

## The contribution of marital quality to the well-being of parents of children with developmental disabilities

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### Abstract

**Background** This study examines the contribution of the marital relationship to the well-being of both mothers and fathers of children with developmental disabilities. Parent well-being is conceptualized in terms of mental health, parenting stress and parenting efficacy.

**Methods** These analyses are based on data from 67 families participating in the Early Intervention Collaborative Study, an ongoing longitudinal investigation of the development of children with disabilities and the adaptation of their families. Multidimensional assessment techniques were used to collect data from married mothers and fathers and their child with a disability. Mother and father data were analysed separately using parallel hierarchical regression models.

**Results** For both mothers and fathers, greater marital quality predicted lower parenting stress and fewer depressive symptoms above and beyond socio-economic status, child characteristics and social support. In relation to parenting efficacy, marital quality added significant unique variance for mothers but not for fathers. For fathers, greater social support predicted increased parenting efficacy. Child behaviour

was also a powerful predictor of parental well-being for both mothers and fathers.

**Conclusion** The findings support the importance of the marital relationship to parental well-being and illustrate the value of including fathers in studies of children with developmental disabilities.

**Keywords** developmental disability, families, fathers, marital quality, parental well-being

Developmental models of parenting indicate that parents are the primary managers of a family's emotional climate (Belsky 1984). Parent well-being therefore is important to the maintenance of a positive family climate. Three components of parent well-being have been studied in relation to the functioning of typically developing children: parental mental health (e.g. Downey & Coyne 1990), parenting stress (e.g. Deater-Deckard 1998; Crnic & Low 2002), and parenting efficacy (e.g. Coleman & Karraker 1998; Jones & Prinz 2005). These critical components of parent well-being have also been studied, although less so, in families with children with developmental disabilities.

Research on parents' mental health largely focuses on its inverse, depressive symptomology. Early investigations assumed anguish and sorrow for parents raising a child with a developmental disability (Farber 1960; Olshansky 1962). Some contemporary

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research has been consistent with this early view, indicating increased depressive symptomology in mothers of children with disabilities, compared with mothers of typically developing children (e.g. Harris & McHale 1989; Blacher *et al.* 1997a), while other studies have found no difference (Bristol *et al.* 1988; Hoare *et al.* 1998). When fathers are included in studies of mental health outcomes of parents of children with disabilities, results usually indicate that mothers experience higher rates of depressive symptomology (Bristol *et al.* 1988; Veisson 1999; Olsson & Hwang 2001).

Much research has focused on parenting stress in mothers and fathers of children with developmental disabilities. Parenting stress, especially stress related to the child's temperament, often appears to be higher in families in which a child has a disability than in other families (Beckman 1991; Cameron *et al.* 1991; Dyson 1997; Baker *et al.* 2003) and to increase over the childhood years (Orr *et al.* 1993; Hauser-Cram *et al.* 2001; Baker *et al.* 2003). Although rates of parenting stress in mothers and fathers tend to be correlated, comparisons of mean levels of parenting stress in mothers and fathers indicate that by the time their child with a disability is school aged, the parents do not differ on measures of stress (Dyson 1997; Floyd & Gallagher 1997).

Studies of parenting efficacy emphasize parents' confidence in their ability to fulfil the parenting role and successfully nurture positive child behaviour and development (Coleman & Karraker 1998; Jones & Prinz 2005). Greater parenting efficacy has been associated with increased satisfaction with parenting (Coleman & Karraker 2000) and more positive perceptions of the child (Johnston & Mash 1989), while low parenting efficacy has been associated with a high incidence of child behaviour problems among parents of children with disabilities (Wanamaker & Glenwick 1998).

The importance of both marital conflict and quality to parent well-being and child development has been studied in families of typically developing children (Fincham 1998). Marital conflict is positively associated with many indicators of children's maladjustment, including conduct disorders, anxiety and aggression (Morrison & Coiro 1999). In contrast, marital quality is associated with positive child outcomes, such as fewer behaviour problems and better peer relationships (Vandewater & Lansford 1998).

