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ORIGINAL PAPER

A Comparison of Father and Mother Report of Child Behaviour on the Strengths and Difficulties Questionnaire

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Abstract To date there has been no comparison of father and mother report on the Strengths and Difficulties Questionnaire (SDQ), a standardised measure of child behaviour used widely in the UK in clinical practice and research. The objectives of the study were to investigate differences and agreement between parents on the various SDQ domains of child behaviour. Parents of 4–6 years olds were recruited via 13 UK general practices, and completed the SDQ and measures on depression, parenting, couple relationship, alcohol use and demographics. Parental SDQ ratings were compared. The SDQ was completed by 248 parent dyads. Mother and father ratings were correlated, however fathers reported higher mean scores than mothers for externalising behaviours. Higher reporting by fathers was related to alcohol misuse, the couple relationship, fathering, and father employment. Fathers did not report significantly more abnormal behaviours than mothers except for hyperactivity. There was high interparental agreement on normal/borderline behaviours (94.8–98.3% agreement), but lower agreement on abnormal behaviours (7.7–37.9%). There was higher interparental agreement on male rather than female children, but fathers were four times more likely to report hyperactivity among their boys compared with girls. Using combined parental reports in clinical settings would enhance the sensitivity of identifying children requiring clinical attention for their problem behaviours.

Keywords Parent report · Child behaviour · Interparental agreement · Strengths and Difficulties Questionnaire

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Parents are reliable informants of their children's behaviour [1], and there are numerous standardised parent-report measures of child behaviour. The Strengths and Difficulties Questionnaire (SDQ) [2] is a widely used screen for child behaviour, and is highly correlated with the lengthier Child Behavior Checklist [3, 4]. In the UK, the SDQ [2] is recommended for routine outcome monitoring by the Child and Adolescent Mental Health Services (CAMHS) Consortium for Outcome Research (CORC), endorsed by the UK's Children's National Service Framework [5]. However, to date there has been no comparison of mother and father report on this measure. If health services are to rely on the SDQ for research or clinical purposes it is essential to assess the degree of agreement between fathers and mothers on this measure.

Ratings of child behaviour vary depending on whether the informant is the mother, father, teacher or someone else [1, 6, 7]. There is higher correlation between informants of child behaviour that interact with the child in similar situations—(e.g. between mothers and fathers, or between teachers)—than between different types of informants (e.g. parents and teachers) [1]. A meta-analysis [1] identified high correlations (mean $r = 0.59$) between parental ratings of child behavioural and emotional problems on the Child Behavior Checklist (CBCL). However, Christensen et al. [8] found low interparental correlations on the CBCL, with parental agreement on only a third of child behaviour problems. Low to moderate interparental correlations were also shown on several other child behaviour rating scales [9]. Eisenstadt et al. [10] however, found strong interparental agreement on child problems using the Eyberg Child Behavior Inventory [10]. Parental ratings are more correlated for externalising problems compared with internalising problems [6, 8, 9], because externalising problems are overt and are more observable than less expressive internalising problems. Mothers consistently report more problem behaviours than fathers when rating their children [6, 8, 10–12]. This may reflect a more accurate perception by the mother as a result of spending more time with her child. Alternatively, it could reflect the differing behaviours exhibited by the child when interacting with their mother and father, respectively. Parents can report differently on the behaviour of their male as compared to their female children [11, 13].

Parental ratings of child behaviour may be biased by personal adjustment factors [12, 14–16]. For example, depressed mothers tend to over-report problem behaviours in their children compared with non-depressed mothers [17, 18]. Moreover, adjustment disorders such as alcoholism can be comorbid with depression [19] and may affect the parent's perception of the child. Couple relationship discord is associated with enhanced ratings of child behaviour problems [8, 11, 14, 20].

The specific objectives of this study were to: determine the consistency and differences between father and mother ratings on the SDQ, and to compare parental identification of normal and clinically deviant child behaviours.

Methods

Families were recruited via 13 general practices in London and South East England and were participants of a wider study investigating paternal depression and child development. Children aged between 4 and 6 years were identified from the general practice records and were linked to an adult household male who could be the father [21]. The identified men were mailed a recruitment pack by their general practice and invited to participate in the study if they were confirmed as the biological father and satisfied the eligibility criteria (see below). If there was no registered adult male at the household, the recruitment pack

was addressed to the 'Father of X' (where X was the child's name) and was posted to the child's address.

