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**Development of a Children's Version of the SCORE
Index of Family Function and Change**

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ABSTRACT

The Systemic Clinical Outcome and Routine Evaluation (SCORE) Index of Family Function and Change is a recently developed outcome measure. It was designed to be acceptable to adults and children aged 12 and over. Thus far no research has been conducted using the SCORE in children under the age of 12. The aim of this study was to pilot a children's version of the SCORE. An existing 29-item version of the SCORE was completed by a sample of seven children aged 8–10. Time was allowed for group discussion with the children. Feedback from this stage of the study was used to develop a draft version of the SCORE for children. An expert panel of clinicians and researchers were also consulted. A pilot version of the Child SCORE was administered to 80 children aged 7–10 in an inner London primary school. Thirty-five children also completed the measure for a second time, 1 week later. Findings suggested that the Child SCORE was acceptable to children in the 8–11 age range. Values for internal reliability and test–retest reliability were good. The Child SCORE appears to be a promising instrument. Further research is required to confirm its acceptability to clinical populations, and to demonstrate sensitivity to change.

INTRODUCTION

The use of routine outcome measures in child and adolescent mental health services (CAMHS) has been increasing in the United Kingdom and across the world (Hanssen-Bauer et al., 2007; Johnston & Gowers, 2005). Johnston and Gowers (2005) have delineated several of the reasons behind the drive to increase outcome measurement in CAMHS, including the need to involve clients and their parents in their treatment, and the need to provide feedback on outcomes to commissioners. However, existing outcome measures in common usage across CAMHS focus on individual, rather than family, functioning. For instance, previous surveys of the use of routine outcome measures in UK CAMHS (Ford, Tingay & Wolpert, 2006; Johnston & Gowers, 2005) have identified only measures of individual functioning, such as the Strengths and Difficulties Questionnaire (Goodman, 1997). Similarly, Hanssen-Bauer et al.'s (2007) study of the cross-national validity of clinician-rated outcome measures included only measures of individual functioning.

As suggested by Worrall-Davies and Cottrell (2009), a more sophisticated research approach to outcomes in young people would go beyond measuring symptoms and behaviors to also include such factors as interactions within the family. The need for measures that capture change within families is particularly strong within CAMHS settings, where a number of commonly used treatments, such as parenting groups and family therapy, specifically target family interactions. Moreover, the use of measures that assess family functioning during treatment episodes in CAMHS could shed light on family factors as moderators and mediators of treatment outcome. This would hold true for individual treatments such as CBT, as well as family-focused treatments. Although there has been a proliferation of family assessment measures in the past decades, none have become routinely used within clinical practice, and there is no "gold standard" measure (Stratton, Bland, Janes & Lask, 2010). Moreover, many of the existing measures have lengthy administration times, thus precluding their routine use (Stratton et al., 2010).

Given this context, the SCORE (Systemic Clinical Outcome and Routine Evaluation) Index of Family Function and Change is a recently developed self-report measure designed to assess change within families (Stratton et al., 2010). It was designed to be used in both practice settings and as a research tool. The published literature on the SCORE suggests that it is a valid and reliable measure of family functioning. Stratton et al. (2010) have reported the process of developing a 40-item version of the measure, the SCORE 40. The SCORE has three dimensions:

- Strengths and adaptability
- Overwhelmed by difficulty
- Disrupted communication

Stratton et al. (2010) describe the process of refining the measure to the 15-item SCORE 15, to reduce the length of time required to complete the questionnaire, thus making it more suitable for routine use. The SCORE 15 has been researched within clinical settings, with the measure being administered at the first and fourth sessions of systemic family therapy, using a sample of 239 families and 584 participants (Stratton et al., in press). This study found that the SCORE 15 was sensitive to change, and that the measure was acceptable to clients and therapists. The CAMHS Outcome Research Consortium (CORC) is currently piloting the SCORE 15 as one of a suite of routine outcome measures for use in CAMHS settings (www.corc.uk.net).

