

Mothers' and Fathers' Perceptions of Child Deviance: Roles of Parent and Child Behaviors and Parent Adjustment

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The mothers ($n = 120$) and fathers ($n = 85$) of children with conduct problems (ages = 3-8 years) completed two measures of child adjustment (Child Behavior Checklist, Eyberg Child Behavior Inventory), three personal adjustment measures (Beck Depression Inventory, Marital Adjustment Test, Parenting Stress Index), and a Life Experience Survey and were observed at home interacting with their children. In addition, teachers ($n = 107$) completed the Behar Preschool Questionnaire. Fathers' perceptions of their children's behaviors were significantly correlated with teachers' ratings, but mothers' ratings were not. Correlations showed that mothers who were depressed or stressed due to marital problems perceived more child deviant behaviors and interacted with their children with more commands and criticisms. Fathers' perceptions and behaviors were relatively unaffected by personal adjustment measures. Differences in these perceptions and behaviors between mothers and fathers are discussed.

Before young children with behavior problems can receive treatment, they must be identified by at least one of their parents as having severe enough problems to warrant professional attention. However, a number of researchers (Christensen, Phillips, Glasgow, & Johnson, 1983; Forehand, Wells, McMahon, Griest, & Rogers, 1982; Rickard, Forehand, Wells, Griest, & McMahon, 1981) have cautioned clinicians against overreliance on mothers' perceptions of their children's deviant behaviors and have suggested that mothers may inaccurately label their children as deviant due to their own personal adjustment problems, including depression, anxiety, and marital dissatisfaction. Moreover, observational research has suggested that the mothers of clinic-referred children who are distressed either due to depression or marital dissatisfaction may exhibit more commands and may be more negative or hostile in their interactions with their children than nondistressed mothers (Forehand, Lautenschlager, Faust, & Graziano, 1986; Patterson, 1980). Research has also suggested that the clinic-referred children of distressed mothers are much less deviant than the clinic-referred children of nondistressed mothers (Rickard et al., 1981).

But how accurate are fathers' perceptions of their children's

problem behaviors? Are fathers' perceptions and behaviors with their children also affected by personal adjustment problems? Very little research has been conducted with the fathers of conduct-problem children. In one of the few available studies, Schaughency and Lahey (1985) used teacher ratings as the operational criteria for judging the accuracy of parent ratings of child misbehaviors. Their research indicated that fathers' ratings were not correlated with teachers' ratings of the children's externalizing behaviors, whereas mothers' ratings were significantly correlated with teachers' ratings. These results did not support previous findings showing depression to be a significant predictor of mothers' perceptions, and the authors attributed their results in part to their tight control of the experimentwise error rate. They explained that the fathers' lack of accuracy on ratings of their children's misbehaviors may have resulted because fathers usually spend less time interacting with their children than do mothers. It could, however, be argued that the teachers and mothers may have had more similar ratings of children's misbehaviors than fathers not because the mothers' perceptions were more accurate than fathers but rather because the mothers and teachers were more likely to have communicated previously about the children. On the other hand, fathers may provide a different but not inaccurate picture of the problem child's behaviors. Unfortunately, the study did not provide direct observational data of the children's behaviors. To understand the accuracy of parent perceptions and the influence of personal adjustment factors, it is necessary to use parent and child behaviors as operational criteria against which the accuracy of parent reports can be measured.

The present study attempted to determine (a) the relation of parental adjustment measures of such variables as depression, marital satisfaction, parenting stress, and other negative life stressors to mothers' and fathers' perceptions of their children's deviant behaviors; (b) the relation of teachers' independent perceptions of the children's behaviors to mothers' and fathers' perceptions; (c) the relation of mother, father, and teacher percep-

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tions of child behaviors to observed mother, father, and child behaviors; and (d) the relation of parent adjustment measures to observed mother, father, and child behaviors.

Method

Subjects

The subjects consisted of 120 families recruited from the University of Washington School of Nursing Parenting Clinic, which was conducting a research project evaluating treatment programs for conduct-problem children. Criteria for study entry required that (a) the child be between 3 and 8 years old; (b) the child have no debilitating physical impairment, intellectual deficit, or history of psychosis and be receiving no treatment at the time of referral; (c) the primary referral problem be child conduct problems that had been occurring for more than 6 months (e.g., noncompliance, aggression, oppositional behaviors); and (d) the parents rate their child as having a clinically significant number of behavior problems (more than 2 standard deviations above the mean) according to the Eyberg Child Behavior Inventory (ECBI; Eyberg & Ross, 1978).

