Family Adjustment to Childhood Developmental Disability: A Measure of Parent Appraisal of Family Impacts

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Objective: To develop the Family Impact of Childhood Disability Scale (FICD) to assess subjective interpretation or “primary appraisal” of parents regarding the impact of a child with developmental disabilities on the family.

Method: A random sample of 87 families was assessed while children with developmental disabilities were in the preschool years. After 7 years had elapsed, 64 of these families were interviewed again when the children were in the preteen years. A set of standardized self-report measures provided mother and father views of child, parent, and family functioning.

Results: The FICD demonstrated adequate internal consistency, with some evidence of discriminant and predictive validity. The FICD total score, based on the discrepancy between positive and negative subscale scores, was found to be a significant predictor of future parenting stress of mothers and of fathers, even when controlling for other important explanatory variables such as marital adjustment and level of disability in a child.

Conclusions: The 15-item FICD offers a brief assessment of both positive and negative parent appraisals, with a total discrepancy score that predicts long-term parenting stress.

Key words: developmental disability; parent stress; cognitive appraisal; measurement.
ily crisis (McCubbin & Patterson, 1983). If the subjective interpretation of the event is such that the event represents little threat or danger, then the occurrence of that event will not constitute a crisis for the person or family appraising that event. Lazarus, Averill, and Opton (1974) consider the subjective interpretation of the situation, or in their terms “the cognitive appraisal,” to be the interaction of situational and personality variables and a key element in understanding the coping process. Coping is generally defined as the cognitive and behavioral efforts made to ameliorate demands that tax or overwhelm a person’s resources (Cohen & Lazarus, 1979; Pearlin & Schooler, 1978). Coping can be seen as the role the individual or social system plays in utilizing physical, social, and psychological resources to manage a stressful situation in the environment (Kessler, Price, & Wortman, 1985). Reiss and Oliveri (1980) question whether subjective interpretation of a life event can be regarded as occurring conceptually and temporally prior to the formation of a family’s coping responses. They view the process as a dynamic one in which subjective interpretation and coping are intertwined and may shift as the family responds to stress and seeks to achieve stability.

Brinchmann (1999) and Larson (1998) confirm the importance of assessing familial stress in situations of childhood developmental disability. They note that assessment of parenting stress is important not only to assist mothers and fathers with their own psychological distress but also to guide the provision of needed psychosocial, educational, and health services that can strengthen family coping and positive adjustment. They suggest that the reduction of parenting stress is paramount in the enhancement of a child’s family life and in the child’s ultimate integration within society.

Donenberg and Baker (1993) contend that most investigations to date, which have attempted to assess family impact of childhood disability, have tended to focus on “levels of stress, feelings of competence in parenting, or mother-child interactions” (p. 180). They suggest that these studies did not directly ask parents about the effects of the child with disability on family life. Further, Donenberg and Baker note that an important difference exists between stress levels due to childhood disability and perceived family impact, for not all potential stressors will result in negative family impact. They assert that “stress has a negative connotation, whereas impact can be both positive and negative” (p. 181). This is consistent with the work of Larson (1998), who describes the tension within parents because of contradictory emotions and beliefs about the disability. Consideration of perceived positive impacts may be of particular relevance to understanding the levels of stress these parents experienced. Tennen and Affleck (1999) underscore the importance of attending to the role of finding benefit in adapting to challenging circumstances. Folkman and Moskowitz (2000) have suggested that the positive appraisal of the efforts involved in caregiving may be especially important in helping people sustain such efforts over long periods.

This study focuses on parental primary appraisal of the impact of childhood disability on positive and negative elements of functioning in the family system. We based the development of a measure of primary appraisal on Lazarus and Folkman’s (1984) definition of primary appraisal as the initial determination of whether an event is stressful, and, if so, whether it is harmful, inconsequential, or benign-positive. Of central interest in this study is the design and evaluation of a brief measure of parents’ primary appraisal of the entry of their child with disability into the family system and its impact on the family as an entity. That is, this measure focuses specifically on the family rather than on the parental subsystem or on the child in his or her social world. With this tight focus on family impact, our measure differs from other similar scales presently available (e.g., Donenberg & Baker, 1993). Our intent here is to evaluate the predictive power of our measure, the Family Impact of Childhood Disability Scale (FICD), to determine its utility as an assessment tool that may identify mothers and fathers who will be most at risk for long-term parenting stress.