The recruitment pack contained: a study information leaflet, consent form, study eligibility form, father questionnaire and a pre-paid reply envelope. Fathers were asked to provide the name of their spouse/partner on the consent form. Non-respondents were sent a written reminder and another copy of the questionnaire 3 weeks later. The partners of responding fathers (child's mother) were sent a study information sheet and a mother questionnaire. Non-respondents were sent a single reminder.

Study Eligibility

We included biological fathers of children registered at the participating practices residing with their child and the child's mother. Each father completed an eligibility form to ensure that they met these criteria. Only fathers sufficiently proficient in English were included so that they could complete the standardised questionnaires. We excluded children with major physical (e.g. Down's syndrome) or mental abnormalities identified from the medical records as these could have impact on our outcomes of interest.

Measures

Child Behaviour

Fathers and mothers individually completed the 4–16 year, parent version of the Strengths and Difficulties Questionnaire (SDQ) [2] which screens for child behaviour. The informant rates 25 items of child behaviour over the past 6-months using a three-point scale (i.e. "not true" "somewhat true" or "certainly true"). The measure yields scores for the following subscales: conduct problems, hyperactivity, emotional symptoms, peer problems, and prosocial behaviour (positive domain). The first four can be summed to give a total difficulties score. Subscale scores are then categorised into "normal" "borderline" and "abnormal" to indicate risk of clinically deviant behaviours [2]. The SDQ has been shown to discriminate psychiatric from non-psychiatric cases and has high specificity (91–94%) and negative predictive values (92–99%) [22], and was found to be better at detecting hyperactivity than the Child Behavior Checklist [3, 4].

Depression

Fathers and mothers completed the Patient Health Questionnaire (PHQ) [23] which provides a DSM IV diagnosis for depression and has a sensitivity of 0.79; a specificity of 0.95; and a positive predictive value of 0.73.

Dyadic Adjustment Scale

Fathers and mothers completed the Dyadic Adjustment Scale [24] which assesses the couple relationship in the domains of: dyadic consensus, dyadic satisfaction, affectional expression, and dyadic cohesion. The measure has good construct validity and reliability

(Cronbach's alpha coefficient = 0.96), with sub-scales reliability ranging from 0.73 to 0.94 and was completed by both fathers and mothers.

Alcohol Misuse

Fathers and mothers completed the 10-item WHO Alcohol Use Disorders Identification Test (AUDIT) [25]. A cut-off of eight indicates risk of hazardous alcohol intake in the past 12 months.

Fathering

Fathers completed: (1) the amount of time spent with their child on a typical weekday and a typical weekend day the previous week; (2) a shorter version (14-items) of the Early Head Start Research and Evaluation Project parental stress scale [26]. Factor analysis of the items revealed three factors, representing 'bonding with the child' (five items Cronbach alpha 0.74), 'perceptions of the child' (two items Cronbach alpha 0.67) and 'paternal role stress' (three items Cronbach alpha 0.64). Scores were computed for each subscale; (3) Father engagement with the child was assessed using the 28-item Early Head Start Research and Evaluation Project (EHS study) father/child activity scale which yields scores for four subscales: 'caregiving', 'socialization', 'physical play', and 'didactic' [27].

Socio-demographic

Fathers and mothers completed items on: age, marital status, employment, ethnicity, education, car ownership, and housing tenure.

Statistics

SDQ subscale scores and a total difficulties score were calculated and categorised into "normal" "borderline" and "abnormal" (www.sdqinfo.com). These were dichotomised a priori into "normal/borderline" and "abnormal" to indicate risk of clinically deviant child behaviour [2]. Analyses were conducted on continuous and dichotomous scores.

Cronbach's alphas indicated the internal consistency of parental ratings. Correlations between father and mother ratings were examined by calculating Spearman rank correlation coefficients. Standardised mean differences were calculated to compare father with mother ratings by dividing observed mean differences by the pooled standard deviations for each SDQ subscale [28]. In accordance with Cohen's [29] criteria correlation coefficients and effect sizes in the order of 0.10 were considered small, 0.30 moderate, and 0.50 large [29]. Effect sizes were significant if their 95% confidence intervals did not cross zero. Informant differences were also analysed by subtracting mother from father actual subscale scores. Resulting values were dichotomised into higher father ratings (positive difference) versus agreement or lower father ratings (negative difference). A logistic regression analysis was conducted to investigate higher father ratings by mother and father factors including: depression, alcohol misuse, dyadic adjustment, ethnicity, employment status, marital status, age, education, housing tenure, and car ownership; fathering factors

including: father–child engagement and time spent together, role stress, attitudes; and stressful life events and child gender. Significant informant differences observed in the logistic regression analysis of higher father ratings were further analysed by conducting a Fisher's z transformation of the mother-father correlation coefficients for those subscales and were compared for mothers who stayed at home to look after the family and mothers who did not.