Comparisons of marital relationships in families with and without children with disabilities have yielded mixed results. Friedrich & Friedrich (1981) found that mothers of children with developmental disabilities reported less satisfaction with the marital relationship than mothers of typically developing children. In contrast, Donovan (1988) found no differences in marital adjustment between families with and without a child with a disability. Stoneman & Gavidia-Payne (2006) found average to above-average levels of marital adjustment overall for mothers and fathers of young children with a range of disabilities and no correlation between severity of the child's disability and marital adjustment.

A variety of predictors of parental well-being are understood. In particular, child behaviour problems are related to a range of indicators of well-being, including stress (e.g. Floyd & Gallagher 1997; Ricci & Hodapp 2003), depressive symptoms (e.g. Blacher *et al.* 1997b; Hastings & Brown 2002), and parenting efficacy (e.g. Day *et al.* 1994; Wanamaker & Glenwick 1998). Research is lacking, however, on the association between the marital relationship and the psychological well-being of mothers and fathers in families of children with disabilities. Research on the marital relationship is necessary because of its central role in establishing the family emotional climate and because it is an area of functioning that could be amenable to intervention (e.g. Baucom *et al.* 1998). In this investigation, we hypothesized that the marital relationship would add unique variance to the prediction of well-being of both mothers and fathers of children with developmental disabilities.

## Method

### Participants

This study is based on data from 67 families participating in the Early Intervention Collaborative Study (EICS), an ongoing longitudinal investigation of the development of children with disabilities and the adaptation of their families (Shonkoff *et al.* 1992; Hauser-Cram *et al.* 2001). Families were originally recruited from community-based early intervention programmes in the north-eastern United States. Parents were asked to participate if their child had Down syndrome, motor impairment or developmental delay of unknown aetiology. These analyses focus on mar-

ried parents of children during the middle childhood period (age 10 years).

Only biological parents who had been married to each other since the birth of the child in the study were included. There were 68 families that met this criterion out of a potential 155. This rate of enduring marriages (44%) is comparable to the US national rate (45%) at the time of data collection for marriages lasting at least 10 years (Kreider & Fields 2001). One family was excluded because of missing data, resulting in a final sample of 67 families.

Characteristics of the children and families are reported in Table 1. EICS participants were originally recruited to represent the three most common categories of biologically based disability served by early intervention programmes in the participating states at that time. When compared with the US population of comparable age at a comparable time, the participating families had a slightly lower rate of poverty and higher rate of Euro-American ethnicity (Hauser-Cram *et al.* 2001). At the age of 10 years,

children with all three types of disabilities demonstrated overall deficits in cognitive functioning and adaptive behaviour (Table 1).

## Procedure

Within approximately 1 month of the child's 10th birthday, two field staff members visited participating families. One met with the mother to gather a range of data including demographic information and to assess the child's adaptive behaviour. The other conducted a multidimensional evaluation of the child, including cognitive assessment. Mothers and fathers completed questionnaires independently.

## Measures

### *Depressive symptoms*

Mothers and fathers completed the Center for Epidemiological Studies – Depression Scale (CES-D; Radloff 1977), a 20-item measure describing a range of behaviours and emotional responses that are potential indicators of depression (e.g. 'I felt hopeful about the future'; 'I talked less than usual'). Respondents rated the frequency of their feelings or behaviours. Higher scores represent greater depressive symptomology. Cronbach's alpha coefficients for mothers and fathers in this study were 0.91 and 0.88, respectively.

### *Parenting stress*

The Parenting Stress Index (PSI; Abidin 1995) is a self-administered instrument composed of two domains: the child domain explores stress related to child temperament and behaviour, and the parent domain measures stress related to the tasks and responsibilities associated with the parental role. To avoid overlap with parents' other ratings of child behaviour, these analyses used only the 54-item parent domain (e.g. 'I feel trapped by my responsibilities as a parent'). Higher scores represent more stress. Cronbach's alphas were 0.93 and 0.92 for mothers and fathers, respectively.

