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Parent Reports of Mental Health Concerns and Functional Impairment on Routine Screening with the Strengths and Difficulties Questionnaire

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Abstract

Objective—This study used the Strengths and Difficulties Questionnaire (SDQ) to describe the prevalence of parent-reported mental health (MH) concerns in youth presenting for primary care appointments and to examine relationships between children's MH issues and functional impairment. We hypothesized that increased MH symptomatology would be associated with increased impairment and family burden.

Methods—Parents of 4–17 years old children were approached at routine visits in 13 primary care sites. Chi-square tests, independent samples t-tests, and a one-way analysis of variance (ANOVA) were used to make comparisons between demographic groups. Age-, sex-, and race-adjusted ordered logistic regression models and ANOVAs examined relationships between impact and SDQ scales.

Results—Boys had higher total Hyperactivity and Peer Problems. Adolescents showed higher Emotional Symptoms, while younger children showed more Hyperactivity. Latinos reported more Conduct Problems, Hyperactivity, and Peer Problems. Latinos also indicated less distress on the child, impairment at home and school, and family burden. Regression analyses indicated increased odds of impairment with higher scale scores. MH symptoms identified with the SDQ in pediatric primary care settings were associated with parent-reported impairment affecting youth and their families.

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Conclusions—The presence of significant impairment suggests that parents' concerns identified by screening are likely to be clinically important and worthy of practice strategies designed to promote assessment, treatment, and referral for these common problems. Identifying and exploring parents' concerns with strategic use of screening tools may allow PCPs to directly engage families around the MH issues that affect them most.

Keywords

mental health; screening; symptoms; impairment; concerns

Nearly one in five youth in the United States has a mental health (MH) problem that interferes with daily functioning and requires intervention.¹ Early identification of these problems is vital, because recognition and treatment of MH issues during childhood can prevent significant social and academic problems, and mitigate progression to MH problems in adulthood.² A workforce shortage of child MH professionals limits access to specialists and underscores the crucial role for primary care providers (PCPs) to address MH problems.^{3,4} A key component of this role is to assess and refer patients through routine use of MH screening. Recommendations and guidelines have been published to encourage pediatric PCPs to increase screening for MH problems.^{4,5}

A considerable body of research documents the role for formal and informal screening in pediatric primary care, with data suggesting that formal screening is more effective than subjective assessment in detecting MH problems.^{6–9} However, over 50% of pediatricians never or rarely use a standardized MH screening tool, especially for children between the ages of six and eleven¹⁰, and MH service follow-up rates after positive results are reported to be low.¹¹ Screening tools that capture children's MH symptoms from multiple dimensions (e.g. social, emotional, behavioral) and range from normal to abnormal, rather than a diagnosis-driven approach, may be more useful for PCPs lacking extensive training in diagnostic assessment of MH problems. Also, the need to document significant impairment for appropriate referral and diagnostic purposes points to the usefulness of screening strategies that include questions about symptoms and related functioning.^{11–13} Parents' level of concern is usually a function of the combination of symptoms and related impact; thus, screening tools such as the Strengths and Difficulties Questionnaire (SDQ) that elicit both may especially help PCPs to make decisions about further assessment, referral, and treatment.^{14,15} "Caseness" derived from an integration of these measures has been shown to result in significantly better prediction of clinical status than that derived from symptoms alone.^{14,16}

Studies of SDQ-detected MH problems in the MH clinic and primary care settings, and in larger population samples, have been reported from various countries.^{17–22} Although the SDQ has not been used extensively in the United States, it is a component of the National Health Interview Survey, where it has shown strong associations with MH service use.^{17,23} Here we present findings from the largest sample of children and adolescents screened with the SDQ in the pediatric primary care setting in the United States. First, we examine the prevalence of high levels of parent-reported MH symptoms and scale scores falling in the band considered high or abnormal in youth presenting for scheduled PCP appointments, and

compare patterns by gender, age, and race/ethnicity. Next, we explore the relationship between children's MH issues and impairment. These analyses employed SDQ scale scores rather than severity categories, as predictors of overall difficulties, significant functional problems and symptom-related burden. We chose a dimensional approach to fully characterize the relationship between symptoms and impairment given that previous research has shown that the odds of disorder increased at a constant rate across the range.²⁴ We hypothesized that increased MH symptoms would be associated with increased impairment and burden, indicated by higher scores on the MH domains and impact sections of the SDQ.