The families were either self-referred (43%) or professionally referred (57%). Study children included 82 boys and 38 girls, with a mean age of 4 years and 4 months ($SD = 15$ months). Study parents included 120 mothers and 85 fathers. There were 58 boys assessed by the 85 fathers (68.2%) and 82 boys assessed by the 120 mothers (68.3%), indicating that the percentage of boys or girls with mothers or fathers did not differ significantly. The sample was predominantly White (98%) and contained children from all five levels of social class as measured by Hollingshead and Redlich's (1958) Two-Factor Index of Social Position (Class V, $n = 20$; Class IV, $n = 29$; Class III, $n = 32$; Class II, $n = 25$; and Class I, $n = 14$). Fifty percent of the mothers were employed.

Parent Perceptions of Child Adjustment

Child Behavior Checklist (CBCL). The parent form of the CBCL (Achenbach & Edelbrock, 1983) consists of 118 items, each rated on a 0–2-point scale. The items constitute multiple behavior-problem scales derived separately for boys and girls in different age groups. Factor analyses by the authors have shown that the scales form two broad-based groupings in all sex/age groups that assess externalizing behavior (aggressive, antisocial, and undercontrolled) and internalizing behavior (fearful, inhibited, and overcontrolled). The CBCL Hyperactive and Depression subscales were used in this study in addition to the Externalizing and Internalizing scales (reported in raw score form) because of their possible relation to the Fearful and Aggressive subscales of the teacher measure and to the parental depression measure. The authors reported that the CBCL discriminates clinic-referred from nonclinic children. They also reported intraclass correlations of 0.98 for interparent agreement and 0.84 for 1-week test–retest reliability.

Eyberg Child Behavior Inventory (ECBI). The ECBI (Robinson, Eyberg, & Ross, 1980) is a 36-item behavioral inventory of conduct problems for children aged 2–16 years. Previous ECBI research with normative samples of 512 children has demonstrated reliability coefficients from .86 (test–retest) to .98 (internal consistency), indicating that the inventory is stable and homogeneous. There are two scores: A Total Problem score permits the parent to indicate (yes/no) whether this behavior is a problem for her or him, and an Intensity score permits the parent to rate on a scale of 1–7 the frequency of the behavior problem.

Teacher Perceptions of Child Adjustment

The Preschool Behavior Questionnaire (PBQ; Behar, 1977) includes 30 items, each rated on a 0–2-point scale, and is completed by the teach-

ers of children aged 3–7 years. Factor analysis has yielded three subscales in addition to a Total Behavior Problem Score: Hostile-Aggressive, Anxious-Fearful, and Hyperactive-Distractable. The author reported that test–retest reliabilities ranged from .60 to .99 and that an interrater reliability of .84 was derived from the overall scale and of .81, .71, and .67 was derived for the factors. The PBQ was also reported to discriminate normal from disturbed populations.

Social and Environmental Stressors

The Life Experiences Survey (LES; Sarason, Johnson, & Siegel, 1978) is a 57-item measure that permits the respondent to assess positive and negative life experiences over the previous year. In this study, the score related to negative life change was used because it was shown to be more reliable and because the authors reported it to be a better measure of life stress. The authors reported that 5–6 week test–retest reliabilities for the negative score were .56 to .88.

Parent Personal Adjustment

Parenting Stress Index (PSI). The PSI (Abidin, 1983) contains 126 items that are divided into two major domains reflecting stress in the parent–child relationship. The first domain represents child characteristics and includes six subscales that constitute the total child domain score. These subscales are Adaptability, Acceptability, Demandingness, Mood, Distractibility and Activity, and Reinforcement. In general, children who score high (≥ 122) on this domain are not seen as a source of reinforcement for the parent and, in fact, parents may feel rejected by the child. The second domain represents parent characteristics and includes seven subscales that constitute the total parent domain score. These subscales are Depression, Attachment, Restricted Role, Competence, Isolation, Spouse Support, and Health. In general, parents who score high (≥ 153) on this domain suggest stress related to parental functioning. The two scores yield a measure of stress coming from the parent–child system. The PSI was shown by the author to have acceptable content, concurrent, and construct validity. Alpha reliability coefficients were reported to be .95, and test–retest reliabilities ranged from .82 to .71.