### *Parenting efficacy*

Parenting efficacy was assessed using the parenting confidence subscale of the Family Experiences Questionnaire (FEQ; Frank *et al.* 1986, unpublished

**Table 1** Characteristics of sample participants (N = 67)

Characteristics	n	%	Mean (SD)
<b>Child</b>			
Gender (male)	34	50.7	
Type of disability			
Down syndrome	23	34.3	
Motor impairment	21	31.3	
Developmental delay	23	34.3	
Ethnicity (European American)	64	95.5	
Cognitive skills			63.9 (30.7)
Adaptive skills			54.9 (21.8)
Has IEP (or in process)	62	92.5	
<b>Mother</b>			
Age (years)			40.1 (4.6)
Education (years)			14.7 (2.4)
Employed (at least part-time)	39	58.2	
<b>Father</b>			
Age (years)			42.4 (5.6)
Education (years)			14.7 (2.9)
Employed (full-time)	63	94.0	
<b>Family income</b>			
<\$25 000	4	6.0	
\$25 000–49 999	21	31.3	
\$50 000+	38	56.7	
Child qualified for free lunch programme	10	14.9	

IEP, individualized education program.

manuscript). This subscale consists of 15 items measuring parents' perceived competence and attitudes towards parenting (e.g. 'When there is a crisis with the children I know I will do what needs to be done'). Higher scores represent greater efficacy. Cronbach's alphas were 0.90 for both mothers and fathers.

#### *Socio-economic status (SES)*

Mothers completed a demographic questionnaire to provide basic background information about their families. Evidence suggests that it is low SES that has a detrimental effect on family and child outcomes and that little variation in outcomes is found at moderate to high levels of SES (e.g. Hudson 2005). Therefore, to identify families in poverty, we used a binary variable that indicated whether or not the child in the study qualified for free/reduced-price lunch in the public school system. As four cases in this sample were missing data on this variable, we performed a binary logistic regression on the free lunch variable, using family income, number of children in the household, and parental education levels as independent variables. Missing data were replaced with predicted probabilities of group membership.

#### *Child functioning*

Children's adaptive functioning was assessed with the Vineland Adaptive Behavior Scales – Interview Form (Sparrow *et al.* 1984), completed during the home visit. These analyses used the total adaptive behaviour score, a composite of the child's performance across three domains: communication, daily living and socialization. Cronbach's alpha coefficient for this sample was 0.99.

For the majority of children in this sample, cognitive functioning was assessed using the Stanford-Binet Intelligence Scale (Thorndike *et al.* 1986), which assesses cognitive functioning across four domains: verbal reasoning, quantitative reasoning, abstract/visual reasoning, and short-term memory. Standard composite scores were used. Approximately 16% ( $n = 11$ ) of the children were assessed using the Bayley Scales of Infant Development (Bayley 1969) due to severe cognitive impairment. For purposes of data analysis, these children were assigned a standard composite score of 27 on the Stanford-Binet.

Because the Stanford-Binet and the Vineland Scales were highly correlated in this sample ( $r = 0.89$ )

and because definitions of intellectual disability include both cognitive and adaptive skills (Luckasson *et al.* 2002), a composite score was generated. Each child's total scores on both the cognitive and adaptive functioning variables were converted to Z-scores and summed.

#### *Child behaviour problems*

Mothers completed the Child Behavior Checklist for Ages 4–18 (CBCL/4–18; Achenbach 1991), which describes 115 challenging behaviours across two domains: internalizing (e.g. 'too fearful or anxious') and externalizing behaviours (e.g. 'can't sit still, hyperactive'). The total behaviour problems score was used. Cronbach's alpha coefficient was 0.92.