Methods

Setting

Data were collected within a larger study assessing outcomes of a psychosocial communication skills training for 54 PCPs²⁵ in PCP offices and hospital affiliated clinics in New York and Maryland. Sites were chosen to represent a range of specialties (pediatrics and family practice), payers (private insurance and Medicaid), locations, and practice structures (solo, group, clinic).^{16,26,27} A total of 16 clinical sites were approached and 13 participated. The number of families recruited per site varied from 14 to 178 (median = 49). The three non-participating sites reported inability to participate due to high staff turnover, lack of a director, or lack of time. Rural sites (n=7) included a solo pediatric practice, a hospital-based pediatric practice, four free-standing multi-specialty offices, and a small-town practice staffed by two nurse practitioners. Urban sites (n=6) included three community clinics (two multi-specialty, one pediatric), a group private pediatric practice, a hospital-based family practice, and a multi-service center for Latino families.

Participants

Recruitment at sites within the same city or region took place sequentially from December 2002 to August 2005. Interviewers approached families in the waiting area if the child was scheduled with one of the participating PCPs, was between 4 and 17 years old, and reported pain rated at 4 or less on an analog scale of 1–10, where 1 equaled no pain. If more than one child in a family was eligible, the researcher randomly chose one child. The parent or caregiver (hereafter referred to as parent) and youth (age 11–17 years) provided written consent and assent, respectively. The parent was compensated \$15 for participation. The Johns Hopkins Bloomberg School of Public Health Committee on Human Research and the research review boards of participating sites approved the procedures.

Of the 871 families approached, 817 families met criteria for eligibility. Table 1 reports the demographics for the participating youth and accompanying parent. The parent completing the SDQ was most commonly the mother (74.4%). 78% had completed high school and 46% were privately insured. About one half (46%) of families were served at rural sites. Mothers accompanied most youth to the visit (74.4%). The most common reason for the visit was for an annual physical/well child appointment (43.2%), and only 5.5% cited MH as the reason for their visit. The sample of youth rated with the SDQ was diverse, with approximately half reported by their parents as Caucasian and 31% African American. English was the native

language for 86.8% of PCPs and 86.6% of youth. A Spanish version of the measure was made available to the 9.4% of families who reported that they were native Spanish speakers. Of the 11% of youth identified as Latino, 93% were recruited from one urban, multi-service site and all but 3 lived with families in which Spanish was their native language. A smaller percentage (48%) of parents of these youth had completed high school and virtually all (99%) had health insurance through Medicaid.

Measure

The SDQ is a brief behavioral health screening tool used with children ages 4 to 17 years. Included are 25 items covering behavioral/emotional symptoms evenly divided into five scales: Emotional Symptoms, Conduct Problems, Hyperactivity, Peer Problems, and Prosocial behavior. Each scale contains five items rated by the caregiver on a 3-point Likert scale to indicate the degree to which each item applies to his/her child (0=Not True, 1=Somewhat True, 2=Certainly True).^{17,18} Positive items within each scale are reverse-coded such that higher scores indicate greater symptom severity, and items within each scale are summed to obtain total scale scores. The scale scores for Hyperactivity, Emotional Symptoms, Conduct Problems and Peer Problems are summed to generate a Total Difficulties score ranging from 0–40.

To facilitate clinical classification, SDQ scale scores are divided into three bands based on cumulative frequency distributions, classifying children into those with the highest 10% of scores, the next 10% of scores, and the remaining 80%.²⁸ Scoring bands determined in the US were similar and were used here to examine the prevalence of these “High”, “Medium” and “Low” difficulties in this population.¹⁷

The impact section addresses whether identified symptoms result in functional impairment and impose significant family burden. The impairment section begins with an Overall Difficulties question: “Overall, do you think that your child has difficulties in one or more of the following areas: emotions, concentration, behavior or being able to get along with others?” If the child is reported to have minor, definite, or severe difficulties, the parent is asked how long they have been present (<1 month, 1–5 months, 6–12 months, >12 months), and the extent to which the difficulties distress the child and interfere with the child’s everyday life at home, with friendships, classroom learning or leisure activities, and place a burden on the family as a whole. Scoring of the impairment items assigns 0 for “not at all” and for “only a little,” 1 for “a medium amount,” and 2 for “a great deal.” A Total Impairment score (0–10) is calculated by summing the five items measuring impact on the child, omitting the question about burden on the family.