**Method**

**Participants and Procedures**

This is a longitudinal family survey in which parents were first interviewed in their homes in 1987 when their children were 5 years old on average (T1), and then again in 1994, when children were 12 years of age on average (T2). At T1, a sampling frame was created with the aid of Children’s Special Services, Department of Family Services of the Province of Manitoba in Canada, of all families in the City of Winnipeg that had preschool children with developmental disabilities. This sampling frame contained 253 children. A random sample of half of
the children was selected for study, yielding a sample of 127 households. The eligible sample was reduced by 25 households (6 did not speak English, 6 did not meet study criteria). There were five interview refusals. The final sample of 88 households represents a completion rate of 86% of eligible research households. In two-parent families, both parents were involved in the interview process that, on average, lasted 2 hours. All interviews were completed in the family home and, when necessary, babysitting services were provided so that both parents could participate. At T2, parents were contacted again with the following attrition: 11 families could not be located, 8 families were no longer appropriate for study (e.g., parent or child died), and 5 families refused the interview (yielding a 93% response rate of eligible families). This left a final T2 cohort of 64 families.

**The Children.** At T1 the cohort of children included in our study had an average age of 5 years ($SD = 2$ years). The sex distribution was 62% male and 38% female. This is consistent with the gender distribution of disabled children in the study’s geographic locale. On average, the study families contained two children. Thirty-two percent of the children were the only child in a family, 33% were from two-child families, and 45% were from families with three or more children. Forty-seven percent of the children had multiple handicaps in which there was a primary diagnosis of developmental delay, but also additional incapacitation such as a hearing or visual impairment. Twenty-four percent of these children also had serious physical disabilities to the extent that they would need constant assistance over the course of their lives to do everyday activities like eating, bathing, and toileting. Twenty-nine percent were children with Down syndrome.

**The Parents.** These were largely two-parent households, with 17% ($n = 15$) single-parent families, and 7% ($n = 5$) remarried families. Ninety-four percent ($n = 83$) of the parents were Caucasian. The average age of mothers in the study was 33 years ($SD = 6$ years). Twenty-one percent had some high school education, 60% had finished high school, 25% had some training beyond high school, and 15% had a university degree. Half the mothers remained at home as full-time homemakers, 24% worked part-time outside the home, and 26% had full-time employment. Twenty-three percent of the mothers had given up paid jobs, and 41% had declined paid jobs to care for their children with disabilities. Fathers in the study had an average age of 36 years ($SD = 7$ years). Forty-nine percent had finished high school, 29% had some training beyond high school, and 19% had a university degree. Eighty-five percent of the fathers were employed full time and 7% were unemployed at the time of the survey. Four percent of the fathers had left a paid job, and 6% had refused a job transfer because of the needs of their child. Eight percent of the fathers had purposely reduced employment hours to help care for their youngster. Sixteen percent of the households had a total annual family income of less than $20,000, and 11% reported total incomes over $50,000. When compared with the 1986 Winnipeg Survey (Currie, 1986), income of research families appeared to be equivalent to the distribution of family incomes in the city. There was a slight overrepresentation of families within the $40,000–$50,000 income bracket in the sample.

Although a 7-year period had elapsed between the first and second wave of interviews, and the overall sample size was reduced by 24 families, the overall characteristics of the study cohort remained the same. Comparisons between households that participated at T1 and T2 showed no significant differences in FICD score at T1 or in key sociodemographic variables (i.e., sex of child, disability level of child, mother or father education, size of family, or family income level). The only important difference was in the number of single-parent households. At T1, when children were on average 5 years of age, there were 17% single parents. At T2, when children were on average 12 years of age, there were 36% single-parent households.

**Measures**

Several standardized scales were employed that were compatible with previous stress research (e.g., Pearlin, Menaghan, Lieberman, & Mullan, 1981) and that allowed comparisons to be made with normative scale scores:

- **Parenting Stress Index-Short Form (PSI-SF).** The PSI-SF (Abidin, 1995) is a 36-item short form of the Parenting Stress Index and is composed of three subscales: Parental Distress, Parent-Child Dysfunctional Interaction, and Difficult Child. The Total Stress score on the short-form has a .94 correlation with the Total Stress score of the full-length PSI, an alpha of .91, and a test-retest reliability coefficient of .84 over a 6-month retest interval (Abidin, 1995).

