Mothers' Resolution of Their Child's Diagnosis and Self-Reported Measures of Parenting Stress, Marital Relations, and Social Support[1]

Thomas Sheeran, Robert S. Marvin,[2] and Robert C. Pianta
University of Virginia

Investigated the relation between maternal resolution/nonresolution of a child's diagnosis of chronic medical condition to self-reported measures of parenting stress, marital quality, and social support. Mothers were administered the Reaction to Diagnosis Interview, and classified as Resolved/Unresolved with respect to the child's diagnosis. Mothers also completed the Parenting Stress Index, Dyadic Adjustment Scale (DAS), Support Functions Scale, and Family Support Scale. Fathers completed the DAS. Maternal resolution vs. nonresolution of diagnosis was related to parenting stress, husband marital satisfaction, and level and helpfulness of social support. Resolution of diagnosis was not related to need for support. Specific subclassifications of Resolved and Unresolved also were differentially related to level and helpfulness of social support. Findings suggest that resolution/nonresolution of diagnosis has implications not only for individual functioning and child–parent interactions, as found in previous research, but also for other intimate familial relationships and social ecology.

For parents of a child with a chronic medical condition, perhaps one of the most trying experiences is receiving their child's diagnosis, and the realization that their child might always be different from other children. The literature indicates that receiving such a diagnosis is a crisis for parents (e.g., Waisbren, 1980), requiring a period of mourning, grieving, and adjustment (Blacher, 1984). Furthermore, recent research suggests that significant levels of ongoing distress and/or denial regarding the child's condition are components of parents' lack of resolution of the child's diagnosis (Pianta, Marvin, Britner, & Borowitz, 1996). This lack of resolution can lead to parenting difficulties (Fraiberg, Adelson, & Shapiro, 1983) and is strongly associated with insecure attachment between child and parent (Marvin & Pianta, 1996).

In this paper, we extend this research from the level of individual and parent–child dyad to the level of family functioning and social ecology. Specifically, we examine the relation between mothers' resolution of the experience of receiving the diagnosis of their child's medical condition and their perceptions of experiences with their families and social networks. Inasmuch as the emotional well-being of parents and a supportive social environment are relevant to effective child care and adaptive family functioning, our findings have implications for basic research, clinical practice, and service provision.

This study is derived from the research on trauma to the attachment and caregiving systems. Bowlby's (1980) work on loss and mourning and the work of researchers such as Main and Hesse (1990) suggest a mechanism by which unresolved trauma can impact the caregiving system and lead to relationship difficulties between the child and parent. The process of resolution of trauma is conceptualized as an integration of (a) cognitive and affective states which existed prior to the trauma, and (b) conflicting states which arose following the traumatic event. With regard to loss, the individual will likely engage in a mental and behavioral search for the lost person, and experience grief and disbelief that the loss is permanent. The individual may have unfounded fears of having been the cause of the loss, and become disoriented in situations in which the lost individual had commonly been found. These confusing behaviors and mental states reflect the conflict between the person's thoughts and feelings regarding self, the lost person, and the relationship before the event, and the newly developing apprehension of the reality and permanence of the loss. The degree to which the person can mostly accept the permanence of the loss and reorient to the present and future is believed to reflect resolution of the trauma. Difficulty in accepting the loss and resolving the trauma is associated with increased likelihood of dysfunctional parenting (Fonagy, Steele, & Steele, 1993; Main & Hesse, 1990).

Parents' experience of receiving a diagnosis of a chronic medical condition in their child is viewed as a traumatic event to the caregiving system. As dis-