Beck Depression Inventory (BDI). The BDI (Beck, 1982) has been shown to correlate significantly with clinicians' ratings of depression and with objective behavioral measures of depression. Split-half reliability tests have achieved a Spearman-Brown reliability coefficient of .93. The BDI continues to be regarded as the best self-report measure of general depression available (Rehm, 1981).

Marital Adjustment Test (MAT). The MAT (Locke & Wallace, 1959) is a self-report measure that assesses the quality of marital satisfaction. It consists of 32 items and has been found to be reliable across time and settings and to discriminate reliably between distressed and nondistressed couples (Kimmel & VanderVeen, 1974; Spanier, 1976).

Home Observations

The Dyadic Parent–Child Interaction Coding System (DPICS; Robinson & Eyberg, 1981) was used to observe each father–child or mother–child interaction. The DPICS consists of 29 behavior categories that are coded each time they occur in a 5-min segment. The scores derived represent the total number of occurrences in a 30-min period for each parent–child dyad. From the parent behavior categories, two separate summary variables were formed: (a) total commands and (b) total critical statements and physical negative behaviors. For the target child, there were two variables: (a) total deviance and (b) noncompliance. The decision to use these summary behaviors was based on previous studies that have shown them to be fairly accurate discriminators of clinic versus nonclinic families (Dumas & Wahler, 1983; Patterson, 1980).

Home observations were made by eight trained observers who were

blind to the hypotheses of the study. Initially, the observers received extensive training and were required to maintain 80% reliability with practice tapes before conducting home observations. It took approximately 4–6 months for observers to become reliable. To maintain accuracy, observers had weekly training sessions and practiced on videotaped interactions. To assess reliability, a second observer was present for at least 40% of all observations. Reliability was calculated in two ways: by the ratio of percent of agreements to total number of agreements and disagreements and by Pearson product-moment correlations between raters for each individual behavior dimension. The percent-agreement reliability was calculated for each 5-min segment and was based only on occurrences of behavior noted (not nonoccurrences). Mean overall interrater agreement was 79% (range = 71–89%), and the product-moment correlations calculated between observers were .97 for total commands, .96 for critical statements, .86 for physical negative behaviors, .95 for total deviance, and .93 for noncompliance.

Procedure

Parents initially came to the clinic for an interview with a therapist and, after they had consented to be part of the study, they completed checklists concerning their perceptions of child behavior, personal adjustment, and behavioral observations. Collaboration about the measures was not permitted in two-parent families. Frequently, parents completed the measures in different rooms in the clinic. For the children who were in daycare or school ($n = 107$), PBQ questionnaires were immediately sent to teachers after the parents' initial intake appointment. The teachers were not told that the children had behavior problems but rather that the parents were participating in a child development study. When necessary, callers reminded teachers to return questionnaires in order to have them back within 2–3 weeks of intake.

Next, each mother-child and father-child interaction was observed in the home for 30 min on 2 evenings during the week (between 4:30–7:30 p.m.). Parents were instructed to maintain their daily routine as much as possible except that they were not to talk to observers, to watch television, or to talk on the telephone. Whether or not the father or mother was observed first was randomly determined. Coders did not indicate to parents who was being observed first. Moreover, they told parents they were primarily interested in observing the children's behaviors. All observational and report data were obtained within a 4-week period of the initial acceptance into the study.

Results

Multivariate analyses of variance (MANOVAs) were first conducted on each of the following sets of measures: mother and father reports of child behaviors (CBCL, ECBI, PSI child domain), mother and father behaviors (total commands, total criticisms, negative behaviors), child behaviors (total deviance, noncompliance), and parent adjustment measures (PSI parent domain, LES, BDI, MAT). When MANOVAs revealed a significant effect, then analyses of variance (ANOVAs) were made between each of the mother and father measures. The degree of agreement among mothers', fathers', and teachers' perceptions of the children's behaviors and the relation of parent adjustment measures to parent perceptions and parent-child behaviors were examined using Pearson product-moment correlations. Correlations and ANOVAs involving father measures and MAT scores were based only on the sample of 85 married parents; correlations involving teachers were based on 107 teachers; the rest of the correlates and analyses were based on 120 families, with the occasional missing data resulting in small differences in the number of subjects for some measures. Be-

cause of the number of comparisons and correlations, the experimentwise error rate was controlled according to Dunn-Bonferroni tables (for each set of measures). Only comparisons or correlations at the .001 level were considered significant. The means and standard deviations for all measures for mothers and fathers are presented in Table 1.