- **Dyadic Adjustment Scale (DAS).** The DAS (Spanier, 1976) was the primary measure employed to assess marital adjustment. It is reported to have strong in-
ternal consistency, with alpha of .96 for the total scale score. In more recent reevaluations of the DAS, Spanier and Thompson (1982) report alpha at .91, and Sharpley and Cross (1982) report alpha at .96. Our data indicated alpha is .92 for mothers and .79 for fathers.

Family Assessment Measure III-Short Form (FAM-SF). The FAM III (Skinner, Steinhauser, & Santa-Barbara, 1983, 1995) is a 50-item scale that offers seven subscales relating to major aspects of family organization and functioning. This measure offers normative data from samples of “normal” and “clinical” families and has demonstrated discriminant validity in significantly differentiating between clinical and nonclinical families (Skinner et al., 1995). The FAM-SF is composed of the two heaviest loading items on each of the seven subscales and offers a unidimensional measure of overall family functioning that correlates highly with the total FAM III score ($r = .90$). Lower scores indicate higher levels of family well-being. Our sample yielded an alpha of .80 for the FAM-SF.

Family Coping Strategies Scale (F-COPES). This is a composite measure of family coping styles (McCubbin, Larsen, & Olson, 1982). Construct validity has been estimated through use of factor analyses that confirm subscale coping strategies. In scale construction analyses, alpha was .77 overall, with subscales ranging from .64 to .87. Total scale test-retest reliability was reported as $r = .78$ (4-week interval) with subscales ranging from .61 to .95. The Reframing subscale, which was of particular interest in this study, was reported to have an alpha of .82 and test-retest reliability of .61.

Beck Depression Inventory. The short form of the Beck Depression Inventory (BDI-SF) (Beck & Beck, 1972) is a screening measure of clinical depression with excellent psychometric properties (Beck & Steer, 1987). The short form of the BDI correlates highly ($r = .93$) with the longer version (Reynolds & Gould, 1981). It is a short-term screening device that counts symptoms of depression over the prior week.

Rosenberg Self-Esteem Inventory (RSE). The RSE (Rosenberg, 1965) was used as a measure of self-acceptance in mothers and fathers. This brief, 10-item measure has adequate reliability and validity characteristics (Robinson, Shaver, & Wrightsman, 1991). The RSE has been found to be closely consistent with other frequently used measures of self-esteem and more independent of irrelevant variables (Tippett & Silber, 1965). The RSE has a coefficient of reproducibility of .92 and a coefficient of scalability of .72, suggesting that it is unidimensional (Rosenberg, 1965). This scale also demonstrates strong consistency over time with a test-retest reliability of .85 (Silber & Tippett, 1965).

Disability Index. A four-item Disability Index (DI) was used (Trute, 1990) to assess degree of physical and mental incapacitation in children. Item-total correlations in this Likert-type scale ranged from .44 to .64, with alpha of .74. Parents were asked to report their child’s present level of disability for degree of intellectual impairment, physical disabilities, need for ongoing medical attention, and future need for physical assistance in everyday functions through the course of their lives. The DI correlates significantly with disabled children’s Developmental Quotient ($r = .59, p < .01$) but goes beyond the assessment of mental ability to include physical incapacitation. We found the DI to be unrelated to social desirability scores in mothers and fathers.

Marlowe Crowne Social Desirability Scale. A short form of the Marlowe Crowne Social Desirability Scale (Crowne & Marlow, 1960) was completed by each parent to test for potential “social desirability” response style bias in self-report measures. Scores on the short form have been found to be closely related to scores on the longer version ($r = .80$ to .90), and the 10-item version had equal Kuder-Richardson formula reliability to the full scale (Strahan & Gerbasi, 1972).

All measures were collected at T1 and T2 with the exception of the PSI-SF, which was collected only at T2, and the DAS, which was collected only at T1.