#### *Social support helpfulness*

Social support was assessed using an adaptation of the Family Support Scale (Dunst *et al.* 1984). The revised scale (Shonkoff *et al.* 1992) consists of 15 items that explore sources of formal and informal support (e.g. relatives, friends, service providers, etc.) and the perceived helpfulness of each source. Because marital quality is also a predictor in the present analyses, we excluded spousal support from the total helpfulness score to avoid issues of collinearity. The Cronbach's alpha coefficients were 0.75 for mothers and 0.78 for fathers.

#### *Marital quality*

The Dyadic Adjustment Scale (DAS; Spanier 1976) assessed the quality of the marital relationship. Completed independently by mothers and fathers, the DAS is a 32-item instrument that asks about the quality of the relationship, shared activities, and the extent of agreement between partners on a range of issues, including household tasks, decision making and recreation. The total score was used for these analyses. Cronbach's alphas were 0.95 for mothers and 0.92 for fathers.

## **Results**

Preliminary analyses revealed statistically significant correlations among all three criterion variables for mothers and fathers alike (see Table 2). We chose not to create a composite of well-being, however, because

**Table 2** Intercorrelations between variables in mother and father analyses<sup>†</sup>

	1	2	3	4	5	6	7	8
1. Depressive symptoms	<b>0.21</b>	0.62***	-0.47***	0.18	-0.04	0.33**	-0.28*	-0.49***
2. Parenting stress	0.59***	<b>0.38**</b>	-0.73***	0.08	-0.13	0.56***	-0.22	-0.48***
3. Parenting efficacy	-0.44***	-0.66***	<b>0.39**</b>	0.03	0.07	-0.51***	0.20	0.38**
4. Poverty	0.15	0.01	0.03	-	-0.03	0.04	0.21	0.07
5. Child functioning	0.00	-0.15	-0.01	-0.03	-	-0.19	-0.12	-0.08
6. Child behaviour problems	0.31*	0.25*	-0.20	0.04	-0.19	-	-0.12	-0.29*
7. Helpfulness of social support	-0.08	-0.21	0.29*	0.12	-0.16	0.19	<b>0.49***</b>	0.38**
8. Marital quality	-0.35**	-0.60***	0.24	0.14	0.07	-0.04	0.29*	<b>0.61***</b>

\* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .

<sup>†</sup>Correlations for variables in mother analyses appear above the diagonal; correlations for variables in father analyses appear below the diagonal; correlations between mother and father variables appear along the diagonal in bold.

**Table 3** Mother–father comparisons of key variables in models

Variables	Mothers		Fathers		$t^{\dagger}$
	Mean (SD)	Range	Mean (SD)	Range	
Depressive symptoms	9.27 (9.07)	0–40	9.59 (8.30)	0–35	-0.25
Parenting stress	120.00 (24.40)	68–192	119.96 (23.11)	69–183	0.01
Parenting efficacy	47.19 (6.28)	33–60	45.47 (5.75)	33–58	2.12*
Marital quality	106.96 (18.55)	56–138	107.73 (14.65)	67–137	-0.58

\* $P < 0.05$ .

<sup>†</sup>Paired-sample  $t$ -tests.

we wanted to explore the unique relations between the set of predictors and each of the three indicators of well-being for each parent. Paired-sample  $t$ -tests revealed a small, but statistically significant difference between mothers and fathers for parenting efficacy only, with mothers reporting greater efficacy ( $t = 2.12$ ;  $P < 0.05$ ; see Table 3). Kolmogorov-Smirnov tests confirmed that all criterion variables were normally distributed. Analyses also indicated similar mother and father reports of the DAS (intra-class coefficient of 0.76,  $P < 0.001$ ).