Mother Versus Father Perceptions and Behaviors

Mothers' and fathers' perceptions of child deviance were significantly correlated ($p < .001$) on the CBCL Internalizing, Externalizing, and Depression scales but not on the CBCL Hyperactive scale or on the two ECBI scores. A MANOVA revealed a significant group effect for the set of seven parent-report variables, $F(7, 77) = 3.91, p < .003$. On the ECBI, mothers reported significantly more behavior problems that they were concerned about as well as more frequent occurrences of the problems than their husbands. There was, however, no difference between mothers' and fathers' perceptions of their children's behavior problems on the CBCL scales. According to the child domain score of the PSI, mothers reported significantly more stress related to the difficult temperaments of their children than did fathers. A MANOVA revealed a significant group effect for the set of parent-adjustment variables, $F(4, 75) = 4.77, p < .002$. On the PSI parent domain score, mothers reported significantly more stress related to a low sense of parenting competence and a lack of support from their spouses than did fathers. On the other personal adjustment measures, mothers reported that they were significantly more depressed on the BDI than their husbands. There was no difference in marital satisfaction scores (MAT) or number of negative life events (LES) reported between mothers and fathers. On the behavioral measures, a MANOVA revealed no significant differences between mother-child and father-child behavioral interactions (see Table 1).

Parent Perceptions Versus Teacher Perceptions

Inspection of Table 2 shows that mother reports on the ECBI and the CBCL rarely correlated with teacher reports on the PBQ. Only the mother CBCL Externalizing score significantly correlated with the PBQ Aggressive-Hostile subscale. The two mother ECBI scores did not correlate with any teacher PBQ scales. On the other hand, father reports were significantly ($p < .001$) correlated with many corresponding PBQ scales. The fathers' CBCL Externalizing score significantly correlated with the teachers' PBQ Total Behavior Problem score and the Aggressive-Hostile and Anxious-Fearful subscales, and the fathers' Hyperactivity score significantly correlated with teachers' Total Behavior Problem score and the Aggressive-Hostile and Hyperactive-Distractable subscales. The father ECBI Intensity score was significantly correlated with teacher PBQ Total Behavior Problem score and the Anxious-Fearful subscale.

Parent Perceptions and Measures of Adjustment

As Table 3 indicates, there were significant correlations between mothers' personal adjustment measures and mothers' ratings of the child on the CBCL and ECBI measures. In particular, mother PSI parent domain stress scores were significantly

Table 1
Means and Standard Deviations of Parent Perceptions,
Personal Adjustment Measures, and Parent-Child Behaviors

Measure	Mother (n = 85)		Father (n = 85)		t value
	M	SD	M	SD	
Perceptions of child					
CBCL					
Internalizing scale	18.53	10.2	18.20	10.7	.27
Externalizing scale	28.15	11.6	26.22	10.0	1.67
Hyperactive subscale	5.57	3.5	6.60	2.8	1.54
Depression subscale	8.56	6.7	7.76	4.8	1.20
ECBI					
Total Problem score	21.23	6.3	16.58	7.3	4.99***
Intensity score	156.37	27.5	143.88	24.7	3.74***
PSI					
Child domain score	135.77	17.9	125.63	17.6	4.38***
Adaptability	31.78	6.1	30.73	4.8	1.50
Acceptability	15.86	3.3	15.25	4.1	1.26
Demandingness	28.39	5.1	24.31	4.9	6.27***
Mood	14.47	3.0	13.60	3.2	2.42**
Hyperactivity	31.36	5.3	29.58	4.3	2.46**
Reinforces parent	13.48	3.5	12.04	4.0	2.48**
Personal Adjustment					
PSI					
Parent domain score	141.76	25.1	132.60	21.6	2.90**
Attachment	14.87	3.4	15.81	3.5	1.97*
Depression	23.23	5.7	21.27	5.2	2.59**
Restricted role Sense of competence	20.75	5.3	19.23	4.6	2.08*
Isolation	35.01	7.2	31.53	6.1	3.69***
Relationship with spouse	14.30	4.6	14.87	3.4	1.05
Health	20.22	4.6	18.20	4.2	3.59***
Beck Depression Inventory	13.36	3.9	11.69	2.9	3.08**
Marital Adjustment Test	7.69	5.7	5.22	5.2	3.18***
Negative Life Events	102.83	17.4	104.40	14.9	1.10
Home observations					
Total commands	3.96	3.3	3.15	3.2	2.07*
Total criticisms and physical negatives	23.78	12.3	28.46	19.7	1.88
Total child deviance	13.01	8.7	15.68	12.0	1.73
Total child noncompliance	13.27	11.8	14.67	12.4	1.15
Total child noncompliance	17.70	9.9	21.54	16.7	1.87