Differences between father and mother report of caseness (i.e. behaviours in the 'normal/borderline' or 'abnormal' range) were determined using McNemar's χ^2 tests, which compares proportions between paired observations. Kappa coefficients measured interparental agreement. Coefficients can lie between 0 and 1 with 1 indicating perfect agreement. Values $\leq$0.4 indicate poor to fair interrater agreement and values >0.4 moderate to substantial interrater agreement [30]. Finally, logistic regression analyses were conducted to investigate differences in parental report of abnormal behaviours by child gender.

Results

Participation

In the 13 general practices that participated in the study we generated a sample of 365 eligible fathers. Two hundred and fifty out of 365 (69%) mothers responded. There were complete SDQ data for 248 father and mother dyads.

Demographic Characteristics

Participating fathers had a mean age of 39.8 (SD 5.5). Most were married (220/247, 89%) and 11% were cohabiting. Most were in paid or self-employment (238/247; 96.4%), and 1.6% (4/247) were unemployed. Eighty-five percent (208/245) were of White ethnicity; 9% (21/245) Asian; 3% (8/245) Black; and 1% (2/245) Mixed. 132/246 (54%) fathers were educated to at least Bachelor's degree level. Eighty-seven percent (215/247) were home owners and had a median of 2 cars (10th–90th centile 1–2), $n = 246$).

Mothers had a mean age of 37.62 (SD 4.69, $n = 245$). Fifty-nine percent (146/247) were in paid or self-employment, 83/247 (34%) were looking after the family or home, and 6/247 (2%) were unemployed. Eighty-four percent (212/248) were of White ethnic status; 10% (25/248) Asian; 3% (8/248) Black; and 1% (2/253) Mixed. Fifty percent (123/248) had been educated to at least Bachelor's degree level.

One hundred and thirty-two (53%) mother and father dyads had a male child and 116 (47%) had a female child participating in the study. Families had a total of 301 other household children: 30/247 (12.2%) dyads had no other children; 153/247 (61.9%) had one other child; 48/247 (19.4%) had two other children; and 15/247 (6.1%) had three or more children. Of these other household children 158/301 (52.5%) were male and 143/301 (47.5%) female.

Father Characteristics, by Partner Response

Fathers whose partner had responded were significantly more likely to be of White ethnic status (210/247 (85%) vs. 70/108 (65%), $p \leq 0.0001$), a homeowner (216/249 (87%) vs.

87/110 (76%), $p = 0.014$), and to be employed (240/249 (96%) vs. 99/109 (91%), $p = 0.031$) than fathers whose partner had not responded.

Analysis of Continuous SDQ Subscale Scores

Table 1 shows that Cronbach's alpha coefficients for father and mother report were similar for most subscales, and were comparable to British population norms with the exception of peer problems and total difficulties.

There was a moderate to large correlation [29] of the subscale scores reported by fathers and mothers (Spearman's r 0.366–0.507, $p < 0.0001$). The correlation was highest for conduct problems (Spearman's r 0.507, $p < 0.000$), followed by hyperactivity (Spearman's r 0.492, $p < 0.0001$) and total difficulties (Spearman's r 0.483, $p < 0.0001$).

Standardised mean differences (SMDs) showed that fathers reported higher mean scores than mothers for hyperactivity, conduct problems, and total difficulties. For conduct problems and total difficulties fathers reported higher scores for girls only compared with mothers. The SMDs in these domains were small to moderate in size (0.18–0.28).

Analysis of Higher Paternal Ratings

Hyperactivity

Higher hyperactivity ratings by fathers rather than mothers were: less likely if the father perceived dyadic consensus was high (adjusted OR 0.54, 95% 0.30–0.95, $p = 0.034$) and if he was employed (adjusted OR 0.12, 95% CI 0.015–0.99, $p = 0.049$); but was more likely if the father spent more time (hours) with his child (adjusted OR 1.05, 95% CI 1.00–1.10, $p = 0.049$).