Data Analyses

Symptoms and scales—Comparisons by gender, age, and race/ethnicity were assessed using chi-squared tests for each SDQ item, and independent samples t-tests and an ANOVA were used to find the differences between total scale scores. Only three racial/ethnic groups were compared (African American/Black, Caucasian/White, Latino) due to the limited number of Native American/American Indian and Asian participants in the study.^a

Impact—Similar to the symptoms and scales, comparisons were first made by gender, age, and race/ethnicity using chi-squared tests for each impact question. Next, a series of ANOVAs compared parents' ratings of severity of difficulties, length of time that difficulties had been present, and impact of the difficulties upon the child's life to the SDQ scale scores. Finally, a series of age-, sex-, and race/ethnicity-adjusted ordered logistic regression models of the SDQ scales on each impact score was conducted to determine the odds of being in the uppermost category ("a great deal") for each impact question per unit increase in the total score for each SDQ scale. The odds ratios can be interpreted as the change in risk of being in the most severe impact category compared to all others combined for each unit increase in a SDQ scale score. Interactions were not compared due to small sample sizes.

Results

Symptoms and Scales

Table 2 presents frequencies of a "Certainly True" (2) response for each SDQ item and a "High" band score for each scale, reported by gender and age of the child and race/ethnicity of the parent. Overall, the proportion of children with scale scores falling in the "High" band for the total difficulties scale was 27.1. As evident in Table 2, the frequency of "High" scores was similar across the Emotional, Hyperactive-Inattentive, Conduct, and Peer Problems scales. However, the frequencies were more than double that of values obtained in studies of children in other settings. Within scales, the frequency of "Certainly True" responses showed substantial variation across symptoms. The frequency of "high" band scores was less for the Prosocial scale (10.6%).

Gender—The proportion of individuals falling in the "High" band on the Total Difficulties scale was significantly greater for males (34.8%) than females (19.2%), $\chi^2(2, N = 812) = 24.99, p < .0001$. The greatest gender difference occurred on the Hyperactivity scale, in which boys showed significantly higher symptom frequencies for all items, a significantly higher frequency of scale scores in the "High" band and higher scale scores ($M = 4.93$ vs. $M = 3.46, p < .01$). Boys showed significantly higher Peer Problems scale scores ($M = 2.22$ vs. $M = 1.86, p < .01$), as well as lower Prosocial scale scores ($M = 7.98$ vs. $M = 8.50, p < .01$) and a greater proportion of scale scores in the "High" band. While mean scale scores did not differ by gender for Conduct Problems, more boys were rated with scores in the "High" band, primarily reflecting a higher frequencies of temper tantrums.

Age—Total Difficulty scale scores did not differ by age. Parents of adolescents reported significantly more somatic symptoms and higher Emotional Symptoms scale scores ($M = 2.95$ vs. $M = 2.43, p < .01$) and a greater frequency of "High" band scores than did parents of younger children. Parents of younger children endorsed significantly more restlessness and fidgeting, as well as higher Hyperactivity scale scores ($M = 4.44$ vs. $M = 3.94, p < .01$).

^aFurther analysis of race responses showed that 86 of the 90 respondents in the "Other" category identified as Latino(a) by race and Hispanic/Latino(a) by ethnicity. This was taken into account for later analyses by creating the Latino group. The eight respondents who identified as racially African American or Caucasian/White and ethnically Hispanic were not included in this Latino category.

Race/ethnicity—Racial/ethnic differences occurred across domains; the Total Difficulties score differed significantly among the three groups, $F(2,763) = 5.59$, $p = .004$, with scores reported by Latino parents ($M=13.57$) falling significantly above those reported by African American ($M = 10.98$, $p = 0.18$) and White/Caucasian ($M=10.70$, $p = .004$) parents. The frequency of ratings falling in the “High” band also varied significantly across racial/ethnic groups, $\chi^2(4, N = 764) = 16.50$, $p = .002$; the frequency for Latino youths (36.4%) was significantly higher than that for African American youth (24.9%) but not for White youth (26.5%).