Note. PSI = Parenting Stress Index; CBCL = Child Behavior Checklist (raw scores reported); ECBI = Eyberg Child Behavior Inventory. Unadjusted alpha levels are reported in this table. When experimentwise error rate is controlled at the .05 level using the Dunn-Bonferroni procedure, only correlations at .001 levels can be considered significant.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2
Correlations of Teacher Perceptions (PBQ) With Mother
and Father Perceptions on the CBCL and ECBI

Parent perceptions	Behar Teacher Preschool Questionnaire (PBQ)			
	Total Behavior Problems	Hostile-Aggressive	Anxious-Fearful	Hyperactive-Distractible
Mother perceptions of child				
CBCL				
Internalizing scale	.00	.01	.18	.11
Externalizing scale	.25*	.29**	.18	.13
Hyperactivity subscale	.06	.05	.01	.15
Depression subscale	.07	.07	.19	.04
ECBI				
Total Problem score	.10	.07	.02	.14
Intensity score	.09	.06	.05	.06
Father perceptions of child				
CBCL				
Internalizing scale	.09	.01	.30*	.04
Externalizing scale	.47**	.39**	.41**	.23
Hyperactivity subscale	.56**	.43**	.31*	.54**
Depression subscale	.06	.01	.27*	.10
ECBI				
Total Problem score	.30*	.28*	.30*	.14
Intensity score	.39**	.28*	.35**	.29*

Note. CBCL = Child Behavior Checklist; ECBI = Eyberg Child Behavior Inventory. When the experimentwise error rate is controlled at .05, only correlations at .001 levels can be considered significant. The sample size for correlations was based on 107 teachers and mothers and 79 teachers and fathers. Raw scores were used on the CBCL.
* $p < .01$. ** $p < .001$.

correlated with the CBCL Internalizing, Externalizing, and Hyperactivity scores as well as the two ECBI scores. Mother BDI scores were significantly correlated with all four CBCL scores, and mother negative LES scores were correlated with the CBCL Externalizing and Depression scores as well as with the ECBI Intensity score. Mother marital scores were correlated with the CBCL Hyperactivity score. On the other hand, there were only one significant correlation between fathers' personal adjustment measures and fathers' ratings on the CBCL and ECBI. Only the fathers' PSI parent domain score was significantly correlated with their perceptions of child depression on the CBCL.

Parent Perceptions, Personal Adjustment Measures, and Parent-Child Interactions

As Table 4 indicates, there were no significant correlations between mother and father reports of child deviance and observable child deviance. However, there were significant positive correlations between mother perceptions of child deviance and mother behaviors. Mothers who reported their children as more deviant on the CBCL exhibited significantly more critical and physically negative behaviors. On the other hand, there were no significant correlations between father perceptions of their children's problem behaviors and their parenting behaviors.

Table 3
Correlations Between Parent Perceptions of Child and Measures of Adjustment

Parent perceptions	Child perceptions with:			
	PSI Parent Domain	Parent BDI	Parent MAT	Parent LES
Mother perceptions of child				
CBCL				
Internalizing scale	.34**	.40**	-.29*	.26*
Externalizing scale	.37**	.37**	-.26*	.36**
Hyperactivity subscale	.60**	.45**	-.40*	.07
Depression subscale	.22*	.31**	-.25*	.29**
ECBI				
Total Problem score	.29**	.17	-.23*	.22*
Intensity score	.30**	.24*	-.17	.28**
Father perceptions of child				
CBCL				
Internalizing scale	.28*	.09	-.28*	.11
Externalizing scale	.22	-.02	-.07	.06
Hyperactivity subscale	.17	-.11	.21	-.10
Depression subscale	.35**	.16	-.25*	.14
ECBI				
Total Problem score	.31*	.001	-.09	.12
Intensity score	.15	-.08	-.04	.10