Results

The Family Implications of Childhood Disability Scale (FICD)

As the first step in scale development, a pool of Likert items was developed through past research that involved interviews with parents in resilient families with children with disabilities (Trute & Hauch, 1988a, 1988b). It was our intent to develop a series of items that would reflect both positive and negative parent appraisals of the impact of their child’s disability on family life. The initial intention was to create a unidimensional scale of parent appraisal with higher scores representing more positive appraisal. However, negative and positive items did
not appear to be unidimensional and additive. In a preliminary review, a short scale emerged from item reliability analyses with interitem correlations that ranged from .39 to .69, with an acceptable alpha (.80) that contained only five of the negative impact items. In subsequent analyses, this brief negative appraisal scale was found to be an important predictor of depression levels in mothers and fathers of young children with developmental disabilities (Trute, 1995). These findings encouraged renewed study of the parent appraisal items. A factor analysis, with simple varimax rotation set to two factors a priori, indicated that negative and positive items loaded solely on each of the two unique factors, yielding a negative factor (eigenvalue = 4.88) that explained 32.6% of total scale variance, and a positive factor (eigenvalue = 2.48) that explained a further 16.5% of scale variance. Only items with communality greater than .30 were retained. The final negative scale was composed of 10 items and the positive scale was comprised of 5 items. There was no correlation between the scores on these two subscales (r [76] = .14, p = .22). Items on the FICD are identified in the appendix.

Stein, Folkman, Trabasso, and Richards (1997) assert that beliefs regarding life challenges carry positive or negative valences that co-occur and that these beliefs can be based on differentially weighted harmful and beneficial appraisal. Consistent with this conceptual distinction between negative and positive appraisals of challenging life events, we not only use positive and negative subscale scores but also employ discrepancy scores (assessing the degree of divergence of negative and positive views) in the empirical measurement of parent appraisal of the family impact of childhood disability. For the calculation of the discrepancy score, the FICD positive total score was subtracted from the negative total score. Given the disproportionate number of items in the two subscales, we converted subscale raw scores to z scores prior to calculating standardized discrepancy scores. However, zero order correlations with FICD raw and z scores, and other key study variables, were not different, and because raw scores are easier for other researchers to calculate, interpret, and use, all results here are based on FICD raw scores.

Parents completed the FICD together as a joint assessment at T1 and did the FICD separately at T2. At T2, while there was a correlation between mothers’ and fathers’ negative subscale scores (r [35] = .50, p < .002), no relationship was found between mothers’ and fathers’ positive subscale scores (r [33] = .28, p = .12). Mothers’ and fathers’ independent FICD scores at T2 were found to be strongly related to averaged FICD scores (mothers’ r [32] = .92, p < .001; and fathers’ r [32] = .86, p < .001). This suggested that averaged scores were closely reflective of both parents’ individual appraisals of family impact of disability. Further, these averaged scores were more reliable compared to mothers’ or fathers’ scores alone (Mathijssen, Koot, Verhulst, De Bryn, & Oud, 1997).

At T1, our family sample yielded a negative subscale score of $M = 21.43$ ($SD = 6.88$), a positive subscale score of $M = 12.65$ ($SD = 3.53$) and a FICD total (negative-positive discrepancy) score of $M = 8.92$ ($SD = 7.22$). FICD total score was not related to social desirability in mothers ($r [75] = -.15, p = .22$) or fathers ($r [67] = -.16, p = .20$). Positive subscale scores were not related to social desirability in mothers ($r [77] = .07, p = .52$) or fathers ($r [67] = .15, p = .20$). Negative subscale scores were not related to social desirability in mothers ($r [76] = -.10, p = .36$) or fathers ($r [67] = -.12, p = .29$).

**Reliability and Long-Term Stability of the FICD.** The reliability of the FICD was assessed by examining the internal consistency of the subscales. The subscales showed good internal consistency with alphas of .88 for the negative subscale and .71 for the positive subscale. Over a period of 7 years, parental FICD scores at T1 were found to be significantly related to parental FICD score at T2 ($r [32] = .64, p < .001$). This cross-sectional sample of parents with children with disabilities showed almost no average change, in their cognitive appraisal of the impact that childhood disability had on family life, between the time their children were approximately 5 and 12 years of age (T1: $M = 9.3, SD = 7.7$; T2: $M = 9.6, SD = 5.9$; $t[31] = -.27, p = .79$).

**Discriminant Validity: The FICD and Related Measures.** The FICD was not found to be related to overall assessments of family functioning (FAM-SF) by mothers or fathers at T1 (see Table I) or T2 (see Table II). Furthermore, the Positive Appraisal subscale of the FICD does not appear to be an alternative measure of “positive reframing,” as a general coping style when responding to life challenges, in either mothers or fathers. At T1, the Positive Reframing subscale of the F-COPES was not significantly related to the Positive Appraisal score on the FICD for mothers ($r [78] = .17, p = .14$) or for fathers ($r [68] = .08, p = .52$).