Latino parents rated their children as significantly more likely to exhibit worries and fears and to appear nervous in new situations, but not in somatic symptoms and unhappiness, resulting in marginally higher Emotional Symptoms scale scores ($M=3.01$ vs. $M=2.47$ and $M=2.70$, $p=.10$) and no significant differences in the rate of “High” band scores. Latino children were also viewed by parents as significantly more likely to tantrum and to have problems related to hyperactivity and attention, leading to significantly higher Conduct Problems ($M=2.92$ vs. $M=2.26$ and $M=2.06$, $p<.01$) and Hyperactivity scale scores ($M=5.21$ vs. $M=4.09$ and $M=4.08$, $p<.01$) and rates of “High” band scores. Parents of Latino youth were more likely to rate youth as solitary, picked on by other children, and relating better to adults than children, resulting in significantly higher total Peer Problems scale scores in comparison to African American but not White youth ($M=2.43$ vs. $M=2.17$ and $M=1.86$, $p<.05$). In contrast, Latino parents rated their children as having significantly higher Prosocial scale scores, indicating more positive behaviors for Latino children than African American and White/Caucasian children ($M=9.06$ vs. $M=8.11$ and $M=8.17$, $p<.01$). A lower proportion of scores of Latino children fell in the “High” band range of Prosocial difficulties than African American children.

Impact—Table 3 presents frequencies of responses in the uppermost category (reflecting greater impairment) of impact supplement items and the Total Impairment score, reported by gender and age of the child and race/ethnicity of the parent.

Overall Difficulties and Duration—Approximately one half of parents indicated that their children had behavioral/emotional difficulties and thus completed the remaining impact items. Overall, only 7.3% of children were rated with severe difficulties. Of parents who endorsed mild, moderate, or severe difficulties, a large majority (71.5%) indicated that the child’s difficulties had been present for over a year; more White/Caucasian parents than African American parents reported their children’s difficulties had been present for this length of time (77.1% vs. 55.8%, $p < .05$).

Impairment—For those children whose parents felt that their behavioral-emotional symptoms resulted in difficulties, the Total Impairment score of more than half fell in the “High” band. In other reports, rate of impairment has been calculated by assigning a value of 0 to those SDQs in which no difficulties were reported.¹⁴ Using this method, the rate of significant impairment for this sample is 26.5%. Parent reports of overall impairment did not differ by gender. However, compared to parents of younger children, a significantly greater proportion of parents of adolescents reported impairment in classroom learning (30.3% vs. 20.9%, $p<.05$). Also, more White/Caucasian parents compared to Latino parents reported

that behavioral/emotional difficulties caused distress and interfered with life at home and in the classroom.

Family burden—The impact of children's problems on family burden did not differ by gender or age. African American and White/Caucasian parents were significantly more likely to report that the child's behavioral/emotional difficulties impacted family burden "a great deal" than did Latino parents (7.3% and 10.0% vs. 0.0%, $p<.05$).

Relationships between SDQ scale scores and impact

Overall, the higher the level of symptoms reported by parents on the SDQ scales, the more likely it was that they also reported high levels of impairment and burden. Age, sex, and race/ethnicity-adjusted logistic regression analyses indicated that parents were significantly more likely to endorse that their children had severe difficulties if they indicated more Emotional Symptoms ($OR=1.22$, $p<.01$), Conduct Problems ($OR=1.36$, $p<.01$), and Hyperactivity ($OR=1.63$, $p<.01$). The intensity of parents' ratings of symptoms had less effect on reports of the duration of the difficulties because the majority of parents endorsed long duration; only increases in Hyperactivity symptoms increased the risk of parents reporting more than one year of problems ($OR=1.16$, $p<.05$).

The relationship between reported impairment and behavioral/emotional difficulties varied depending on the SDQ symptom scale. Figure 1 shows results of the age, sex, and race/ethnicity-adjusted ordered logistic regression analyses for the impairment items, presenting the odds ratios of the change in risk of endorsing "a great deal" of impairment compared to all other categories combined for each unit increase in SDQ scale score.

Increases in Emotional Symptoms were most significantly related to the child's distress ($OR=1.33$, $p<.01$), with less impact on classroom learning ($OR=1.06$, $p>.05$). Conduct Problems had the greatest effect on life at home ($OR=1.37$, $p<.01$), and caused less distress to the child ($OR=1.07$, $p>.05$). Increased Hyperactivity was related to greater impairment in classroom learning ($OR=1.46$, $p<.01$), and did not have a great impact on life with friends ($OR=1.06$, $p>.05$). Lastly, Peer Problems were associated with significantly greater impact on life with friends ($OR=1.59$, $p<.01$), but did not have a great effect on life at home ($OR=1.06$, $p>.05$) or classroom learning ($OR=1.04$, $p>.05$).