Note. MAT = Marital Adjustment Test; BDI = Beck Depression Inventory; LES = Negative Life Events Scale; PSI = Parenting Stress Index; CBCL = Child Behavior Checklist (raw scores); ECBI = Eyberg Child Behavior Inventory. Unadjusted alpha levels are reported in this table. When the experimentwise error rate is controlled at the .05 level using the Dunn-Bonferroni procedure, only correlations at .001 level can be considered significant. The sample size for MAT scores was based on 91 mothers and 81 fathers and for the remainder of the measures was based on 120 mothers and 85 fathers.
* $p < .01$. ** $p < .001$.

As Table 4 indicates, there were significant correlations between mother adjustment measures and mother behaviors. Low mother marital satisfaction was significantly correlated with a high number of mother commands with children. High mother negative life events were significantly correlated with a high number of mother criticisms and physically negative behaviors with their children. For the fathers, there were no significant correlations between personal adjustment measures and father behaviors. However, there were a few trends that occurred in the reverse direction of that for mothers. Low father marital satisfaction and high PSI parent stress were correlated ($p < .01$) with low parent commands.

Discussion

In general, these results support previous findings that mothers' perceptions of their children's deviant behaviors are significantly influenced by personal adjustment measures and, in particular, by maternal depression (Brody & Forehand, 1986; Christensen et al., 1983). In fact, maternal depression was found to be a better predictor of maternal reports of children's

deviant behaviors than teacher's independent reports of child deviance. There were very few correlations between mother and teacher reports. On the other hand, fathers' reports were com-

Table 4
Correlations of Parent Perceptions and Adjustment Measures With Parent and Child Behaviors

Parent perceptions	Home observations			
	Total parent commands	Total criticism and physical negatives	Child deviance	Noncompliance
Mother Perceptions of Child				
CBCL Internalizing scale	.12	.34***	.003	.09
CBCL Externalizing scale	.09	.28***	.050	.11
CBCL Hyperactivity subscale	.24*	.29**	.130	.25*
CBCL Depression subscale	.12	.34***	.020	.11
ECBI Total Problem score	.06	.20**	.22**	.05
ECBI Intensity score	.03	.24**	.18*	.005
Father perceptions of child				
CBCL Internalizing scale	-.11	.06	.070	.15
CBCL Externalizing scale	-.12	.08	.030	.18
CBCL Hyperactivity subscale	-.14	.07	.060	.11
CBCL Depression subscale	-.15	.09	.150	.20
ECBI Total Problem score	-.08	.09	.05	.07
ECBI Intensity score	.03	.09	.13	.06
Mother Personal Adjustment				
PSI Parent domain	.14*	.15*	-.06	.12
Beck Depression Inventory	.07	.27**	.01	.06
Marital Adjustment Test	-.33***	-.26**	-.16	.30**
Negative Life Events	.02	.32***	.16*	.06
Father Personal Adjustment				
PSI Parent domain	-.24**	-.08	-.01	-.23**
Beck Depression Inventory	.01	.01	.07	-.20
Marital Adjustment Test	.24**	.03	-.02	.22*
Negative Life Events	-.03	-.03	.13	-.05

Note. PSI = Parenting Stress Index; CBCL = Child Behavior Checklist; ECBI = Eyberg Child Behavior Inventory. The sample size for MAT scores was based on 89 mothers and 78 fathers and for the remainder of the measures was based on 117-120 mothers and 82-85 fathers. Unadjusted alpha levels are reported in this table. When the experimentwise error rate is controlled at the .05 level using the Dunn-Bonferroni procedure, only correlations at .001 can be considered significant.
* $p < .05$. ** $p < .01$. *** $p < .001$.

paratively less influenced by personal adjustment measures, and there were significant correlations between father and teacher reports of children's behaviors, particularly for externalizing child behaviors. These findings contradict and fail to replicate a prior study (Schaughency & Lahey, 1985) that found teacher reports to be a better predictor of mothers' reports of child deviance than maternal depression and that also found no correlations between father and teacher reports.