FICD scores at T1 were weakly related to moth-
ers’ level of depression and self-esteem, but not fathers’ depression or self-esteem scores (see Table I). At T2 (see Table II), FICD scores were not found to be strongly related to mothers’ or fathers’ psychological measures (i.e., depression, self-esteem).

**Predicting Parenting Stress.** Separate two-step hierarchical regressions were completed for mothers and fathers, employing parenting stress (PSI-SF) at T2 as the dependent variable of study. In the first step, two key T1 predictor variables were entered: marital adjustment (DAS) and mother or father self-esteem (RSE). These variables were selected as they both emerged as significantly related to marital and family adjustment (see Table I). In the second step, FICD scores at T1 were entered to study variance accounted for by FICD alone, after controlling for marital adjustment and parent self-esteem.

When DAS and RSE were entered as predictor variables of mothers’ PSI-SF scores, at step one of the hierarchal regression analysis, the relationships were significant, $F(2, 45) = 5.63, p < .01$. Marital adjustment (DAS) emerged as a significant predictor ($t[48] = -2.82, p < .05$), while mothers’ self-esteem was not significant ($t[48] = 1.27, p = .21$). In step

### Table I. Intercorrelations Between Measures at Time 1 for Mothers and Fathers (n)

<table>
<thead>
<tr>
<th>Measure</th>
<th>FICD</th>
<th>DAS</th>
<th>FAM-SF</th>
<th>RSE</th>
<th>BDI-SF</th>
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</thead>
<tbody>
<tr>
<td><strong>Mothers</strong></td>
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<tr>
<td>FICD</td>
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<tr>
<td>DAS</td>
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<td>—</td>
<td></td>
<td>.23* (75)</td>
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<tr>
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<tr>
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<td>—</td>
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<td>.31* (76)</td>
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<tr>
<td>BDI-SF</td>
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<td></td>
<td>.48*** (86)</td>
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<tr>
<td><strong>Fathers</strong></td>
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<tr>
<td>FICD</td>
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<td>DAS</td>
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<td>.25* (71)</td>
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<td>.48*** (86)</td>
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</table>

FICD = Family Impact of Childhood Disability Scale; DAS = Dyadic Adjustment Scale (Spanier, 1976); FAM-SF = Family Assessment Measure (Short-Form) (Skinner et al., 1983); RSE = Rosenberg Self-Esteem Inventory (Rosenberg, 1965); BDI-SF = Beck Depression Scale (Short Form) (Beck & Beck, 1972).

* $p < .05$.
** $p < .01$.
*** $p < .001$.

### Table II. Intercorrelations Between Measures at Time 2 for Mothers and Fathers (n)

<table>
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<tr>
<th>Measure</th>
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<th>RSE</th>
<th>BDI-SF</th>
<th>PSI-SF</th>
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<td><strong>Mothers</strong></td>
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</tr>
<tr>
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<td>.04 (32)</td>
<td>.24 (32)</td>
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<td>.49*** (57)</td>
<td>.49*** (57)</td>
<td>.61*** (57)</td>
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<tr>
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<td>.68*** (57)</td>
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<td>.47*** (57)</td>
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<td>—</td>
<td>.60*** (57)</td>
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<td>PSI-SF</td>
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<td><strong>Fathers</strong></td>
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</tr>
<tr>
<td>FICD</td>
<td>—</td>
<td>.13 (31)</td>
<td>.27 (32)</td>
<td>.09 (31)</td>
<td>.57*** (31)</td>
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<tr>
<td>FAM-SF</td>
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<td>—</td>
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<td>.30 (36)</td>
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<tr>
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<td>.28 (37)</td>
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<td>—</td>
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<td>.26 (36)</td>
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</table>

FICD = Family Impact of Childhood Disability Scale; FAM-SF = Family Assessment Measure (Short-Form) (Skinner et al., 1983); RSE = Rosenberg Self-Esteem Inventory (Rosenberg, 1965); BDI-SF = Beck Depression Scale (Short Form) (Beck & Beck, 1972); PSI = Parenting Stress Index (Short Form) (Abidin, 1995).