cussed previously, receiving such a diagnosis is a crisis for parents. The mourn-
ing process associated with this event is often described as "grieving the loss of
the perfect child," and entails the changing of parents' mental models of self and
child from those representing the "perfect," healthy child originally anticipated,
to those representing a child with a chronic medical condition. Pianta and Marvin
(1992b) have developed a standardized, reliable procedure for assessing parents'
success in resolving their child's diagnosis. Based largely on attachment theory
and research, the Reaction to Diagnosis Interview (RDI) is intended to assess the
degree to which the parent is able to move past the crisis of the diagnosis and
reorient to the reality of the child's condition. The classification of resolution or
nonresolution of mothers with respect to the child's diagnosis has been demon-
strated to be a strong predictor of secure or insecure child–parent attachment in
Strange Situation (Marvin & Pianta, 1996), suggesting a relation between par-
ents' resolution of the child's diagnosis and quality of parenting. In addition to
the primary classifications of resolution or nonresolution with respect to the
child's diagnosis, three subtypes of Resolved and six subtypes of Unresolved
have been identified. Each of these is believed to reflect a distinct style of
coping, and could have differential associations with other parenting and family
variables, as well as with child outcomes.

A family systems framework would suggest that a parent's reaction to a
crisis of this magnitude could affect, and be affected by, family and social
ecological factors. One of the basic axioms of systems theories is the idea that
input to one part of the system *can but does not necessarily* affect other parts.
We know that differential response to receiving such a diagnosis is related to
parent variables, and to child–parent variables. It is an empirical question
whether this differential response is related to system variables at the levels of
the spouse dyad, the family system, and the more encompassing family social
ecology. Among the constructs most commonly studied are those related to
parenting or family stress, to marital relations, and to parent or family social
support systems.

In this paper we report on the relation between maternal resolution of the
child's diagnosis and these latter constructs. We expected that families in which
the mothers have resolved the experience of their child's diagnosis would report
more supportive, satisfying, and helpful social support relationships, as well as
lower overall stress related to parenting. Additionally, we expected that mothers
who are Resolved would report higher levels of support from the intimate rela-
tionships that are believed to be critical in assisting a person through the crisis of
the child's diagnosis (spouse, parents, friends, support groups). Finally, we
hypothesized that different coping styles (as indicated by the subclassifications of
Resolved/Unresolved) would be reflected in maternal perceptions marital/family
functioning and social ecology.

METHOD

Participants

This is part of a larger study of families who have young children diagnosed with either mild or moderate cerebral palsy (CP) or epilepsy. The larger study is designed to explore child and family functioning related to chronic neurological disorders with a range both of severity and of degree to which the condition is "static" or stable versus unstable. The full sample consists of 115 diagnosed children, and an additional 37 nondiagnosed (healthy) comparison children and their caregivers. Because 18 families did not return the complete set of paper-and-pencil measures, the sample reported on in this paper comprised 97 children between the ages of 13–54 months, who had a diagnosis of CP or epilepsy, and their caregivers. Families were recruited from clinics at university medical centers, community hospitals, and early intervention programs in Virginia, West Virginia, North Carolina, Maryland, and Washington DC. Median family income was $25,200 (range = $6,000–162,000).

Seventy of the children had a diagnosis of CP and 27 were diagnosed with epilepsy. The time between the child's diagnosis and this data collection ranged from 2 to 50 months. There were no differences between the diagnostic groups in ethnicity of the child, cognitive/developmental age, marital status at the time of data collection, mothers' education, fathers/partners' education, length of time between diagnosis and data collection, or median family income. Nor was there any relation between maternal distribution of Resolved/Unresolved classification and diagnosis type, cognitive/developmental age, or time since receiving the diagnosis. Consequently, this study viewed all children in the sample as a homogenous group, all with diagnoses of neurologically based chronic medical conditions.

Five children were African American, one Hispanic American, and the remainder were Caucasian. Mothers were the primary caregivers for all children except three for whom the primary caregiver was the grandmother. Eighty-two (85%) of the mothers were married ($n = 73$) or unmarried-partnered ($n = 9$). The remainder of the paper refers to primary caregivers as mothers and their partners as fathers. Mean level of mothers' education was 13.2 years (range = 8–21). Mean level of fathers' education was 12.7 years (range = 4–19).