Evidence for the construct validity and reliability of the SCORE comes from two published studies. Cahill, O'Reilly, Carr, Dooley, and Stratton (2010) administered the SCORE 40 to a nonclinical sample of 791 individuals, which included 132 adolescents. A 28-item version of the SCORE (the SCORE 28) containing the above three dimensions was identified through exploratory principal components analysis. This study demonstrated the construct validity of the SCORE, and established acceptable levels of test–retest reliability. Fay et al. (2013) conducted a national telephone survey in Ireland, with a sample size of 403 adults. This study confirmed the construct validity of the SCORE, and established norms for the SCORE 28 and SCORE 15. In this study, the internal reliability of both the SCORE 15 and SCORE 28 were compared. The SCORE 28 showed good internal reliability for the total scale and across all three subscales. By contrast, the SCORE 15 was found to have alpha coefficients of 0.83 for the total scale, 0.76 for the family strengths scale, 0.71 for the family difficulties scale, but only 0.58 for the family communication scale, thus suggesting that the SCORE 28 has greater internal coherence.

The SCORE was constructed for use with adults and young people of normal literacy aged 12 and above (Stratton et al., 2010). Thus far no research has been conducted on the SCORE using children below the age of 12. The aim of this study was to explore the viability of adapting the SCORE for children under the age of 12, using a nonclinical sample drawn from an English primary school.

METHODOLOGY

The project received ethical approval from the Psychiatry and Nursing Ethics Committee at King's College London, and was comprised of three distinct phases, as described below. The study was conducted in a multicultural inner-city London primary school in an area of high social deprivation. The school has few White British pupils, with the majority being of Black African and Black Caribbean origin. A higher than average number of pupils speak English as an additional language.

Selection Criteria

To participate in the study, children were required to be aged between 7 and 10 years of age, which was the target age range for the Child SCORE. Children with a general learning disability were excluded from the study. The presence of learning disabilities was determined by parental or teacher report, and not by screening test.

Stage 1—Completion of the Adult SCORE by a Small Sample of Children

A group of seven children were recruited from a nonclinical sample aged between 8 and 10 years of age (three boys and four girls). The aim of this part of the study was to gain an impression of how well children in this age range understood the existing SCORE. Children were recruited for this stage of the study by an initial approach letter to parents, which included an opt-in form. Approach letters were sent to all parents of children in years 3–5 at the school. Ten parents responded to the opt-in letter, and these parents were contacted by the researcher by telephone. Following this phone call, six parents were willing to consent for their children to take part. One set of parents had two children in the target age, hence a total of seven children took part in the group. Consent forms were completed by the parents prior to the group. The children in the focus group were given an age-appropriate information sheet, and received a verbal explanation about the study. Children also completed a consent form before taking part in the focus group. The children were asked to complete a 29-item version of the SCORE, the SCORE 29 (Fay et al., 2013), in a group setting at their school, on one occasion only. The children were asked to let the researcher know if there were any words or items that they did not understand. The SCORE 29 was chosen so that items for the Child SCORE could be derived from a fairly wide pool of items, on the assumption that some items might not be well understood by children in the age range. Time was allowed at the end of the group for feedback and discussion.

Stage 1—Results

Seven children participated in this part of the study. The mean age was 9 years and 3 months. The children reported that overall they understood the SCORE quite well, including the Likert scale. The children identified eight items from the SCORE 29 where they had some difficulty in understanding what the item meant. During the group discussion it was noticed by the researcher that some of these items generated lively discussion from the children. This suggested not only that children understood the concepts but also that the items were relevant to their experiences of family life. During the discussion, the children made a number of suggestions of changes that could be made to the adult SCORE to make it more accessible to children. These suggestions included using simpler, more child-friendly language, and use of shorter sentences for the items.

Stage 2—Development of the Child SCORE

There was a period of consultation with an expert panel to develop the pilot version of the Child SCORE. Feedback from the first phase of the study informed this process. The expert panel comprised of six individuals at senior level in academic institutions and clinical practice in CAMHS. Members of the expert panel were sent an initial draft version of the Child SCORE by email, along with details of the outcome of Stage 1. Panel members then provided feedback and suggestions for amendments by email. At the end of Stage 2 a

pilot questionnaire was developed, to be referred to in this study as the Child SCORE.