The behavioral observations of parent-child interactions provided some important new information about the effect of personal adjustment measures on parental perceptions and behaviors. Mothers' reports of child behavior problems were positively correlated with home observations of mothers' critical or physically negative behaviors. Mothers' reports of low marital satisfaction and high negative life stressors were correlated with home observations of mothers' total commands in addition to critical or physically negative behaviors. These findings support earlier research comparing distressed and nondistressed mothers' interactions with their children (Forehand et al., 1986). However, there were no significant correlations between fathers' perceptions of deviant child behaviors and father behaviors. Moreover, there were no significant correlations between fathers' personal adjustment measures and father behaviors with children. The model that was proposed by Lahey, Conger, Atkeson, and Treiber (1984) suggested that mothers who are depressed or distressed may have a lower threshold for child misbehavior, which may cause them to respond more negatively and to see their children as more deviant. On the other hand, these data seem to suggest that fathers may cope with stress and child problems differently than mothers.

The data comparing mothers' and fathers' perceptions of their children's misbehaviors, personal adjustment measures, and behavioral interactions with their children also present some interesting differences between mothers and fathers. On the CBCL, no significant differences occurred between mothers' and fathers' reports, whereas on the ECBI, significant differences occurred on both scores. The difference between these two measures is that the ECBI Intensity score reports the intensity of a behavior problem on a 7-point scale, and the Problem score indicates whether or not the parent sees the problem as a source of concern. The CBCL does not ask for a statement of whether the parent perceives the behavior as a problem and only includes a 3-point scale. The significant difference between mothers' and fathers' ECBI scores indicates that mothers see their children's behavior problems as occurring more frequently than do fathers and are more likely to perceive them as a problem for themselves. The significant differences between the mothers' and fathers' PSI parent and child domain scores may reflect the same differences in perceptions. The higher PSI child domain score indicates that mothers perceive their children as more difficult temperamentally, and the higher PSI parent domain score indicates that mothers perceive themselves as more incompetent as parents than fathers. These data suggest that mothers may absorb more of the stress or guilt related to the child's misbehaviors and to their own parenting role regarding the child than do fathers.

Nonetheless, despite the significant differences between mothers and fathers in their perceptions of their children's deviant behaviors and on the personal adjustment measures, there

were no significant differences between mother and father behaviors in the ways they interacted with their children. Patterson (1980) previously reported that mothers are more involved, more aversive, issue more commands, and are more likely to be attacked by child deviant behaviors than fathers. However, this study, which used a much larger sample, did not indicate these differences between mothers' and fathers' behaviors with their children. In fact, fathers exhibited somewhat ($p < .05$) more commands when interacting with their children than mothers. Perhaps these data reflect a generational change in the role of fathers in the family.

There are several limitations of the study that should be noted. First, the CBCL subscales do overlap on a few behavioral items. This nonindependence of the CBCL scales should contribute to the consistency of correlations found with all four CBCL scales. However, the use of the separate subscales as opposed to only the CBCL Total Problem score revealed that fathers and teachers were significantly more reliable with each other in reporting child externalizing behaviors than internalizing behaviors. The data also revealed that mothers' perceptions of both externalizing and internalizing child behaviors were affected by personal adjustment measures. Second, the study may be limited by the decision in this study to pool the data for girls and boys. This decision was made because the percentage of boys and girls reported on by mothers and fathers was nearly identical and because there was a large number of correlations and a relatively small sample of girls. Future research could examine parent perceptions, behaviors, and adjustment measures by the sex of the child and the parent.

These data reveal a need for obtaining father perceptions of children's behaviors, not only because they correlate well with teacher reports but also because they appear to be relatively less contaminated by personal adjustment measures. The present study also indicates the need for continuing research on the factors involved in both mothers' and fathers' perceptions and parenting behaviors with conduct-problem children. For example, we need to understand how fathers respond to their wives' increased stress levels, depression, feelings of low parenting competence and lack of spouse support, and negative perceptions of their children. Do they withdraw from their wives, leaving them to feel more unsupported? Do they attempt to control more of the parenting? Or do they blame the mothers? Unfortunately, most of our past research has focused solely on mothers' reports and parenting behaviors with conduct-problem children and, furthermore, has continued to place the burden of responsibility for parenting on mothers' shoulders by primarily treating mothers in parent training programs. Only by involving fathers in treatment and by understanding their perspectives, behaviors, and approaches to conduct-problem children can we hope to provide long-term support for the families of these children.

