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Parenting Stress in Families with Children with Disabilities

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Abstract

Parenting stress is an important variable to consider in families with children with disabilities. This study evaluated 880 such families, using measures of child and family functioning. Results suggest that factors such as income, time available for interaction with the child, and social support predict parenting stress much better than do aspects of child functioning.

Parenting Stress in Families with Children with Disabilities

Parenting stress is an important variable to consider when providing services for children or for their families. This variable has been associated with low parenting satisfaction, higher symptomatology (*Koeske & Koeske, 1990*), abusive behaviors (*Kelly, 1998; Rodriguiz & Green, 1997; Whipple & Webster-Stratton, 1991*), and insecure child attachment (*Hadidian & Merbian, 1996; Jarvis & Creasey, 1991*). Indeed, some authors argue that in order for many families to carry out prescribed treatments for their children, professionals must first assist parents in managing their stress levels (*Dunst, Leet, & Trivette, 1988; McDowell, Saylor, Taylor, Boyce, & Stokes, 1995*).

Parenting stress is a particularly salient variable when working with families who have children with developmental disabilities (*Dyson, 1997*). Multiple demands on family resources are prevalent in such families, and stress levels tend to be elevated (*Beresford, 1994; Tunali & Power, 1993*) and adversely affect perceptions of family functioning (*Dyson, 1997*).

Furthermore, families with children who have developmental disabilities must be considered as being at particular risk for problematic parent-child relationships that can interfere with child development and needed interventions (*McKay, Pickens & Stewart, 1996*).

Although past research has identified that parents of children with disabilities do experience high levels of stress, it is unclear to what degree this stress is related to family functioning variables, such as social support and financial resources, as well as to the severity of the child's disability (*Feldman, Leger, & Walton-Allen, 1997; Innocenti, Huh, & Boyce, 1992; Rodriguiz & Murphy, 1997*). Information about the relative impact of family resources and the child's level of developmental impairment on parenting stress would not only help in identifying

which parents are more at-risk for adverse symptomatology, but it would also help in designing more effective interventions by targeting the variables that are most related to parenting stress.

The present study was conducted to determine the relative weight of both family and child functioning variables in predicting parenting stress.

Method

Participants

A total of 880 parents who had a child who was moderately to severely developmentally delayed were recruited from among those participating in a larger longitudinal study investigating 16 early intervention sites across the nation (*see Casto & White, 1993*). The overall developmental quotient for the sample of children was 65.4 ($SD = 19.3$), as measured by the Battelle Developmental Inventory (BDI), for which the normative mean is 100 ($SD = 15$) (*Newborg, Stock, Wnek, Guidubaldi, & Svinicki, 1984*). The children were 59% male; 78% were Caucasian, 16% were African American, 2% were of Hispanic origin, 2% were Native American, 1% were Asian American, and 2% were of other ethnic backgrounds. Their average age was 2 years and 11 months ($SD = 19$ months).

At the time of the assessment, the parents' average age was 32 years ($SD = 7$). Of the parents, 16% had not graduated from high school; 39% had a high school diploma; 24% had some college education; and 20% had graduated from college. Regarding marital status, 76% were married, 12% were separated or divorced, and 12% were single. Of the 63% of mothers not working outside the home, 74% were married; 11% of fathers reported not working outside the home. The socioeconomic background of the participants ranged from below the poverty line to the upper middle class, with the average family being lower middle class.

Instruments

The instrument used to measure parenting stress was the Parenting Stress Index/Short Form (PSI/SF) (*Abidin, 1990a*). The PSI/SF is a condensed version of the original Parenting Stress Index (*Abidin, 1990b*), and it provides a total score and three subscale scores: (1) Parental Distress (PD), (2) Parent-Child Dysfunctional Relationship (P-CDR), and (3) Difficult Child (DC). Item content reflects general emotional distress and dissatisfaction in the parenting role (PD), dissatisfaction with parent-child interactions (P-CDI), and problematic child behaviors or demands (DC). In past research, the Parenting Stress Index has effectively discriminated parental stress between families of children with and without disabilities (*Stolis, 1990*).

Child functioning was assessed by the total score and the five subscale scores of the BDI: personal/social, adaptive behavior, motor, communication, and cognitive development. The factor structure of the BDI has been found to remain stable over time, and it correlates highly with other developmental inventories (*Snyder, Lawson, Thompson, Stricklin, & Sexton, 1993*).