* $p < .05$.
** $p < .01$.
*** $p < .001$. 
two, FICD was entered (see Table III). Results show
that parenting stress in mothers at T2 was signifi-
cantly predicted by their DAS and FICD scores at T1.
Further, the hierarchal regression analysis confirms
that FICD is a significant predictor of mothers’ par-
ing stress after removing variance explained by
marital relations and self-esteem. In step one of the
regression analysis for fathers, the combination of
marital adjustment (DAS) and self-esteem (RSE) as
predictor variables approached significance, $F(2, 33) = 3.19, p = .054$, but neither predictor alone
was significant. After step two, with the entry of
FICD, the overall regression equation was signifi-
cant, $F(3, 32) = 3.72, p < .02$, and FICD emerged
as the sole significant predictor of father parenting
stress, $(t(36) = 2.05, p < .05)$ (see Table IV).

Although there is no significant zero-order sta-
tistical relationship between levels of parenting
stress in mothers and in fathers ($r (35) = .28, p = .10$), the hierarchal regression analyses show similar
results. FICD is a significant predictor of level of par-
ing stress for both mothers and fathers.

### Discussion

The results of this study support the assertion that
cognitive appraisal is an important factor in deline-
ating the relationship between a stressor and adjust-
ment. The findings provide evidence of the useful-
ness of the FICD in assessing primary parental
appraisal of the impact of childhood disability. Consistent with Lazarus and Folkman’s (1984)
definition of primary appraisal, and Donenberg and
Baker’s (1993) view of family impacts, the FICD as-
sesses both positive and negative appraisals of the
impact of childhood disability on the family. Factor
analysis confirmed that the 15-item FICD consists
of two independent dimensions: positive and nega-
tive appraisal. This finding is consistent with prior
research, which has demonstrated the independ-
ence of positive and negative affect. Bradburn and
Caplovitz (1965) were the first to confirm that posi-
tive and negative affect are not inversely related (or
negatively correlated) but appear to be orthogonal
or independent factors. Their finding has been con-
firmed by subsequent research (Watson & Clark,
1984). This study also supports prior findings that
positive and negative appraisals co-occur and that
the proportions of each can be salient predictive
measures of caregiver psychological well-being
(Stein et al., 1997).

### Table III. Summary of the Hierarchical Regression Analysis for Variables Predicting Parent Stress Levels in Mothers of Pre-Teenage Children With Disabilities

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Standardized $\beta$</th>
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</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Marital adjustment (DAS)</td>
<td>-0.58</td>
<td>0.20</td>
<td>-0.36**</td>
</tr>
<tr>
<td>Self-esteem (RSE)</td>
<td>0.81</td>
<td>0.64</td>
<td>.17</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
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<tr>
<td>Marital adjustment (DAS)</td>
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<td>0.20</td>
<td>-0.36**</td>
</tr>
<tr>
<td>Self-esteem (RSE)</td>
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<td>0.63</td>
<td>.11</td>
</tr>
<tr>
<td>Cognitive appraisal (FICD)</td>
<td>0.80</td>
<td>0.38</td>
<td>.28*</td>
</tr>
</tbody>
</table>

$n = 48$.  
DAS = Dyadic Adjustment Scale (Spanier, 1976); RSE = Rosenberg Self-Esteem Inventory (Rosenberg, 1965); FICD = Family Impact of Childhood Disability Scale.

### Table IV. Summary of the Hierarchical Regression Analysis for Variables Predicting Parent Stress Levels in Fathers of Pre-Teenage Children With Disabilities

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Standardized $\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital adjustment (DAS)</td>
<td>-0.24</td>
<td>0.17</td>
<td>-0.22</td>
</tr>
<tr>
<td>Self-esteem (RSE)</td>
<td>1.73</td>
<td>0.98</td>
<td>.29</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital adjustment (DAS)</td>
<td>-0.26</td>
<td>0.17</td>
<td>-0.24</td>
</tr>
<tr>
<td>Self-esteem (RSE)</td>
<td>1.10</td>
<td>0.98</td>
<td>.19</td>
</tr>
<tr>
<td>Cognitive appraisal (FICD)</td>
<td>0.93</td>
<td>0.46</td>
<td>.33*</td>
</tr>
</tbody>
</table>

$n = 36$.  
DAS = Dyadic Adjustment Scale (Spanier, 1976); RSE = Rosenberg Self-Esteem Inventory (Rosenberg, 1965); FICD = Family Impact of Childhood Disability Scale.

