scoring

The first 9 items are keyed positively, i.e. never = 4, very often = 0, the 10<sup>th</sup> is keyed negatively, i.e. never = 0, very often = 4. 0 = minimum score, 40 = maximum score. Add scores together for total overt hostility score.

#### 6. The Demographic Questionnaire (based on the Personal Development and Health Questionnaire, Hutchings, 1996)

This measure is used to attain 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. It 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.

#### **Administration**

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

#### **From the demographics questionnaire a measure of Socio-economic Disadvantage (SED 6; Hutchings, 1996) can be derived.**

Six socio-economic risk factors are measured: employment status, marital status, number of children, maternal education, housing, area of residence (high/low crime).

#### **Scoring of SED6**

Based on the answers provided to the demographics questionnaire, 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 (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.

#### **7. Teacher Questionnaire/brief report on child behaviour at school**

This questionnaire yields information pertaining to absenteeism and performance in class. It also asks for a brief progress report.

**Please note: Some questionnaires are double-sided; please ensure that parents complete ALL pages of each measure**

**A score sheet is supplied in each pack for you to either (a) complete and analyse yourselves, or (b) for you to return to us at Bangor university to input into a statistical database to analyse at a nominal cost; we will then send you a report for your groups. If you wish us to score the questionnaires as well as to input and analyse please return the questionnaires to us after each data collection point, i.e. pre and post attendance on the parent programme.**

**If you have any queries regarding these questionnaires you can contact Dr Tracey Bywater on 01248 383845 or email [t.bywater@bangor.ac.uk](mailto:t.bywater@bangor.ac.uk)**