Conduct Problems

Conduct problems were more highly rated by fathers rather than mothers if they reported increasing paternal role stress (score) (crude OR 1.16, 95% CI 1.02–1.31, $p = 0.022$).

Total Difficulties

Total difficulties were more highly rated by fathers compared with mothers if mothers reported higher dyadic satisfaction (adjusted OR 1.86, 95% 1.00–3.45, $p = 0.048$) and fathers reported alcohol misuse (adjusted OR 2.31, 95% 0.92–5.82, $p = 0.076$).

Child gender and paternal major depression were not associated with higher reporting in the above domains.

A comparison of the mother–father correlation coefficients in the above SDQ domains for mothers who stayed at home ($n = 83$) to look after the family and mothers who did not ($n = 164$) showed no significant differences for hyperactivity ($p = 0.84$, $r = 0.50$ and $r = 0.52$, respectively, for mothers who stayed at home and mothers who did not stay at

Table 1 Reliability, correlations, means, and standardised mean differences for father and mother SDQ subscale scores

SDQ subscale	Cronbach's alpha			Spearman's rank correlation *r* (*P*)	Mean scores (SD)			Standardised mean difference (95% CI)
	Fathers	Mothers	[a]Normative data for Britain		Fathers	Mothers	[a]Normative data for Britain	
Prosocial behaviour	0.70	0.69	0.65	0.37 (<0.0001)	Overall 7.61 (1.87)	7.88 (1.77)	8.6 (1.6)	−0.15 (−.032 to 0.03)
					Boys 7.29 (1.88)	7.53 (1.86)	8.4 (1.7)	−0.13 (−0.37 to 0.11)
					Girls 7.98 (1.79)	8.28 (1.58)	8.9 (1.4)	−0.18 (−0.43 to 0.08)
Hyperactivity	0.74	0.72	0.77	0.49 (<0.0001)	Overall 3.32 (2.32)	2.91 (2.10)	3.6 (2.7)	0.18 (0.01 to 0.36)
					Boys 3.71 (2.51)	3.24 (2.17)	4.1 (2.8)	0.20 (−0.04 to 0.44)
					Girls 2.88 (2.01)	2.54 (1.97)	3.1 (2.5)	0.17 (−0.09 to 0.43)
Emotional symptoms	0.59	0.54	0.67	0.39 (<0.0001)	Overall 1.45 (1.55)	1.24 (1.45)	1.9 (2.0)	0.14 (−0.04 to 0.32)
					Boys 1.47 (1.65)	1.31 (1.51)	1.8 (2.0)	0.10 (−0.14 to 0.34)
					Girls 1.43 (1.43)	1.17 (1.38)	2.0 (1.9)	0.19 (−0.07 to 0.44)
Conduct problems	0.57	0.59	0.63	0.51 (<0.0001)	Overall 1.80 (1.50)	1.49 (1.51)	1.6 (1.7)	0.21 (0.03 to 0.38)
					Boys 1.96 (1.57)	1.71 (1.65)	1.8 (1.8)	0.16 (−0.09 to 0.40)
					Girls 1.62 (1.39)	1.25 (1.30)	1.5 (1.5)	0.27 (0.02 to 0.53)
Peer problems	0.36	0.58	0.57	0.41 (<0.0001)	Overall 1.15 (1.22)	1.03 (1.39)	1.4 (1.7)	0.09 (−0.09 to 0.27)
					Boys 1.28 (1.22)	1.23 (1.54)	1.5 (1.7)	0.04 (−0.21 to 0.28)
					Girls 1.00 (1.21)	0.82 (1.17)	1.3 (1.6)	0.15 (−0.11 to 0.41)
Total difficulties	0.61	0.62	0.82	0.48 (<0.0001)	Overall 7.72 (4.61)	6.69 (4.48)	8.6 (5.7)	0.23 (0.05 to 0.40)
					Boys 8.44 (4.99)	7.48 (4.79)	9.3 (6.0)	0.20 (−0.05 to 0.44)
					Girls 6.93 (4.00)	5.82 (3.94)	7.9 (5.4)	0.28 (0.02 to 0.54)

[a] Normative data for a sample of *N*=5,855 British 5–10 years olds

home); conduct problems ($p = 0.85$, $r = 0.49$ and $r = 0.51$, respectively, for mothers who stayed at home and mothers who did not stay at home); and total difficulties ($p = 0.38$, $r = 0.56$ and $r = 0.47$, respectively, for mothers who stayed at home and mothers who did not stay at home).