Figure 2 shows the results of the final set of ordered logistic regressions regarding family burden, presenting the odds of endorsing that the child's problems were "extremely burdensome" per point increase on each SDQ scale. Overall, Conduct Problems had the greatest effect on family burden ($OR=1.29$, $p<.01$), while Peer Problems did not have a significant impact ($OR=1.10$, $p>.05$).

Discussion

In our study, boys were significantly more likely to receive high scores on the Hyperactivity and Peer Problem scales, while Hyperactivity problems were more prominent in younger children, and Emotional Symptoms were more prominent in adolescents. These findings are

consistent with previous reports from MH clinical populations and primary care settings using the SDQ and other screening tools.^{29–32}

We found highly significant differences in parent-reported symptoms according to race/ethnicity, with Latino parents identifying more problems across scales, as well as higher rates of Prosocial behaviors. It is unclear whether this finding represents higher rates of MH problems in Latino youth, as reported in recent literature^{33,34}; cultural factors that influence the willingness of Latino parents, as compared with Caucasian and African American parents, to rate their children with significant MH symptoms; or other factors. Our findings suggest that clinicians need to be attuned to the possibility that Latino children may be particularly vulnerable to MH problems.

Higher ratings on various scales were related to greater functional impairment and family burden, suggesting that parents who rate their children as highly symptomatic are more likely to experience and observe problems in different aspects of the child's life. This relationship is a key indicator for busy PCPs: the combination of symptoms and impairment indicate areas requiring clinical attention. Emotional Symptoms had the greatest effect on the child's distress, Conduct Problems most strongly affected life at home, Hyperactivity interfered most with classroom learning, and Peer Problems had the greatest impact on life with friends. These findings suggest that clinicians focus their work on helping decrease the daily impact of particular MH symptoms rather than only on symptom reduction. A useful strategy for PCP practices might be to employ the scoring bands identified by the SDQ developers and modified for US populations that differentiate low, medium, and high levels of emotional or behavioral difficulties and impairment. Interpreting level of concerns through these cutoffs may be more understandable to providers and parents and lead to more effective screening¹³.

These results may have great clinical relevance in pediatric primary care. When child MH problems are identified in primary care, they may not meet standard diagnostic thresholds.¹⁸ In addition, child MH symptoms commonly cross diagnostic categories, leading to high rates of comorbidity³⁵, and precise diagnosis of youth MH presentations requires lengthy assessment. Moreover, family burden is highly predictive of MH services utilization for youth MH problems^{12,16,36}. Given these challenges, if MH problems are to be addressed PCPs, the primary care paradigm of “make the diagnosis and prescribe the standard therapy” is in doubt. Instead, by taking relationships between MH issues, impairment, and burden into account, PCPs can focus their work with families by targeting specific areas of child and family functioning related to the child's issues along with the MH issues themselves. Such strategies may be easier to implement, and more effective in the lives of families, which in turn could decrease the need for referrals to specialty MH care. Exciting new interventions for supporting the capacity of PCPs to act upon these concerns have emerged, including phone-based child MH consultation to pediatric primary care³⁶, access to early childhood MH consultation programs for MH problems presenting at early ages³⁷, and brief trainings for PCPs in basic “Common Factors” approaches to low-intensity MH problems presenting in primary care.³⁸

Limitations

Other relevant variables may have influenced the results, including site characteristics (e.g., specialties, location practice structure) and family characteristics (income, insurance type). Sample size considerations limited our ability to investigate these important factors. Although sites encompassed urban, suburban and rural areas, the location of family residence was not collected.

Many racial/ethnic populations were not included in our analysis due to small sample sizes. Results showed that Latino parents reported significantly more symptoms on many of the SDQ scales and significantly less impact. Such discrepancies between symptomology and impact may be related to cultural factors regarding health, distress, and resilience in Latino populations. Furthermore, Latino parents indicated more positive behaviors on the Prosocial scale, and also tended to respond in the affirmative to positively worded items on the difficulties scales. It is important to note that the Latino families providing SDQ data were recruited almost entirely from one urban health center and tended to be of lower income and educational level; thus, linguistic, economic and educational factors particular to this population may have influenced how parents interpreted and responded to the SDQ items. Future studies should focus on possible cultural and linguistic factors that affect the use of this instrument in Latino and other diverse patient populations.