Approximately 18% of mothers and 24% of fathers scored at or above the clinical cut-off score of 16 on the CES-D (Radloff 1977), although sample means did not differ significantly from those reported for the general population (Radloff & Locke 1986;  $M = 8.7$ ,  $SD = 8.4$ ;  $t = 0.513$ ,  $P > 0.05$  for mothers;  $t = 0.883$ ,  $P > 0.05$  for fathers). Approximately 27% of mothers

and 22% of fathers had parent domain stress scores in the high-risk range of 135 or greater (Abidin 1995), but sample means did not differ significantly from those of the normative sample (Abidin 1995;  $M = 118.00$ ,  $SD = 22$ ;  $t = 0.671$ ,  $P > 0.05$  for mothers;  $t = 0.694$ ,  $P > 0.05$  for fathers). With regard to marital quality, 24% of mothers and 27% of fathers had scores in the 'distressed' range of 97 or below (Eddy *et al.* 1991). One-sample  $t$ -tests indicated that both mothers and fathers scored significantly lower on the DAS than the original community sample (Spanier 1976;  $M = 114.8$ ,  $SD = 17.8$ ;  $t = -3.46$ ,  $P < 0.01$  for mothers;  $t = -3.95$ ,  $P < 0.001$  for fathers).

ANOVAs were used to test for group differences in each criterion variable by child gender (two groups) and type of disability (three groups), using mother and father scores as the repeated measure. Results

indicated no significant main or interaction effects for child gender and type of disability and no interactions with parent gender. Thus, these child characteristics were not included in the final regression models. Six parallel hierarchical regression analyses were conducted, one for each of the three indicators of well-being for both mothers and fathers. In each equation, predictors were entered in the following steps: (1) SES, (2) child functioning, (3) child behaviour problems, (4) social support helpfulness, and (5) marital quality. This order was chosen to assess the extent to which marital quality added significant unique variance in predicting maternal and paternal well-being above and beyond family and child characteristics, and external sources of social support (Pedhazur 1997).

For mothers, marital quality contributed significantly to all three indicators of well-being (Table 4). Mothers who reported higher levels of marital quality also reported lower levels of depressive symptomology, lower levels of stress related to the parenting role, and greater parenting efficacy. Marital quality explained 12.3% of the unique variance in depressive symptomology, 9.5% of the variance in parenting stress, and 4.4% of the variance in parenting efficacy. No other variable was a significant predictor of all three outcomes for mothers. Low SES was associated only with greater maternal depressive symptomology. Greater child problem behaviour significantly predicted both more parenting stress and lower efficacy in mothers.

For fathers, marital quality added significant unique variance to depressive symptomology and parenting stress, but not to efficacy (Table 5). Fathers who reported higher levels of marital quality reported lower levels of depressive symptomology and parenting stress. Marital quality explained 10.8% of the unique variance in depressive symptomology and 28.4% of the variance in total parenting stress. Child problem behaviour predicted all three indicators of well-being for fathers. In addition to child behaviour and marital quality, low SES was a trend-level predictor of paternal depressive symptomology. Further, non-spousal social support, but not marital satisfaction, was a significant predictor of fathers' parenting efficacy, along with child behaviour. Similar to mothers, the child's overall level of functioning did not predict any measure of paternal well-being.

Table 4 Summary of hierarchical regression analysis for variables predicting well-being in mothers

	Depressive symptoms				Parenting stress				Parenting efficacy			
	B (SE)	$\beta$	$\Delta R^2$	Total $R^2$	B (SE)	$\beta$	$\Delta R^2$	Total $R^2$	B (SE)	$\beta$	$\Delta R^2$	Total $R^2$
1. Poverty <sup>†</sup>	5.929 (2.681)	0.235*	0.033	0.033	6.792 (6.655)	0.100	0.007	0.007	0.292 (1.883)	0.017	0.001	0.001
2. Child functioning	-0.208 (0.503)	-0.044	0.001	0.034	-1.047 (1.249)	-0.083	0.017	0.024	0.022 (0.353)	0.007	0.004	0.005
3. Child behaviour	0.162 (0.098)	0.183	0.107	0.142	1.020 (0.243)	0.430***	0.292	0.316	-0.267 (0.069)	-0.438***	0.261	0.266
4. Social support	-0.158 (0.110)	-0.165	0.081	0.223	-0.183 (0.273)	-0.071	0.032	0.348	0.036 (0.077)	0.054	0.016	0.283
5. Marital quality	-0.193 (0.057)	-0.395**	0.123	0.346	-0.455 (0.141)	-0.346**	0.095	0.443	0.080 (0.040)	0.236*	0.044	0.327

\*  $P \leq 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ .

<sup>†</sup>Poverty was measured by a dummy variable indicating whether a child was eligible for a free lunch.

Table 5 Summary of hierarchical regression analysis for variables predicting well-being in fathers

	Depressive symptoms			Parenting stress			Parenting efficacy					
	B (SE)	$\beta$	$\Delta R^2$	Total R <sup>2</sup>	B (SE)	$\beta$	$\Delta R^2$	Total R <sup>2</sup>	B (SE)	$\beta$	$\Delta R^2$	Total R <sup>2</sup>
1. Poverty <sup>†</sup>	4.476 (2.598)	0.194*	0.022	0.022	6.112 (6.303)	0.095	0.000	0.000	-0.358 (1.896)	-0.022	0.001	0.001
2. Child functioning	0.352 (0.492)	0.082	0.000	0.022	-0.986 (1.194)	-0.082	0.022	0.023	-0.074 (0.359)	-0.025	0.000	0.001
3. Child behaviour	0.252 (0.093)	0.313***	0.096	0.118	0.506 (0.225)	0.225**	0.049	0.072	-0.141 (0.068)	-0.251**	0.042	0.043
4. Social support	-0.049 (0.109)	-0.053	0.024	0.142	-0.287 (0.266)	-0.113	0.076	0.148	0.185 (0.080)	0.292**	0.107	0.150
5. Marital quality	-0.198 (0.067)	-0.349***	0.108	0.250	-0.892 (0.162)	-0.565***	0.284	0.432	0.059 (0.049)	0.149	0.020	0.170

\*  $P < 0.10$ ; \*\*  $P < 0.05$ ; \*\*\*  $P < 0.01$ ; \*\*\*\*  $P < 0.001$ .<sup>†</sup>Poverty was measured by a dummy variable indicating whether a child was eligible for a free lunch.

Finally, marital quality was tested as a moderator of the effects of children's behaviour on parental well-being. An interaction term was entered as a final step in each regression model (Baron & Kenny 1986). Analyses revealed no significant interactions between marital quality and child behaviour problems.

## Discussion

Overall, the results of this investigation add further support to the view that parents bring strengths to their parenting role (Turnbull *et al.* 1993), despite having some areas of vulnerability. Mothers and fathers in our study did not differ from the general population with regard to depressive symptomology or parenting stress. This conflicts with previous findings that parents of children with disabilities report higher levels of stress than comparison parents (e.g. Beckman 1991; Dyson 1997); however, in these previous studies, differences were largely attributable to stress related to child temperament. The results reported here were based on the parent domain of the PSI only, and thus indicate that parents of children with and without disabilities experience similar amounts of stress related to the challenges and duties of parenting.

The parents in this study appear to have lower-quality marriages than couples in the general population who have been married a similar length of time. About one-quarter of parents in this sample reported marital relationships that could be classified as 'distressed'. Nevertheless, marital distress appeared to be only marginally related to characteristics of the child. Fathers' satisfaction with their marriages was unrelated to either child skills or behaviours, while for mothers, marital satisfaction was moderately correlated with child behaviour ( $r = -0.29$ ), but not with overall child functioning. Social support was moderately correlated with both mothers' and fathers' marital satisfaction ( $r = 0.38$  and  $r = 0.29$ , for mothers and fathers, respectively). This suggests that factors outside the immediate family system may also be critical determinants of marital quality.

The findings support our initial hypothesis for both mothers and fathers that marital quality predicts all three aspects of parent well-being with the exception of parenting efficacy for fathers. Child behaviour, but not a child's overall adaptive and cognitive functioning, was also a critical predictor of parental well-

being. Behaviour problems were associated with parenting stress and efficacy for both parents, findings that replicate and extend other studies (e.g. Day *et al.* 1994; Wanamaker & Glenwick 1998; Baker *et al.* 2003; Abbeduto *et al.* 2004; Blacher *et al.* 2005). Child behaviour problems also predicted depressive symptoms in fathers but not in mothers.