Analysis of Dichotomous (Normal/Borderline versus Abnormal) Subscale SDQ Scores

Sixty out of 248 (24%) fathers compared with 46/248 (19%) mothers identified their child as having at least one abnormal behaviour (McNemar's $\chi^2 = 3.50$, $p = 0.06$). Fathers were more likely to report two or more abnormal behaviours than were mothers (McNemar's $\chi^2 = 4.84$, $p = 0.028$). According to fathers, 27/248 (10.9%) children had two or more abnormal behaviours. Of these 27 children, 21 had two problems, 4 had three problems and 2 had four problems. However, mothers identified only 16 children (6.5%) as having two or more abnormal behaviours (15 with two problems and 1 with three problems).

Combining Parental Reports

The prevalence of child problems ranged from 7.3% (prosocial behaviour problems) to 16.5% (conduct problems) if *either* the father or mother reported a problem (i.e. the cases were added), but ranged from 4.5% (total difficulties) to 11.7% (conduct problems) if taking father report alone; and from 2.8% (prosocial behaviour problems) to 9.4% (conduct problems) if taking mother report alone.

Differences and Agreement Between Father and Mother Report

Table 2 shows the numbers of normal/borderline and abnormal behaviours reported by fathers and mothers. Fathers reported significantly more hyperactivity problems than did mothers. For the remaining subscales there were no significant parental differences in the numbers of abnormal behaviours reported (Table 2).

Table 2 shows high father–mother percentage agreement on normal/borderline behaviours (94.5–98.3% agreement), but low agreement on abnormal behaviours, particularly for peer problems. Highest agreement was for conduct problems.

Overall agreement ranged from very slight to fair (Kappa coefficients: 0.025–0.36) [30] (Table 2). Interparental agreement was higher for male than for female children except for total difficulties.

Logistic Regression Analysis of Father and Mother Report of Abnormal Behaviours by Child Gender

Fathers were four times more likely to report hyperactivity among their boys compared with their girls (Table 3). There was a trend towards fathers reporting more prosocial behaviour problems and total difficulties among their boys than their girls. There was no sex-selective over-identification of abnormal behaviours by mothers.

Table 2 Parental report of normal/ borderline and abnormal behaviours

	Father report		Mother report		McNemar's χ^2 (P)	Mother agreement with father report (%)		Kappa (P)		
	Normal/ borderline	Abnormal	Normal/ borderline	Abnormal		Normal/ borderline	Abnormal	Overall	Boys	Girls
Prosocial behaviour problems	234/248	14/248	241/248	7/248	3.27 (0.071)	230/234 (98.3)	3/14 (21.4)	0.26 (≤0.0001)	0.31 (0.0001)	−0.013 (0.57)
Hyperactivity	221/245	24/245	233/245	12/245	5.14 (0.023)	213/221 (96.4)	4/24 (16.7)	0.17 (0.0025)	0.21 (0.004)	−0.034 (0.65)
Emotional symptoms	233/247	14/247	239/247	8/247	2.25 (0.13)	228/233 (97.9)	3/14 (21.4)	0.24 (≤0.0001)	0.27 (0.0006)	0.19 (0.013)
Conduct problems	217/246	29/246	223/246	23/246	1.20 (0.27)	205/217 (94.5)	11/29 (37.9)	0.36 (≤0.0001)	0.41 (0.09)	0.26 (0.003)
Peer problems	232/245	13/245	232/245	13/245	0.00 (1.00)	220/232 (94.8)	1/13 (7.7)	0.025 (0.35)	0.06 (0.25)	−0.04 (0.66)
Total difficulties	229/240	11/240	231/240	9/240	0.29 (0.59)	223/229 (97.4)	3/11 (27.3)	0.27 (≤0.0001)	0.20 (0.01)	0.49 (≤0.0001)

Table 3 Logistic regression analysis of parental report of abnormal behaviours for boys