Conclusions

We describe the parent-reported emotional and behavioral profiles of a large and geographically, racially/ethnically, and economically diverse population of youth presenting in primary care, where valid and user-friendly screening tools can be used to identify MH problems within the process of developmental surveillance. We examined concerns according to categories of symptoms that cut across traditional diagnostic terms, and also investigated evidence of impairment and burden related to symptoms. This concern-based rather than diagnosis-based approach to assessment can empower PCPs to directly engage families as partners around the MH issues that affect them most. Focusing on detection of both symptoms and impairment may increase the likelihood of accessing community-based programs and services.^{12,15} This approach may also promote the creation of broadly applicable adaptations of modular interventions that have been used in MH specialty settings and which PCPs might learn easily and apply well.³⁹ For example, brief PCP-delivered training in positive parenting skills for parents of children with hyperactivity and conduct problems could arise from the strategic use of screening tools such as the SDQ that delineate broad categories of concerns.

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What's New

Evidence-based screening tools can be employed in primary care to identify parents' concerns by assessing mental health symptoms and related impairment. Screening results can drive problem-focused interventions beginning with the PCP. Development of practical interventions is a crucial next step.

Figure 1.
Odds Ratios Indicating Risk of "A great deal" of Functional Impairment per Point Increase on the SDQ Scales
* $p < 0.01$, ** $p < 0.05$

Figure 2.
Odds Ratios Indicating Risk of Providing an “Extremely burdensome” Response per Point Increase on the SDQ Scales

**p<0.05, *p<0.01

Table 1

Study Demographics.

Demographic	n (%)
Child Gender (N=817)	
Male	411 (50.3)
Female	403 (49.3)
Child Age (N=817)	
4–10	441 (54.0)
11–17	372 (45.5)
Parent Race* (N=817)	
African-American/Black	253 (31.0)
American Indian/Native American	8 (1.0)
Asian	4 (0.5)
White/Caucasian	435 (53.2)
Other*	90 (11.0)
Parent Ethnicity (N=817)	
Hispanic/Latino(a)	86 (10.5)
Non-Hispanic	582 (71.2)
Parent Education (N=817)	
Not a High School Graduate	153 (18.7)
High School Graduate	340 (44.6)
Attended College	270 (33.3)

Parent race/ethnicity was used due to low completion rates of the query of child race/ethnicity.

**
78 of the 90 respondents in the “Other” category identified themselves as Latino(a) by race and Hispanic/Latino(a) by ethnicity.

Table 2
Frequencies of “Certainly True” Responses to SDQ Items and “High” Band Scale Scores by Demographic Variables