Measures of family functioning included the Family Support Scale (FSS) (*Dunst, Jenkins, & Trivette, 1985*), an 18-item questionnaire assessing the perceived support from family, friends, social groups, and professional services; the Family Resource Scale (FRS) (*Dunst & Leet, 1985*), a 30-item questionnaire measuring the amount of time and financial resources available for the family; and the Family Inventory of Life Events and Changes (FILE) (*McCubbin, Patterson, & Wilson, 1983*), a survey that evaluates the presence or absence of 71 life-straining events within the past year.

Results

Because of the range of family socioeconomic backgrounds present in this sample,

exploratory analyses were first conducted to verify if relevant variables unduly influenced the results of the study. Analyses of variance (ANOVAs) conducted with the parents' marital status and occupational level failed to reveal any statistically significant differences on either the PSI/SF or the BDI. No significant correlation between the BDI and family annual income and educational level of the parent was found. However, both family annual income and educational level of the parent were mildly correlated with the PSI/SF ($r = -.14$ and $-.13$, respectively; $p < .05$). Therefore, the effect of these two variables was controlled for in the statistical analyses that follow.

To evaluate the relationships between parenting stress and family and child functioning, partial correlations were computed, controlling for family income and parent education. Measures of family functioning (FRS, FSS, & FILE) all correlated significantly (average $r = .31$) with the total PSI/SF score and with the three subscales (see Table 1). Aspects of child functioning (BDI subscales) also significantly correlated (average $r = .21$) with the total PSI/SF score, but correlations of the BDI with the Parental Distress subscale were of much lower magnitude and were generally not statistically significant (see Table 1).

Partial correlations were also calculated to evaluate the relationship between family functioning factors (i.e., FRS, FSS, & FILE) and each BDI subscale. The FRS was found to be mildly positively related to child personal/social functioning ($r = .10$, $p < .05$) and to child communication ($r = .11$, $p < .05$). No other statistically significant correlations were found between the measures of family and child functioning.

Regression models were computed to assess the relative weight of family and child functioning variables in predicting the total PSI/SF score. Because the FRS, FSS, and FILE had

higher correlation coefficients with the total PSI/SF score than did the BDI (see Table 1), the first model regressed parenting stress on these three measures of family functioning. This model had an R^2 value of .219, $p < .001$ (see Table 2). When child functioning, as measured by the total BDI score, was entered in the regression model, the resulting R^2 value increased to .258, $p < .001$ (see Table 2). The resulting increase of .039 in R^2 was statistically significant ($p < .001$). In a final step, annual family income and parent educational level were entered to control for the potential effects of these variables. These variables were entered last because the magnitude of their correlations with the PSI/SF had been found to be lower than those of the two previous sets of variables. The resulting change of .001 in R^2 was not statistically significant ($p = .94$). An analysis of the associated standardized beta weights indicated that family resources ($b = -.261$) had the largest impact in predicting overall parenting stress. Child functioning ($b = -.198$) was slightly more predictive of parenting stress than were family social support ($b = -.185$) and stressful life events ($b = .185$).

Because the previous regression model only considered the total BDI score, a separate regression was conducted using each of the five BDI subscales (see Table 3). Overall, the amount of variance in parenting stress explained by child development was much lower than the amount explained by family functioning variables (see Table 2). Importantly, the results also showed that of the five aspects of child functioning assessed, only personal/social development was found to be a significant predictor of overall parental stress.

Discussion

Based on the above results, the following conclusions were reached: (1) although both family functioning and the severity of the child's disability were found to be related to overall

parenting stress, family functioning variables were generally stronger predictors of overall parenting stress; (2) of the family functioning variables assessed, family resources tended to predict overall parenting stress somewhat better than did perceived family support or actual stressful life events; (3) the severity of the child's disability had minimal impact on parental distress per se, but it had a notable impact on stress related to the parent-child relationship; and (4) the child's social skills were a stronger predictor of parenting stress than were their motor, communicative, adaptive behavior, or cognitive abilities.

The current findings confirm other studies (*e.g., Boyce, Behl, Mortensen, & Akers, 1991; Dunst et al., 1988; McDowell et al., 1995*) that emphasize the need to consider the parents' level of stress when designing a therapeutic intervention for children. In addition, this study also suggests that addressing family functioning factors is particularly important in making appropriate treatment recommendations. Child treatment programs would appear likely to benefit when parent training on effective utilization of existing financial resources and time is part of the overall treatment plan. Professionals should also evaluate parents' knowledge of and access to available supports and respite services to ensure that parents receive needed time for themselves and for other day-to-day responsibilities. Moreover, because many of those families of children with developmental disabilities that are experiencing significantly elevated stress levels lack adequate income or access to necessary resources (*Gallagher, Beckman, & Cross, 1983*), the results of this research indirectly support the need for outreach programs and financial assistance. Such services may be particularly helpful for families dealing with the financial burdens caused by frequent hospitalizations, medical complications, and utilization of other health services (*Hanson & Hanline, 1990*) needed for children with disabilities. Political

advocacy may be required to facilitate funding for programs addressing family resources once future studies confirm that those programs are more effective than traditional, child-focused services.