SDQ subscale	Odds ratio for an abnormal SDQ score for boys (95% CI)	
	Father report	Mother report
Prosocial behaviour problems	3.42*	5.48
	(0.93–12.59)	(0.65–46.18)
Hyperactivity	4.00**	2.75
	(1.45–11.03)	(0.73–10.43)
Emotional symptoms	1.18	1.50
	(0.40–3.52)	(0.35–6.40)
Conduct problems	1.78	1.43
	(0.79–4.01)	(0.60–3.45)
Peer problems	1.04	3.08
	(0.34–3.17)	(0.83–11.50)
Total difficulties	4.24*	3.73
	(0.90–20.04)	(0.78–17.96)

** $p \leq 0.01$; * $p \leq 0.07$

Discussion

This study compared mother and father report of child behaviour on the Strengths and Difficulties Questionnaire (SDQ), a measure widely used in clinical practice in the UK. To our knowledge this is the first such community study. SDQ ratings were compared using both continuous and dichotomous scores (the latter indicating risk of clinically deviant child behaviour).

Sample Profile

According to the 2001 UK census [31] 71% of the population of London were White compared with 85% in our study. Census figures showed that of the couple households in London 78% were married and 22% were cohabiting compared with 89% married and 11% cohabiting couples in our study.

Analysis of Continuous SDQ Subscale Scores

Internal consistencies for father and mother reported subscale scores were moderate to large for most subscales. These internal consistencies were comparable to British population norms with the exception of total difficulties and father reported peer problems [22].

We found moderate to large correlations between father and mother reports for externalising problems and total difficulties indicating adequate inter-parent reliability for these scales [29]. Numerous studies on other behaviour rating scales have also found higher parental agreement for externalising behaviours [1, 6, 8, 32–34], which are more noticeable than less expressive internalising behaviours. Despite significant rank correlations between fathers and mothers on these scales, fathers reported significantly higher scores than mothers for hyperactivity, conduct problems and total difficulties suggesting

that fathers are more sensitive to externalising behaviours than are mothers, or that they over-report in this domain. In a study of psychological status of a sample of 11–16 year old children with cancer, [35] fathers also reported higher SDQ scores than mothers for hyperactivity, conduct problems, and total difficulties. Furthermore, paternal ratings of conduct problems were very similar to children's self-ratings, whereas mothers' ratings were lower. A possible explanation is that since mothers are more often the primary caregivers and spend more time with their children than fathers [36] they become desensitised to their children's problem behaviour [35]. Although our analysis did not show a significant difference in mother and father correlations between mothers who stayed at home to look after the family and mothers who did not, we were limited by a small sample size. Several studies have found mothers to report a higher frequency of problems in their children than fathers [8, 10, 14, 33] while others have found no difference [1, 32]. These studies did not use the SDQ, included children of varying ages, and some utilised a clinical rather than a community sample of children. For most domains mean parental SDQ subscale scores were slightly lower but comparable to those for a normative British sample [22].

Several factors were associated with higher father ratings. Fathers with more paternal role stress reported a higher conduct problems score compared with mothers. This may be indicative of a more negative perception of the child [14], however, difficult child behaviour can also cause parental stress [37]. This association could also be accounted for in some part by a genetic association between the father and the child. A study of adolescent twins found that genetic factors accounted for approximately half the variability in depressive symptoms and antisocial behaviour [38].

Higher mother perceived dyadic satisfaction, and paternal alcohol disorder were related to a higher father total difficulties score compared with mothers. A more positive perception of the relationship may be accompanied by higher general satisfaction, and positivity in viewing the child's behaviour. In relation to this, fathers would score the child more negatively. Children of fathers with alcohol disorders are at particular risk of behaviour problems [39–41]. However, since mothers reported a lower score than did fathers with alcohol problems, it may be that fathers with alcohol disorders have a more negative perception of their child than mothers.

Higher couple relationship consensus, and employment were related to fathers being less likely to report a higher hyperactivity score compared with mothers. This may reflect better communication about the child and reliance on the mother's view of the child as a result of the father being away at work.

Child gender influenced paternal reports. Fathers were significantly more likely to report a higher conduct problems and total difficulties score than mothers among their female children.

Analysis of Dichotomous SDQ Subscale Scores

When considering deviant behaviour (dichotomous scores), fathers reported a higher rate of multiple problems in their children. This may reflect a lack of precision in the fathers' assessments of their children. Some have suggested that separate norms for father and mother assessment need to be developed rather than reliance on a single norm [9, 10, 32]. On the other hand, there is evidence that comorbidities in child behaviour are not uncommon and perhaps fathers are more sensitive to certain constructs of abnormal behaviours in their children than are mothers.