Measures and Procedures

Families were recruited through medical clinics and contacted in person or by mail. The families traveled to the laboratory and participated in five interviews, three observational procedures, and a standardized cognitive assessment

on a single day. The interview procedure relevant to this report is the RDI.
Parents were also give five questionnaires to fill out and return by mail. The
questionnaires relevant to this report, completed by mothers, are: (a) Dunst and
Trivette's (1988) Support Functions Scale (SFS); (b) Dunst, Jenkins, and Trivet-
te's (1984) Family Support Scale (FSS); and (c) Abidin's (1990) Parenting Stress
Index, Short Form (PSI). Mothers and fathers also completed the Dyadic Adjust-
ment Scale (DAS) (Spanier, 1976).[3] Parents consented for their family's partici-
pation in the study, and the University of Virginia's Human Investigation Com-
mittee annually reviewed and approved the project.

Reaction to Diagnosis Interview

The RDI (Pianta & Marvin, 1992a) was designed to assess parents' resolu-
tion of loss/trauma associated with receiving a chronic medical diagnosis for
their child. The RDI is based on the Adult Attachment Interview (George,
Kaplan, & Main, 1985), in which parents' mental representations of relationships
are assessed through probes for feelings and memories of certain relationship
experiences. The RDI was administered by one of the principal investigators
(R. S. M. or R. C. P.) or a trained graduate student. All interviewers were
trained to meet criteria for standardized administration of the RDI, including
rapport building, use of standard probes, and remaining neutral. All interviews
were videotaped.[4]

Mothers' responses to the RDI were coded using the Reaction to Diagnosis
Classification System (RTDCS; Pianta & Marvin, 1992b). The RTDCS consists
of a list of elements of resolution and lack of resolution, a set of two major
categories (Resolved and Unresolved), and two sets of subcategories associated
with each of the major categories.

Coders viewed the videotape of the interview at least twice, taking notes.
They then listed the elements of Resolution and Lack of Resolution observed,
and made a classification of Resolved (R) or Unresolved (U), followed by a
subclassification within either R or U. Persons classified as R exhibit integrative
strategies for coping with the diagnosis. Prominent among these are a reorienta-
tion to the present and future, a realistic view of the child, termination of the
search for an existential reason for the child's condition (existential in the sense of,
"Why did this happen to me and/or my child?"), a balanced view of the impact

[3]Although fathers' completion of *all* questionnaires clearly would have provided a more comprehen-
sive understanding of how maternal and paternal perceptions jointly influence the family system, it
was decided during the design of the larger research project to collect only DAS questionnaire data
from the fathers. This decision was made to maximize the likelihood of fathers' participation in the
study.
[4]Both mothers and fathers were administered the Reaction to Diagnosis Interview. Coding and
analyses of father interviews currently are in progress, and are not reported in this paper.

of this experience on themselves, and a sense of coherence in the interview. These individuals recount their story with clarity and without enlisting the interviewer's sympathy. Their affect is balanced and the story is realistic with appropriate detail. Conversely, individuals classified as U demonstrate one, or several, nonintegrative strategies. These include attempts to distort reality regarding the child's condition or potential, a continued search for existential reasons for the experience, unbalanced perceptions of the impact on the self (denial or victimization), and selective attention on past experience to the neglect of present reality. Also included are individuals whose interviews are marked by confusion and incoherence.

Three subtypes of Resolved and six subtypes of Unresolved have been identified to date (Pianta et al., 1996), each of which reflects a different style of resolution/nonresolution. The Feeling-, Action-, and Thinking-oriented Resolved subtypes are characterized by expression of feeling, active caregiving of the child, or an emphasis on information about the child's disability, respectively. Among the Unresolved subgroups, the Emotionally Overwhelmed express strong feelings of pain in the interview, and tend to enlist the interviewer's sympathy. The Angrily Preoccupied subgroup actively express anger throughout the interview and enlist the interviewer's endorsement of their anger. The Neutralizing subgroup do not report negative emotion associated with the child's diagnosis. Depressed/Passive mothers are pervasively sad and depressed during the interview, are overwhelmed by the prospect of caring for the child, and express little hope for the future. The Cognitive Distorting subgroup have unbalanced perceptions of the child's condition, clearly idealizing the benefits versus the costs of the experience, and distorting their expectations regarding the child's future. Finally, the Confused mothers show substantial incoherence, contradiction, and/or confusion during the interview. For a more detailed description of the Resolved/Unresolved subgroups, see Pianta et al. (1996) and Pianta and Marvin (1992b).