Stage 2—Results

It was agreed with the panel that the Child SCORE was to be based on the SCORE 15, which is the 15-item version of the SCORE currently being evaluated in the United Kingdom. The rationale for this was that 15 was considered a reasonable number of items for children to complete. Also, there would be clear benefits—both as a research instrument, and as a clinical tool—if the Child SCORE and the SCORE 15 were directly comparable in terms of content. Finally, few of the items in the SCORE 15 were among those identified as being hard for children to understand. There were four exceptions to this among the 15 multiple-choice items of the SCORE 15. There was also a query about Question 16, which is an open question that follows the multiple choice part of the questionnaire. In each case there were particular words that children had found hard to understand. Based on feedback from Stage 1, it did not seem that children were unable to grasp the concepts involved, but were simply unfamiliar with certain words, thus requiring a change in wording. It was agreed by the expert panel that the 5-point Likert scale used on the SCORE 15 should be retained, and that the Child SCORE should be visually appealing to children, with the possible use of color.

The use of gradations of color across the Likert scale was proposed, as this led to a marked presence of color on the measure, and helped to give the measure visual appeal. The gradation of color also has a link to the logic of the Likert scale, with the intensity of the color reflecting the extent to which a respondent feels the item describes their family well.

All members of the expert panel were happy with the visual presentation and use of color with the Likert scale. Suggestions from the panel were mostly about the wording of items. In total, 10 items from the SCORE 15 were changed, either by word order or choice of word. For example, in Item 9, the word “crisis” was replaced with “big problem”. The explanatory information on the first page of the measure was adapted to be short and intelligible to children. In line with the adult SCORE, the respondent defines who is in the family. Once no further suggestions were made a final draft was created and circulated to panel members and agreed on for use with the nonclinical sample. To match children who completed the measure twice, children were asked for their gender, date of birth, and favorite color. The Child SCORE is presented in the Appendix.

Stage 3—Administration of the Child SCORE to a Nonclinical Sample

The Child SCORE was administered to a nonclinical sample of 80 children aged between 7 and 10 years of age. This part of the study took place in the same school as that used in Stage 1. In Stage 3 of the study, an “opt-out” approach was adopted to parental consent. Letters were sent to parents of all pupils at the school in years 3–5. This letter included a parental information sheet and an opt-out form. Where parents responded with completed opt-out forms, their children were excluded from the study. Data were collected from one Year 3 class, two Year 4 classes, and two Year 5 classes. Classes were selected by the school on the basis of the classes’ availability to participate.

The researcher collected data for the first administration of the questionnaire by visiting the classes individually. Children were told that they could ask the researcher or teachers if they did not understand anything. The majority of participants completed the measure without assistance. Children were not asked to complete the questionnaires under “exam conditions”, as there was a possibility that some children might be distressed by some items.

All children in the classes were invited to participate. Children were given a verbal explanation of the study and also an age-appropriate information sheet. There were 101 children in the classes who were invited to participate. It was explained verbally and on the information sheet that children were not obliged to participate, and could withdraw at any time without giving a reason. Seventeen children declined to participate. One child was excluded due to learning disability. Three children in the classes sampled were excluded due to their parents having declined consent by parental opt-out. This left a total of 80 children who completed the Child SCORE on the first administration.

A smaller sample of these children ($n = 35$) completed the Child SCORE on a second occasion, 1 week later, to determine the test–retest reliability of the measure. Teachers from four of the classes previously sampled were asked to send a group of their children to

complete the questionnaire in another classroom. Children were sampled in this way as it was less disruptive to the school. No instruction was given to the teachers about which children to send for the second administration. It is presumed that children were sent to participate randomly, or due to pragmatic reasons around the children's availability at the time. Three children from the retest sample could not be paired due to the children not completing sufficient information to match the two measures with confidence, leaving a total of 32 paired measures.

Data Analysis

Version 15 of the Statistical Package for the Social Sciences (SPSS) was used for data analysis (SPSS Inc., Chicago, IL, USA). The internal consistency reliability of the Child SCORE total and each of its scales was evaluated with Cronbach's alpha (Cronbach, 1951). Test-retest reliability was evaluated using Pearson's correlation, and by performing a Wilcoxon test.