Given the evidence that children with developmental disabilities often exhibit higher frequencies of problem behaviour than typically developing children (e.g. Jacobson 1982; Tonge 1999; Baker *et al.* 2005), the relation of behaviour problems to parental well-being indicates that interventions which address child behaviour problems should be considered. Further, the independent impact of a discordant marriage on parental well-being suggests that professionals such as teachers and healthcare providers who interact with these families should be trained to consider the status of the marital relationship and how to make appropriate referrals.

For mothers, depressive symptoms were related to family economic resources, with the marital relationship again adding predictive power. A similar result was found for fathers at the trend level. These findings reinforce the strong association between low SES and poor mental health found in numerous other studies (e.g. Dohrenwend 1980; Hudson 1988, 2005). Given the comorbidity of low SES and the incidence of childhood disability (e.g. Fujijura & Yamaki 2000), these findings further underscore the need for accessible mental health and family counselling services for low-income families of children with disabilities.

Marital quality was a predictor of parenting efficacy for mothers, whereas non-spousal social support predicted paternal parenting efficacy. These findings suggest that mothers derive self-evaluations of their parenting, in part, from a supportive marital relationship, whereas fathers' self-perceptions of their parenting come primarily from sources external to the marriage. While it is generally believed that the marital relationship has greater impact on parenting outcomes than external sources of social support (e.g. Belsky 1984), this may not be the case for fathers' own appraisals of their parenting competence. In contrast to previous research (Frank *et al.* 1986; Johnston & Mash 1989), mothers in this study had higher reported levels of parenting efficacy than fathers, indicating greater perceived competence in

the parenting role. It is worth noting that all families in this sample had received early intervention services that placed particular emphasis on mothers during their child's early years (Shonkoff *et al.* 1992) and may be related to mothers' feelings of parenting efficacy. Parke (2002) has suggested that fathers have fewer opportunities to practise parenting skills, and this may be especially true when a child has a disability (Lamb & Billings 1997). Many fathers want greater involvement with their children with special needs (e.g. Hadadian & Merbler 1995), but they may feel like outsiders, even when included in intervention efforts (Lillie 1993; May 1996). Further, as fathers appear to derive increased well-being from greater satisfaction with available social support rather than with greater quantities of support (Hornby 1995), efforts to improve the quality of existing sources of instrumental support are warranted.

This study has several limitations. First, the statistical power of the analyses has been constrained by the small sample size, which has also limited the number of predictors tested. For example, a larger sample size would have enabled us to explore the effects of different types of behaviour problems on parent well-being. Second, given the homogeneity of the sample, generalization to other ethnicities and family constellations cannot be made. Furthermore, all participants received early intervention services, which may also make it difficult to generalize to families who have not received similar services. Third, shared variance is a problem as most measures are based on parent report. Finally, limitations exist in the interpretation of the direction of effects. Although the quality of the marital relationship was found to predict parental well-being, it is possible that the effects are in the reverse direction or that transactional, multidirectional processes are operating.

Children in this investigation were in middle childhood, but as they enter adolescence, families face both new opportunities and new challenges (Hauser-Cram & Krauss 2004). Further research could investigate the mechanisms and processes through which marital quality may serve as a risk or protective factor for parents as children enter their next life phase. Also, as marital quality was an important predictor of well-being for these parents of children with disabilities, it would be worthwhile to examine sources of well-being in single, widowed and divorced par-



ents. Specifically, types and availability of alternative support systems would be worthy of exploration.

In general, the findings from this investigation serve to focus more attention on the importance of the marital relationship for families of children with disabilities and indicate that the presence of a child with a disability cannot be viewed as the sole source of parents' deleterious well-being. Overall, these results suggest that the quality of the marital relationship is a critical component of the well-being of parents raising a child with a disability.

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