The coders were advanced graduate students and the principal investigators, who had been trained to ≥ 80% reliability at major group and subgroup levels. Coders were blind to each other's classifications and to the other data reported. All interviews were coded by two coders. Exact agreement at the level of Resolved/Unresolved was 92/97 (95%). Exact agreement at the level of the nine subclasses was 84/97 (87%). All disagreements were conferenced to agreement after coder agreement had been computed, and the analyses were conducted using the conferenced classifications.

Marvin and Pianta (1996) found support for the validity of maternal resolution through comparison of mother's resolution status with her child's attachment status (Ainsworth, Blehar, Waters, & Wall, 1978). They reported that 82% of mothers classified Resolved had securely attached children, while 81% of mothers classified Unresolved had insecurely attached children. Maternal resolution versus nonresolution of the child's diagnosis is thus a strong predictor of secure versus insecure child–parent attachment.

Support Functions Scale, Short Form

Dunst and Trivette's (1988) SFS taps global need for social support, as well as within the areas of emotional, child, instrumental, financial, and agency, support. For the purposes of this study, instrumental, financial, and agency support were collapsed into one scale of Practical support. Need for support on the SFS is measured on a 5-point scale, in which the respondent reports frequency of need for a type of support from 1 *never* to 5 *quite often*. Dunst and Trivette (1988) reported internal consistency on a 20-item version of the scale to be high, with a coefficient alpha of .87 and a test–retest reliability over a 1-month period of .91 ($p < .001$). For this sample, coefficient alpha was .83.

Family Support Scale

Dunst, Jenkins, and Trivette's (1984) 18-item FSS measures Helpfulness of various sources of Formal and Informal family network support. For the purposes of this study, Informal sources were further broken down into Family, Friend, and Other Informal sources of support. Helpfulness was rated on a 5-point scale from 0 *not at all helpful* to 4 *extremely helpful*. Dunst et al. (1984) reported a coefficient alpha of .77, and test–retest reliability over a 1-month interval of .91 ($p < .001$). For this sample, coefficient alpha was .87. A Total Support Helpfulness score was obtained by summing the score on all 18 items. Number of Sources Available was simply the number of identified sources of support.

In line with our hypothesis that certain intimate relationships would be more instrumental than other sources of support in helping a mother cope with her child's diagnosis, we constructed a new subscale, labeled Intimate Network sources. Our working hypothesis is that these support sources would aid the mother in managing the emotional trauma of the diagnosis, accepting the loss as permanent, and reorienting to the present reality. The sources of support from the FSS considered to be most relevant to this theoretically constructed subscale were Item 1: My Parents; Item 5: Spouse or partner; Item 6: My friends; Item 11: Parent groups. The Intimate Network subscale was included with the other standard subscales in the data analysis, demonstrating a reliability coefficient alpha of .63.

Parenting Stress Index, Short Form

Abidin's (1990) 36-item PSI-Short Form was designed to identify parent–child systems under stress, as well as specific sources of stress. The PSI consists of items which a parent may or may not endorse regarding their perceptions of child characteristics, their interactions with the child, and their present quality of life. The measure contains three reported subscales labelled Difficult Child, Parent–Child Dysfunctional Interactions, and Parental Distress. Abidin (1990) reported

that the same three-factor solution adequately describes both the Short Form used for this study and the original, 101-item Long Form of the PSI. Global coefficient alpha for the PSI is reported at .95. For this sample, global coefficient alpha was .91. See Abidin (1990) for a discussion of validity of the PSI.

Dyadic Adjustment Scale

Spanier's (1976) 32-item DAS was designed to differentiate distressed from nondistressed couples, and is one of the most widely used and validated self-report measures of marital functioning. Individuals report the degree of agreement or disagreement that they have with their spouse across several dimensions. The DAS yields a Total Score and three subscale scores. In the present analysis, the Consensus, Satisfaction, and Cohesion subscales from the DAS were used. The Affection factor score, which has not been reliably extracted in factor analysis, was excluded. Spanier (1976) reported a global coefficient alpha for the DAS of .96. For this sample, global coefficient alpha was .96. Research by Walker, Manion, Cloutier, & Johnson (1992) supported the validity of the DAS for couples with chronically ill children.