Stage 3—Results

A total of 80 children completed the Child SCORE on one occasion. The sample comprised 43 girls and 36 boys and one child for whom gender information was missing. Six children (three girls, three boys; mean age: 9 years) were excluded from the statistical analysis due to having missed more than three items, as this might reduce the reliability of the results. This left a sample of $n = 74$. The mean age of participants was 9 years and 8 months (median = 9 years and 9 months). Age ranged from 7 years and 7 months to 10 years and 10 months. There were only two children aged below 8 years of age in the sample.

Scoring Procedure

The Child SCORE is comprised of three dimensions, with each dimension comprising five items. Table 1 presents the items of the Child SCORE by dimension. Items in Dimension 1 are scored 1–5. Scores are reversed for all items on dimensions 2 and 3. The score for each dimension is the sum of all items divided by 5. The total score is the sum of all 15 items divided by 15. The range for the total score and for each dimension is from 1 to 5.

Internal Reliability of the Child SCORE

The internal reliability of the Child SCORE was assessed using Cronbach's alpha. Any questionnaires with missing items were excluded from these analyses ($n = 24$). On the first administration of the Child SCORE, alpha was 0.80 for the sample ($n = 50$). The sample was also analyzed by age. Alpha for younger children (aged up to 9 years and 8 months) was 0.81 ($n = 24$). For older children (aged above 9 years and 8 months) alpha was 0.76 ($n = 25$).

Analysis by Age and Gender

Analyses of the sample were conducted by age and gender. No statistically significant differences were found for either. However, the younger half of the sample gave higher total scores, meaning that they reported more difficulties.

Test-retest Reliability

The test-retest reliability of the Child SCORE was 0.81, based on 17 cases that had no missing items at either first or second administration. As this procedure was based on a small sample, further evidence was sought of the stability of the measure. To include more children who completed the measure twice, we worked out the mean scores for all children with no more than three missing items ($n = 30$). After checking with a Bland Altman diagram (Bland & Altman, 1986), which was satisfactory, we performed a Wilcoxon test, which showed no significant difference between the two measurements ($p = .6$).

Internal Reliability of the Dimensions

The alpha coefficients for each dimension of the Child SCORE, at first administration, were 0.55 for the strengths scale, 0.65 for the communication scale, and 0.71 for the difficulties scale.

Total Scores

Table 2 shows the total score and the scores for the three dimensions of the Child SCORE. Scores close to 1 indicate that the family is perceived as functioning well; scores close to 5 indicate the opposite. The mid-point is 3. Question 17 asks children what the biggest problem is for their family. This is followed by a 0–10 visual analogue scale (Question 17A) in which children can rate how big this problem is, with 10 indicating that it is “a very big problem”.

Analysis of Qualitative Questions

Questions 16 and 17 are open-ended questions that children respond to in their own words. The responses of all 80 children were analyzed and coded into basic categories. Table 3 shows responses to Question 16. Table 4 shows responses to Question 17.

Missing Items

Six children missed more than 3 items from the measure, and were excluded from statistical analysis. Of the remaining 74 respondents, 4 (5.4% of sample of 74) missed Item 14 (In my family we blame each other when things go wrong). There were 8 other items which were missed between 1 and 3 times. The most frequently missed items were the open-ended questions. Item 16 (Could you tell us what words best describe your family?) was missed by 9 (12.2%) children. Item 17 (What is the biggest problem for your family at the moment?) and Item 17a (How big is this problem for your family?) were both missed by 18 children (24.3%).

DISCUSSION

The results of both the Stage 1 feedback and the statistical analysis of Stage 3 suggest that the SCORE can be adapted for use in the 8–11 age group. The alpha value for the first administration was 0.8. Alpha values above 0.8 are considered to represent excellent internal reliability—levels above 0.7 are considered adequate (Bland & Altman, 1997). The figure for test–retest reliability, at 0.81, is encouraging. Test–retest values above 0.7 are considered satisfactory, and above 0.8 are considered good (Rodgers & Nicewander, 1988). This supports the hypothesis that, broadly speaking, children in this study understood the Child SCORE.