While child developmental delays in adaptive behavior, cognition, communication, and motor skills were not significant predictors of parental stress, delays in personal/social skills were found to be significant. Thus practitioners are likely to enhance treatment quality by collaborating with parents on specific strategies to facilitate child social behavior. Such practice may enable parents to interact with their child more effectively and help parents to establish more manageable daily routines for their child.

It should be noted that despite the large national sample used in this study, there are limitations to the generalizability of the results. First, three-fourths of the parents were Caucasian, and the results may not accurately represent parenting stress in other populations. Second, two-thirds of the mothers surveyed reported not working outside of the home. Although no significant differences in parenting stress were found across the mothers' occupational status in this sample, the overall results may not adequately represent the experiences of mothers who carry the responsibilities of both working full-time and caring for a child with disabilities. Finally, the children in this sample were, on average, about three years old, and different patterns of stress appear to be experienced by parents of older children with developmental disabilities (*Orr, Cameron, Dobson, & Day, 1993*).

As a whole, the results of this study imply that interventions or counseling strategies for families of children with disabilities should consider multiple aspects of family functioning. Helping families receive the necessary training to manage existing resources or to acquire needed

resources should be considered if family-focused interventions are expected to yield greater benefits than traditional child-oriented approaches. Given the results of this study, future research would do well to investigate longitudinal parenting stress in families of children with developmental disabilities. Follow-up studies that emphasize the effects of differential utilization of family resources and the effects of children's social skills on parenting stress are particularly warranted.

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Table 1.

Partial Correlations of Child and Family Factors with Parental Stress

	Parenting Stress Index/Short Form			
	PD	P-CDR	DC	Total
<i>Child Functioning</i>				
BDI Subscales				
Personal/Social	-.07	-.30**	-.23**	-.24**
Adaptive Behavior	-.06	-.31**	-.19**	-.22**
Motor	.07	-.26**	-.14*	-.19**
Communication	-.05	-.26**	-.16**	-.19**
Cognitive	-.09*	-.26**	-.12*	-.19**
<i>Family Functioning</i>				
Family Support (FSS)	-.26**	-.18**	-.18**	-.26**
Family Resources (FRS)	-.45**	-.22**	-.23**	-.38**
Life Events (FILE)	.38**	.14**	.17**	.29**

Note. The effects of family annual income and parent educational level were controlled in these analyses. PD = Parental Distress, P-CDR = Parent-Child Dysfunctional Relationship, DC = Difficult Child. * $p < .05$, ** $p < .01$.

Table 2.

Summary of Hierarchical Regression Models Predicting Overall Parental Stress

Variable	<i>B</i>	<i>SE B</i>	β
Step 1			
FSS	-.295	.058	-.187***
FRS	-.263	.038	-.276***
FILE	.474	.098	.182***
Step 2			
FSS	-.293	.057	-.186***
FRS	-.249	.037	-.261***
FILE	.479	.095	.184***
BDI	-.121	.021	-.199***
Step 3			
FSS	-.291	.057	-.185***
FRS	-.249	.039	-.261***
FILE	.482	.096	.185***
BDI	-.120	.021	-.198***
Income	<.001	<.001	.008
Education	-.123	.336	-.015

Note. $R^2 = .219$ for step 1; $\Delta R^2 = .039$ for step 2 ($p < .001$); $\Delta R^2 = .001$ for step 3 ($p = .94$).

FSS = Family Support Scale; FRS = Family Resource Scale; FILE = Family Inventory of Life Events and Changes; BDI = Battelle Developmental Inventory Total Score. *** $p < .001$.

Table 3.

Simultaneous Regression of Parental Stress from BDI Subscales Predicting Overall Parental Stress

Variable	<i>B</i>	<i>SE B</i>	β
Personal/Social	-.075	.028	-.156**
Adaptive Behavior	-.033	.028	-.066
Motor	.014	.032	.024
Communication	-.001	.030	-.010
Cognitive	-.051	.028	-.095

Note. $R^2 = .068$. ** $p < .01$.