There was high interparental agreement on normal/borderline behaviours, but low agreement on abnormal behaviours, with highest agreement being for conduct problems. The conduct problems subscale represents maladjustments such as oppositional defiant disorder, conduct disorder, and other disruptive behavioural disorders [22] which are perhaps more easily identifiable than are internalising behaviours such as a depressive, phobic or anxiety disorders.

There was generally higher overall interrater agreement (Kappa coefficients) between fathers and mothers on boys compared with girls. Tarullo et al. [13] also reported higher parental agreement among males than females in their study of behaviour problems. There is evidence that parents can place higher value on their male children and hence may observe and discuss their behaviour more closely than their female children [8]. However, when predicting abnormal behaviours fathers were more likely to report hyperactivity, pro-social behaviour problems, and total difficulties among their boys than their girls. There was no evidence of sex-selective reporting of abnormal behaviours by mothers. These differences may reflect gender-stereotyped expectations among fathers of boys and a lower threshold for identifying these problem behaviours.

Clinical Implications

The Strengths and Difficulties Questionnaire is used increasingly on child and adolescents for outcome monitoring in clinical settings (Department of Health, 2004), but there is little attention paid to which parent completes the assessments. Our study suggests moderate agreement between parents, but also identified some differences between parental ratings particularly for abnormal behaviours. Clinicians and researchers utilising the SDQ should bear in mind that parental stress and alcohol disorder may cause fathers to report more negatively on their child's behaviour, and that the quality of the couple's relationship may contribute to parental discrepancies in report on the SDQ.

In most instances it would be valuable if children were assessed by both parents and combined reports used. This may increase the sensitivity of the assessments but lower the specificity. From a clinical point of view enhanced sensitivity would reduce the risk of missing cases requiring clinical attention. Further research should be considered in clinical settings to verify the accuracy of single versus combined reports in the identification of abnormal child behaviours.

Study Limitations

This study has a number of limitations. The sample focussed on biological fathers of children aged 4–6 years, residing in the family. Also, our sample was weighted in favour of a White population of higher socioeconomic status. The results may not be generalisable to non-biological fathers, children of other ages, and other ethnic and socioeconomic groups. Furthermore, it is unclear whether non-resident fathers would have similar patterns of responses. We collected data on fathering parameters but not on mothering. Future studies evaluating parent report on behaviour rating scales may benefit from collecting data on mothering. The lower levels of interparental agreement on abnormal behaviours and co-morbidity point to the importance of extending and replicating this study with a more symptomatic clinically referred population.

Summary

This paper compares mother and father report on the Strengths and Difficulties Questionnaire (SDQ), a widely used tool to screen for child behaviour in clinical practice and research. The SDQ provides scores for prosocial behaviour, hyperactivity, emotional symptoms, conduct problems, and peer problems as well as a total difficulties score. Prescribed cut-off scores on the SDQ indicate risk of abnormal child behaviour. Families were recruited via primary care. Children aged 4–6 years were firstly identified from general practice records and were linked with an adult household male who could be the father. Biological fathers who were resident with their child and the child's mother were recruited by post. Two hundred and forty-eight mother–father dyads completed the SDQ and measures on depression, parenting, the couple relationship, alcohol use and demographics. Mother and father ratings, and also dichotomous scores indicating risk of normal/borderline versus clinically abnormal child behaviour, were compared and analysed in relation to covariates. Mother and father scores were correlated, particularly for externalising behaviours such as conduct problems and hyperactivity; however fathers reported higher scores in these domains. Higher paternal ratings were related to alcohol misuse, couple relationship quality, fathering, and father employment. With the dichotomous scores there was high parental concordance on normal/borderline child behaviours but low concordance on clinically deviant behaviours. Again highest interparental agreement was observed for conduct problems, and agreement was generally higher for male compared with female children. Fathers were more likely to report hyperactivity among their boys compared with their girls, but there were no gender differences in mother report of abnormal behaviours. The differences observed between mother and fathers ratings may represent different but valid perspectives determined by the differing interactions between fathers and mothers with their children. In most instances it would be valuable if children were assessed by both parents and combined reports used to enhance the sensitivity of identifying children requiring clinical attention for their behaviour problems. Further research should be considered in clinical settings to verify the accuracy of single versus combined parental reports on the SDQ in the identification of abnormal child behaviours.

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