However, the alpha coefficients were relatively low for two subscales of the Child SCORE. Based on the first administration, this study found alpha coefficients of 0.55 for the strengths scale, 0.65 for the communication scale, and 0.71 for the difficulties scale. These figures can be compared to those for the SCORE 15 in Fay et al.’s (2013) study of adults. The alpha value of 0.55 for the strengths scale in the child sample compares with a value of 0.76 in the adult sample. However, for the communication scale the alpha value was 0.65 in the child sample as compared with 0.58 in adults. The alpha value for the difficulties scale was the same in both child and adult samples. It can be surmised that, at aggregate level, the internal reliability of the Child SCORE is broadly similar to that reported for the adult SCORE 15. Fay et al. (2013) report values above 0.75 for all three scales of the SCORE 28, suggesting that the larger pool of items results in greater internal reliability. In this respect, the practical gain that is made through the brevity of the Child SCORE and SCORE 15 appears to be at the expense of reduced internal reliability. In the light of their findings on internal reliability of the three subscales, Fay et al. (2013) have suggested that clinicians use the SCORE 29 at the start and end of the therapy, and use the SCORE 15 for repeated administration during therapy. The findings of this study suggest that the Child SCORE might also be suitable for repeated administration in clinical settings. We found that most children in our sample did not struggle with the length of the Child SCORE, suggesting that a version of the Child SCORE with more items may well be acceptable to children in the 8–11 age range. Moreover, children involved in the group discussion phase identified relatively few items from the SCORE 29 that they did not understand. Future research should explore the development of a longer version of the Child SCORE, based on the SCORE 29. This longer version of the Child SCORE may be particularly useful as a research instrument, and could also be administered during clinical practice.

One hypothesis to explain the low alpha value for the strengths scale in this study is that this is the scale with least variance. Children tended to answer the items on this scale at the extreme “low” end of the scale (“this describes our family very well”). Variance was

greatest for the difficulties scale, which has the highest alpha value of the subscales in this study. Children in this study tended to endorse fairly positive descriptions of family life, as evidenced by their mean total score of 1.8 for the scale, and the low mean score for Question 17a, which was the analogue scale for problem rating. The profile for alpha values by subscale may look different in clinical populations, where it is likely that there would be greater variance in the responses. It is also possible that greater variance might be elicited by a larger sample that includes a wider range of cultural backgrounds. Although the results point to a picture of generally “well-functioning” families, this study did not assess for a “faking good” response set. There is also the possibility of sampling bias. Seventeen children who were eligible to take part in the study chose not to do so. In line with the research protocol, children were not asked to give reasons for nonparticipation. One hypothesis to explain nonparticipation is that some of the children who opted out may have been struggling academically or have had specific reading difficulties. Another explanation is that some of these children may have been experiencing significant problems at home. These children may have not wanted to participate as they thought it might upset them, or they may have been concerned about the outcome if they disclosed problems. Similarly, it is possible that the parents who refused permission were concerned that family difficulties would be revealed.

In terms of the number of missed items, the most frequently missed questions were the qualitative ones at the end of the measure. There are a number of possible explanations for this. Children may have found the measure overly long, or they may have thought that they had finished, believing that the final questions were optional. Alternatively, it could be that, because the children tended not to report having many problems, Question 17 may not have been perceived as relevant. This question might elicit more responses within a clinical population. Overall, the number of missed items from the Likert-scale section of the measure was fairly low.

This study included only two children below the age of eight. It is therefore not possible to make claims about the reliability of the Child SCORE among 7-year-olds. However, there was no evidence from this study that younger children completed the Child SCORE less reliably than the older children in the sample.