Item	Gender			Age		Parent Race		
	Total (N=817) n (%)	Male (N=411) n (%)	Female (N=403) n (%)	4–10 (N=441) n (%)	11–17 (N=372) n (%)	African American (N=253) n (%)	Caucasian/White (N=435) n (%)	Latino [‡] (N=78) n (%)
Emotional Symptoms Scale								
Often complains of headaches...	97 (11.9)	49 (12.0)	48 (12.0)	37 (8.4)	60 (16.2)*	33 (13.1)	50 (11.5)	9 (11.5)
Many worries...	96 (11.8)	54 (13.2)	42 (10.5)	49 (11.2)	47 (12.7)	21 (8.3) ^{c*}	54 (12.5)	16 (20.8)
Often unhappy, downhearted...	61 (7.5)	30 (7.3)	31 (7.8)	31 (7.1)	30 (8.1)	19 (7.6)	29 (6.7)	10 (13.0)
Nervous or clingy...	150 (18.4)	82 (20.0)	67 (16.8)	76 (17.4)	73 (19.7)	35 (14.0) ^{c*}	81 (18.7)	23 (29.9)
Many fears, easily scared	83 (10.2)	50 (12.2)	32 (8.1)	51 (11.7)	31 (8.4)	24 (9.6) ^{c*}	32 (7.4) ^{c*}	22 (28.6)
Scale Score (5–10)	185 (22.7)	99 (24.1)	86 (21.4)	85 (19.3)	100(27.0)*	58 (22.7)	97 (22.4)	17 (20.0)
Conduct Problems Scale								
Often has temper tantrums...	149 (18.2)	89 (21.9)	60 (15.0)*	80 (18.3)	69 (18.7)	40 (16.1) ^{c*}	78 (18.0) ^{c*}	27 (35.5)
Generally well behaved... [‡]	64 (7.8)	35 (8.6)	29 (7.3)	233 (8.5)	194 (7.3)	18 (7.2)	32 (7.4)	6 (7.9)
Often fights...	55 (6.7)	34 (8.4)	21 (5.3)	33 (7.5)	22 (6.0)	20 (8.0)	24 (5.6)	11 (14.3)
Often lies or cheats	60 (7.3)	36 (8.9)	23 (5.8)	28 (6.4)	31 (8.4)	19 (7.7)	28 (6.5)	11 (14.3)
Steals from home, school...	24 (2.9)	11 (2.7)	13 (3.3)	6 (1.4)	20 (4.9)**	9 (3.6)	9 (2.1)	4 (5.3)
Scale Score (4–10)	188 (23.1)	110 (26.8)	78 (19.5)**	105 (23.9)	83 (22.4)	63 (24.7)^{c*}	91 (20.5)^{c*}	32 (37.6)
Hyperactivity Scale								
Restless, overactive...	185 (22.6)	128 (31.4)	56 (14.0)*	120 (27.3)	64 (17.4)*	53 (21.0) ^{c*}	87 (20.2) ^{c*}	33 (42.9)
Constantly fidgeting...	176 (21.5)	118 (28.9)	58 (14.6)*	117 (26.7)	59 (16.0)*	47 (18.7) ^{c*}	75 (17.3) ^{c*}	46 (59.7)

Item	Gender			Age		Parent Race		
	Total (N=817) n (%)	Male (N=411) n (%)	Female (N=403) n (%)	4–10 (N=441) n (%)	11–17 (N=372) n (%)	African American (N=253) n (%)	Caucasian/White (N=435) n (%)	Latino [‡] (N=78) n (%)
Easily distracted...	229 (28.0)	142 (34.6)	86 (21.7)*	136 (31.0)	92 (25.1)	55 (22.0) ^{c*}	108 (24.9) ^{c*}	55 (72.4)
Thinks things out...	143 (17.5)	91 (22.3)	52 (13.1)*	81 (17.5)	94 (17.9)	44 (17.6)	77 (17.9)	15 (19.5)
Sees tasks through to the end...	172 (21.1)	109 (26.6)	62 (15.4)*	174 (18.2)	134 (24.5)	40 (15.8) ^{b*}	114 (26.3)	12 (15.4)
Scale Score (7–10)	179 (22.0)	128 (30.9)	51 (12.7)*	106 (24.1)	72 (19.4)	51 (20.0)^{c*}	94 (21.7)^{c*}	26 (30.6)
Peer Problems Scale								
Rather solitary, tends to...	93 (11.4)	47 (11.5)	46 (11.6)	51 (11.7)	42 (11.4)	25 (10.0) ^{c*}	41 (9.5) ^{c*}	23 (29.9)
Has at least one good friend [†]	42 (5.1)	25 (6.1)	17 (4.3)	19 (4.4)	23 (6.2)	16 (6.4)	21 (4.9)	2 (2.6)
Generally liked...	19 (2.3)	9 (2.2)	10 (2.5)	10 (2.3)	9 (2.4)	8 (3.2)	7 (1.6)	3 (3.9)
Picked on or bullied...	71 (8.7)	43 (10.5)	28 (7.0)	39 (8.9)	32 (8.7)	18 (7.1) ^{a*}	29 (6.7) ^{c*}	16 (20.8)
Gets on better with adults...	99 (12.1)	46 (11.2)	53 (13.3)	43 (9.8)	56 (15.1) ^{**}	33 (13.1) ^{c*}	41 (9.5) ^{c*}	20 (26.0)
Scale Score (4–10)	175 (21.5)	97 (23.6)	78 (19.5)	82 (18.6)	93 (25.1)	63 (24.7)	81 (18.7)	21 (24.7)
Prosocial Scale								
Considerate of other people...	17 (2.1)	7 (1.7)	10 (2.5)	6 (1.4)	11 (3.0)	4 (1.6)	9 (2.1)	3 (3.9)
Shares readily with...	39 (4.8)	18 (4.4)	20 (5.0)	19 (4.4)	18 (4.9)	15 (6.0)	16 (3.7)	4 (5.3)
Helpful if someone is hurt...	32 (3.9)	19 (4.6)	13 (3.3)	18 (4.1)	14 (3.8)	8 (3.2)	17 (3.9)	4 (5.2)
Kind to younger children [†]	15 (1.8)	11 (2.7)	4 (1.0)	7 (1.6)	8 (2.2)	5 (2.0)	7 (1.6)	1 (1.3)
Often volunteers to help...	40 (4.9)	24 (5.9)	16 (4.0)	16 (3.6)	24 (6.5)	14 (5.6)	19 (4.4)	5 (6.5)
Scale Score (0–5)	86 (10.6)	56 (13.6)	30 (7.5)*	45 (10.2)	40 (10.8)	33 (13.3)^{c*}	47 (10.8)	5 (5.8)