RESULTS

Multivariate analysis of variance (MANOVA) procedures were used to compare both major categories and subcategories on the multiple dependent variables. Using Hotelling's T^2 criterion, when alpha levels were .10 or less, follow-up univariate analyses were employed to determine the source of group differences. Additionally, total scores on the various measures were compared across groups. Alpha levels of .05 were used for all univariate analyses. The results are presented in three sections. The first compares the major categories of Resolved and Unresolved on self-report measures of social ecology. The second and third present comparisons of self-report measures among the subgroups of the Resolved and Unresolved categories.

Major Resolution Category and Self-Report Measures

Comparing Resolved and Unresolved groups, MANOVA results indicated no significant differences on factor scores of the Parenting Stress Index, $F(3, 93) = 1.63, p = .18$; wife Dyadic Adjustment Scale, $F(3, 93) = 0.72, p = .54$; and Support Functions Scale, $F(3, 93) = 0.99, p = .40$. However, significant differences were found for factor scores of the husband DAS, $F(3, 93) = 2.43, p = .07$, and the Family Support Scale, $F(6, 90) = 2.71, p = .018$. Table I shows the

Table I. Resolution of Child's Diagnosis and Self-Report Measures of Social Ecology

Variable	Resolved (n = 47)		Unresolved (n = 50)		t(95)
	M	SD	M	SD	
Parenting Stress Index [Hotellings T^2 = 0.05, $F(3, 93)$ = 1.63, p = .18]					
Mother report					
Total stress	77.1	19.0	85.2	18.7	−1.83[a]
Difficult child	28.2	9.3	31.6	7.7	
Parental distress	27.3	7.0	31.0	9.8	
P–C dysfunctional interaction	21.5	5.9	22.6	6.4	
Dyadic Adjustment Scale					
Wife factor scores [Hotellings T^2 = 0.02, $F(3, 93)$ = 0.72, p = .54]					
Total minus Affection	99.1	14.4	92.6	22.4	1.46
Cohesion	15.2	3.5	13.7	5.2	
Consensus	46.5	5.9	43.9	9.7	
Satisfaction	37.4	7.3	34.9	9.4	
Husband factor scores [Hotellings T^2 = 0.09, $F(3, 93)$ = 2.43, p = .07]					
Total minus Affection	102.2	12.5	95.5	17.7	1.79[a]
Cohesion	15.4	2.9	13.5	3.7	2.43[b]
Consensus	48.0	5.9	46.4	8.8	0.75
Satisfaction	38.7	6.2	35.6	7.6	1.94[a]
Support Functions Scale [Hotellings T^2 = 0.03, $F(3, 93)$ = .99, p = .40]					
Average ratings of support need					
Average total support need	2.7	0.68	2.8	0.65	−0.75
Child support	2.9	1.0	2.9	0.88	
Emotional support	3.1	0.76	3.0	0.76	
Practical support	2.3	0.72	2.5	0.71	
Family Support Scale [Hotellings T^2 = 0.18, $F(6, 90)$ = 2.71, p = .018]					
Ratings of support helpfulness					
Total support helpfulness	25.0	8.2	21.5	9.3	1.97[a]
Family support	11.3	3.8	9.2	4.8	2.28[a]
Formal support	13.2	4.4	12.5	6.4	0.56
Friend support	2.1	1.7	1.9	1.9	0.45
Intimate network	7.5	2.3	6.3	3.1	2.15[a]
Other informal support	2.2	2.1	2.3	2.5	−0.15
No. of sources available	12.5	2.9	11.5	3.5	1.50

[a] p < .05.
[b] p < .01.

results of follow-up univariate analyses, as well as comparisons of total scores on all measures.