LIMITATIONS

The main limitation of this study is the lack of validity data. As such, the Child SCORE is still in the testing phase and requires further validation. At present, the validity of the Child SCORE can only be inferred from the adult data. Fay et al. (2013) have demonstrated that the 15- and 28-item versions of the SCORE correlate highly with existing measures of family functioning, including the McMaster family assessment device (Ryan, Epstein, Keitner, Miller, & Bishop, 2005). Unfortunately, demonstrating the convergent validity of the Child SCORE in the 8– 11-year-old age range is not a straightforward task, as there is no existing self-report measure of family functioning with established reliability and validity for this age group. Future research studies should establish convergent validity by examining the correlations between the Child SCORE with parental and clinician ratings of family functioning. The discriminant validity of the Child SCORE needs to be investigated through research utilizing measures of individual child functioning, such as the Strengths and Difficulties Questionnaire (SDQ— Goodman, 1997). As this study used a nonclinical sample, it is not known whether the Child SCORE would be acceptable to a clinical population. Norms have not been established for clinical populations, thus the Child SCORE has not been established as having predictive validity. Crucially, it is not known whether or not the Child SCORE is sensitive to change before and after therapy. Recent research within clinical settings has confirmed that the SCORE 15 is sensitive to change, and is acceptable to clients and therapists (Stratton et al., in press). These findings, while promising in terms of the Child SCORE, need replication in the 8– 11 age range.

A relative strength of this study is that it was conducted using a sample of children who reflect the multicultural and socio-economic profile of many children referred to CAMHS in inner cities. However, the sample size is too small to be used for norms for the general UK population, and the participants included few White British children. Future studies should be conducted using large clinical and nonclinical samples which include a diverse range of cultural and socio-economic backgrounds.

CONCLUSION

The findings of this study suggest that the Child SCORE is acceptable to children in the 8–11 age range. Internal reliability and test–retest reliability are both good. The Child SCORE has the potential to be a useful routine outcome measure within CAMHS. It can be used in conjunction with the adult SCORE measures to gain a rich snapshot of family life as seen from several family members’ perspectives. The Child SCORE could be a useful research tool, and can also be used flexibly as a therapeutic tool in both family-focused and individually focused treatments. Further research is required to establish its validity, confirm its acceptability to clinical populations, and to demonstrate sensitivity to change.

REFERENCES

- Bland, J., & Altman, D. (1986). Statistical methods for assessing agreement between two methods of clinical measurement. *The Lancet*, 327, 307–310.
- Bland, J., & Altman, D. (1997). Statistics notes: Cronbach’s alpha. *British Medical Journal*, 314, 572–575.
- Cahill, P., O’Reilly, K., Carr, A., Dooley, B., & Stratton, P. (2010). Validation of a 28-item version of the Systemic Clinical Outcome and Routine Evaluation in an Irish context: The SCORE-28. *Journal of Family Therapy*, 32, 210–231.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.
- Fay, D., Carr, A., O’Reilly, K., Cahill, P., Dooley, B., Guerin, S. et al. (2013). Irish norms for the SCORE-15 and 28 from a national telephone survey. *Journal of Family Therapy*, 35, 24–42.
- Ford, T., Tingay, K., & Wolpert, M., & The CORC Steering Group (2006) CORC’s survey of routine outcome monitoring and national CAMHS dataset developments: A response to Johnston and Gower. *Child and Adolescent Mental Health*, 11, 50–52.
- Goodman, R. (1997). The strengths and difficulties questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, 38, 581–586.
- Hanssen-Bauer, K., Gowers, S., Aalen, O., Bilenberg, N., Brann, P., Garralda, E. et al. (2007). Cross-national reliability of clinician-rated outcome measures in child and adolescent mental health services. *Administration and Policy in Mental Health and Mental Health Services Research*, 34, 513–518.
- Johnston, C., & Gowers, S. (2005). Routine outcome measurement: A survey of UK child and adolescent mental health services. *Child and Adolescent Mental Health*, 10, 133–139.
- Rodgers, J. L., & Nicewander, W. A. (1988). Thirteen ways to look at the correlation coefficient. *The American Statistician*, 42, 59–66.
- Ryan, C., Epstein, N., Keitner, G., Miller, I., & Bishop, D. (2005). *Evaluating and treating families. The McMaster approach*. New York: Routledge.
- Stratton, P., Bland, J., Janes, E., & Lask, J. (2010). Developing an indicator of family function and a practicable outcome measure for systemic family and couple therapy: The SCORE. *Journal of Family Therapy*, 32, 232–258.
- Stratton, P., Lask, J., Bland, J., Nowotny, E., Evans, C., Singh, R. et al. (in press). Validation of the SCORE-15 Index of Family Functioning and Change in detecting therapeutic improvement early in therapy. *Journal of Family Therapy*.
- Worrall-Davies, A., & Cottrell, D. (2009). Outcome research and interagency work with children: What does it tell us about what the CAMHS contribution should look like? *Children and Society*, 23, 336–346.