References

- Abidin, R. R. (1983). *Parenting Stress Index—Manual*. Charlottesville, VA: Pediatric Psychology Press.
- Achenbach, T. M., & Edelbrock, C. S. (1983). *Manual for the Child Behavior Checklist and Revised Child Behavior Profile*. Burlington, VT: University Associates in Psychiatry.
- Beck, A. T. (1982). *Depression: Causes and treatment*. Ann Arbor, MI: University of Michigan Press.

- Behar, L. (1977). The preschool behavior questionnaire. *Journal of Abnormal Child Psychology*, 5, 265-275.
- Brody, G. H., & Forehand, R. (1986). Maternal perceptions of child maladjustment as a function of the combined influence of child behavior and maternal depression. *Journal of Consulting and Clinical Psychology*, 54, 237-240.
- Christensen, A., Phillips, S., Glasgow, R. E., & Johnson, S. M. (1983). Parental characteristics and interactional dysfunction in families with child behavior problems: A preliminary investigation. *Journal of Abnormal Child Psychology*, 11, 153-166.
- Dumas, J. E., & Wahler, R. G. (1983). Predictors of treatment outcome in parent training: Mother insularity and socioeconomic disadvantage. *Behavioral Assessment*, 5, 301-313.
- Eyberg, S. M., & Ross, A. W. (1978). Assessment of child behavior problems: The validation of a new inventory. *Journal of Clinical Child Psychology*, 7, 113-116.
- Forehand, R., Lautenschlager, G. J., Faust, J., & Graziano, W. G. (1986). Parent perceptions and parent-child interactions in clinic-referred children: A preliminary investigation of the effects of maternal depressive moods. *Behavior Research and Therapy*, 24, 73-75.
- Forehand, R., Wells, K. C., McMahon, R. J., Griest, D. C., & Rogers, T. (1982). Maternal perception of maladjustment in clinic-referred children: An extension of earlier research. *Journal of Behavioral Assessment*, 4, 145-151.
- Hollingshead, A., & Redlich, F. (1958). *Social class and mental illness*. New York: Wiley.
- Kimmel, D., & VanderVeen, F. (1974). Factors of marital adjustment in Locke's Marital Adjustment Test. *Journal of Marriage and the Family*, 36, 57-63.
- Lahey, B. B., Conger, R. D., Atkeson, B. M., & Treiber, F. A. (1984). Parenting behavior and emotional status of physically abusive mothers. *Journal of Consulting and Clinical Psychology*, 52, 1062-1071.
- Locke, H. J., & Wallace, K. M. (1959). Short marital adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living*, 21, 251-255.
- Patterson, G. R. (1980). Mothers: The unacknowledged victims. *Monographs of the Society for Research in Child Development*, 45 (5, Serial No. 186).
- Rehm, L. P. (1981). Self-report depression scales. In M. Hersen & A. S. Bellach (Eds.), *Behavioral assessment: A practical handbook* (2nd ed., pp. 246-295). Oxford, England: Pergamon Press.
- Rickard, K. M., Forehand, R., Wells, K. C., Griest, D. L., & McMahon, R. J. (1981). Factors in referral of children for behavioral treatment: A comparison of mothers of clinic-referred deviant, clinic-referred nondeviant and nonclinic children. *Behavior Research and Therapy*, 19, 201-205.
- Robinson, E. A., & Eyberg, S. M. (1981). The dyadic parent-child interaction coding system: Standardization and validation. *Journal of Consulting and Clinical Psychology*, 49, 245-250.
- Robinson, E. A., Eyberg, S. M., & Ross, A. W. (1980). The standardization of an inventory of child conduct problem behaviors. *Journal of Clinical Child Psychology*, 9, 22-28.
- Sarason, I. G., Johnson, J. H., & Siegel, J. M. (1978). Assessing the impact of life changes: Development of the life experiences survey. *Journal of Consulting and Clinical Psychology*, 46, 932-946.
- Schaughency, E. A., & Lahey, B. B. (1985). Mothers' and fathers' perceptions of child deviance: Roles of child behavior, parental depression, and marital satisfaction. *Journal of Consulting and Clinical Psychology*, 53, 718-723.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 38, 15-28.

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