Our findings relating to the reliability and pre-
dictive validity of the FICD support its importance
as a brief 15-item family assessment measure. That
is, it is a measure that can serve as a useful assess-
ment tool in psychological intervention for parents
early in the life of a child who has been diagnosed
as having a developmental disability. Internal con-
istency analysis suggests the reliability of the mea-
sure. Further, no average change was found in
parents’ cognitive appraisal of the impact that
childhood disability had on family life over the 7-
year interval in our longitudinal survey. This would
suggest that the appraisal parents hold, of the fam-
ily impact of childhood disability, is formed early in
the life of the child with disabilities and tends to
remain unchanged through to the preadolescent
years of the child. In terms of the predictive validity of the FICD, regression analyses confirmed the utility of the measure in predicting long-term parenting stress in mothers and fathers.

It appears that FICD is not an alternative measure of parent psychological adjustment. Mother scores on this scale are weakly related to their levels of psychological well-being during the preschool period of their child with a disability, but this relationship does not appear to be present when the children with disabilities are in their pre-teenage years. Fathers’ assessment of the family impact of childhood disability does not appear to be related to their psychological adjustment (i.e., depression, self-esteem) during the early or later childhood years of their son or daughter with a disability. In a similar vein, the Positive Appraisal subscale on the FICD is not tapping a tendency of mothers or fathers to employ positive reframing as a general parent coping style. Our results confirm that the FICD should not be viewed as an alternative measure of parent coping style, but as a unique assessment of parent appraisal of the impact of childhood disability on the family.

In addition to establishing the psychometric properties of the FICD, the study has several interesting findings. First, no differences were found between mother and father appraisals of the impact of their child’s developmental disability on the family. The scores of mothers and fathers were moderately correlated on the negative subscale score, although there was no correlation between their scores on the positive subscale. This suggests that while parents have similar perceptions of the negative impact of the disability on family life, their views of the positive impact are independent. The consistency in the view of fathers and mothers on the negative impact of childhood disability on their family life replicates prior research, which has found no differences between parents in their level of pessimism or report of parent and family problems (Rousey, Best, & Blacher, 1992).

Second, the study confirmed the importance of the marital relationship in predicting parenting stress, which, in turn, is highly correlated with overall family adjustment. This is consistent with previous research that has established the importance of the marital relationship in family adjustment to childhood developmental disabilities (Abbott & Meredith, 1986; Friedrich, 1979; Nihira, Meyers, & Mink, 1980; Trute, 1990). Whereas satisfaction in marital relations was useful in predicting mothers’ long-term parenting stress, the predictive power of marital relations for mothers’ well-being was increased by the inclusion of the FICD, which assesses parent perception of the impact of developmental disability on the family. Only limited research has focused on the differential saliency of marital relations for parenting stress and family adjustment of mothers and fathers (Deater-Deckard & Scarr, 1996). Our findings suggest that the impact of marital relations on the well-being of fathers of children with developmental disabilities may be less profound than it is for mothers. Our findings confirm the importance of cognitive appraisal of the fathers regarding the impact of their child’s disabilities on family life, as an important element of their parenting stress in the longer term.

These research findings suggest that child and family mental health practitioners should pay careful attention to the cognitive appraisal of mothers and fathers regarding the impact of a child with developmental disabilities on family life. Identifying parents in families at risk for high levels of parenting stress while the child is young provides an important opportunity for preventive child mental health services. In this function, the FICD shows promise as a clinical assessment tool that may assist practitioners to better understand parental cognitive appraisal and that might highlight cognitions or beliefs in mothers and fathers that could interfere with subsequent parent and family adjustment.

Appendix

Items in the Family Implications of Childhood Disability Scale (FICD)

Scale Question: “In your view, what consequences have resulted from having a child with a disability in your family.” Score each item on a four-point Likert scale: (1) Not at all, (2) To a mild degree, (3) To a moderate degree, or (4) To a substantial degree.

1. There have been extraordinary time demands created in looking after the needs of the disabled child. (–)
2. There has been unwelcome disruption to “normal” family routines. (–)
3. The experience has brought us closer to God. (+)
14. Because of the circumstances of the child's disability, there has been a postponement of major purchases. (−)

15. Raising a disabled child has made life more meaningful for family members. (+)

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