TABLE 1
Breakdown of items on the Child SCORE by dimension

Dimension 1: Strengths and Adaptability
In my family we talk to each other about things which matter to us
In my family every person gets listened to
We trust each other
When one of us is upset they get looked after in my family
We are good at finding new ways to deal with things that are difficult
Dimension 2: Overwhelmed by difficulties
We find it hard to deal with everyday problems
It feels miserable in our family
In my family we seem to go from one big problem to another
Things always seem to go wrong for my family
In my family we blame each other when things go wrong
Dimension 3: Disrupted Communication
In my family people often do not tell each other the truth
In my family it feels risky or scary to disagree
In my family when people get angry they ignore each other on purpose
People in the family are nasty to each other
People in my family interfere or get involved too much in each other's lives

TABLE 2
Scores on Child SCORE at first administration

	N	Minimum	Maximum	Mean	SD
Total score	50	1.00	3.20	1.90	0.64
Dimension 1—Strengths	67	1.00	4.00	1.71	0.69
Dimension 2—Difficulties	61	1.00	4.40	2.09	0.92
Dimension 3—Communication	60	1.00	4.00	1.91	0.82
Q17A	57	0	9.00	2.00	2.49

TABLE 3
Breakdown of responses to Q.16—'What words best describe your family?'

Type of response	N	Example
Positive	56	Best in the world, loving, caring, and strong. I love my family
Mixed—Both Positive and Negative	6	My family is very good people but sometimes there are problems in my family
Negative	2	My family fight a lot
Miscellaneous/Neutral	5	Normal family
N/A—Box left empty	11	

TABLE 4
Breakdown of responses to Q.17—'What is the biggest problem for your family?'

Type of response	N	Example
No problems	26	None
Fighting	4	Me and my brother fighting
Money	6	Money
Other problems	17	The house is too small and we are looking for a new house
Not sure	4	I don't know
Miscellaneous	2	We love each other
N/A—Box left empty	21	

APPENDIX

Child SCORE

Before we start, please could you tell us:

Today's Date:
 What is your birthday (date of birth)?
 Are you a boy or a girl?
 What is your favourite colour?

Hello. We would like you to tell us about your family. We have written some sentences about families. For each sentence, please tell us how well it describes your family. This means how true you think it is.

For each line, tell us if you think the sentence describes your family:

1. **Very well**
2. **Well**
3. **A bit**
4. **Not well**
5. **Not at all**

For example, if a sentence was "Our family wants to stay together". If you feel this sentence is very true about your family, then it describes your family very well. You would put a tick in the box for Very Well, like this:

	<u>This describes our family:</u>				
	Very Well	Well	A bit	Not well	Not at all
Our family wants to stay together	✓				

Do not think for too long about any question, but do try to tick one of the boxes for each question. There are no right or wrong answers. It is about how you see things at the moment.

Please turn over to fill out the questionnaire!



	This describes our family:				
	Very Well	Well	A bit	Not well	Not at all
1) In my family we talk to each other about things which matter to us					
2) In my family people often do not tell each other the truth					
3) In my family every person gets listened to					
4) In my family it feels risky or scary to disagree					
5) We find it hard to deal with everyday problems					
6) We trust each other					
7) It feels miserable in our family					
8) In my family when people get angry they ignore each other on purpose					
9) In my family we seem to go from one big problem to another					
10) When one of us is upset they get looked after in my family					
11) Things always seem to go wrong for my family					
12) People in the family are nasty to each other					
13) People in my family interfere or get involved too much in each other's lives					
14) In my family we blame each other when things go wrong					
15) We are good at finding new ways to deal with things that are difficult					

Could you tell us what words best describe your family?

.....

What is the biggest problem for your family at the moment?

.....

How big is this problem for your family? Please put a mark on the line below:										
No problem	←—————→									Very big problem
0	1	2	3	4	5	6	7	8	9	10

Many thanks for your help!