Bold= “High” band scale score, indicating scores in the highest 10% of all scores for clinical difficulties in that scale

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[†] Reverse-coded to indicate difficulties.

[‡] 8 respondents identified as racially African American or Caucasian/White and ethnically Hispanic; these were not included in the Latino(a) category.

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

Superscript letters denote differences between races (African American: a; White: b; Latino: c).

Table 3
Frequencies of Uppermost Category Responses to SDQ Impact Questions “High” Band Total Scores by Demographic Variables

Item	Gender			Age		Parent Race		
	Total n (%)	Male n (%)	Female n (%)	4-10 n (%)	11-17 n (%)	African American n (%)	Caucasian/White n (%)	Latino [‡] n (%)
Overall, do you think that your child has difficulties...? (Yes – severe difficulties; n=410)	30 (7.3)	19 (7.9)	11 (6.4)	14 (6.6)	16 (8.0)	9 (7.1)	19 (8.4)	1 (3.0)
How long have these difficulties been present? (Over a year; n=410)	293 (71.5)	176 (72.4)	116 (66.3)	144 (66.7)	148 (73.3)	72 (55.8) ^{b**}	175 (77.1)	26 (74.3)
Functional Impairment: Do the difficulties... ... upset or distress your child? (A great deal; n=410)	71 (17.3)	41 (16.0)	30 (15.6)	30 (12.9)	41 (19.1)	19 (12.8)	46 (19.6) ^{c**}	1 (2.8)
... interfere with your child's everyday life at home? (A great deal; n=406)	69 (17.0)	43 (16.9)	26 (13.8)	36 (15.7)	33 (15.4)	17 (11.8)	49 (20.5) ^{c**}	1 (2.9)
... interfere with your child's everyday life with friends? (A great deal; n=403)	34 (8.4)	20 (7.9)	14 (7.4)	15 (6.4)	19 (9.1)	11 (7.7)	19 (8.1)	2 (5.7)
... interfere with your child's everyday life in classroom learning? (A great deal; n=406)	114 (28.1)	73 (28.4)	40 (21.2)	49 (20.9)	64 (30.3) ^{**}	38 (26.0)	68 (28.7) ^{c**}	3 (8.6)
... interfere with your child's everyday life in leisure activities? (A great deal; n=398)	37 (9.3)	23 (9.1)	14 (7.6)	20 (8.8)	17 (8.1)	18 (12.9)	16 (6.8)	1 (3.0)
Total Impairment Score (2–10)	214 (51.4)	137 (55.9)	76 (42.5)	99 (45.2)	114 (55.6)	57 (41.6)	132 (57.4)	13 (40.6)
Family Burden: Do the difficulties... ... put a burden on you or the family as a whole? (A great deal; n=405)	65 (16.0)	39 (9.7)	26 (6.5)	30 (6.9)	35 (9.6)	18 (7.3) ^{c**}	43 (10.0) ^{c**}	0 (0.0)

[‡] Reverse-coded to indicate difficulties.

[‡] 8 respondents identified as racially African American or Caucasian/White and ethnically Hispanic; these were not included in the Latino(a) category.

* p<.01,

** p<.05.

Superscript letters denote differences between races (African American: a; White: b; Latino: c).