Comparing groups on factors of the measures for which MANOVA analyses were significant, husbands of Resolved wives showed higher scores in the Satisfaction, $t(95)$ = 1.94, p = .03; Cohesion, $t(95)$ = 2.43, p = .009; and Total

minus Affection, $t(95) = 1.79$, $p = .04$, factor scores of the DAS than husbands of Unresolved wives. On the Family Support Scale, Resolved mothers indicated more support from family, $t(95) = 2.28$, $p = .01$, as well as higher levels of total support, $t(95) = 1.97$, $p = .05$, than did Unresolved mothers. Regarding our constructed measure of Intimate Network, the Resolved group reported higher levels of helpfulness on this scale than did the other group, $t(95) = 2.15$, $p = .02$.

Comparing total scores on the remaining scales (PSI, wife DAS, SFS), only the PSI scores were significantly different, $t(95) = -1.83$, $p = .04$. On this scale, Unresolved mothers exceeded a percentile ranking of 84 (M raw score = 85.2, $SD = 18.7$), while the percentile ranking of Resolved mothers was approximately 71 (M raw score = 77.1, $SD = 19.0$).

Subcategories of Resolution: Resolved

Among the three Resolved subgroups, 13 mothers were classified as Feeling Oriented, 13 as Action Oriented, and 21 as Thinking Oriented. Differences across the three subgroups were found only on the Support Functions Scale, $F(6, 80) = 1.95$, $p = .08$. Elevated scores by the Feeling-oriented subgroup largely accounted for these differences. Specifically, the Feeling-oriented subgroup reported greater Total Need for support ($M = 3.1$, $SD = 0.62$) than both the Action-oriented ($M = 2.6$, $SD = 0.65$) and the Thinking-oriented ($M = 2.6$, $SD = 0.70$) subgroups, $F(2, 44) = 1.84$, $p = .04$. In the area of Emotional Support, the Feeling-oriented subgroup also reported greater need ($M = 3.4$, $SD = 0.89$) than both the Action-oriented ($M = 2.9$, $SD = 0.60$) and the Thinking-oriented ($M = 2.9$, $SD - 0.74$) subgroups, $F(2, 44) = 1.65$, $p = .05$. Additionally, the Feeling-oriented subgroup reported grater need for Practical Support ($M = 2.6$, $SD = 0.72$) than the Thinking-oriented ($M = 2.1$, $SD = 0.74$) subgroup, $F(2, 44) = 1.80$, $p = .04$. Finally, in the area of Child Support, the Feeling-oriented subgroup indicated greater need ($M = 3.3$, $SD = 0.83$) than the Action-oriented ($M = 2.6$, $SD = 1.0$) subgroup, $F(2, 44) = 1.98$, $p = .03$. No differences on any of the other measures were found among the three Resolved subgroups.

Subcategories of Resolution: Unresolved

Table II shows comparisons among the six Unresolved subcategories. Emotionally Overwhelmed, Angrily Preoccupied, Neutralizing Affect, Depressed/Passive, Cognitive Distorting, and Disorganized/Confused. MANOVA analyses indicated between-subgroup differences on the Support Functions Scale, $F(15, 122) = 1.43$, $p = .10$, and the Family Support Scale, $F(30, 192) = 1.66$, $p = .02$. On the Support Functions Scale, the need for Practical Support

Table II. Unresolved Subgroups and Self-Report Measures of Social Ecology[a]

Variable	Emo (n = 10) M	SD	Ang (n = 6) M	SD	Neu (n = 6) M	SD	Dep (n = 7) M	SD	Cog (n = 10) M	SD	Dis (n = 11) M	SD	F(5, 44)
Parenting Stress Index [Hotellings T² = 0.21, F(15, 22) = 0.58, p = .88]													
					Mother report								
Total stress	86.1	25.4	89.0	12.7	85.1	12.2	90.3	16.3	77.0	11.5	86.6	24.8	2.44[b]
Difficult child	32.9	9.9	31.5	4.5	33.7	8.4	30.6	5.2	29.3	6.5	32.1	9.8	
Parental distress	30.2	9.3	34.3	8.4	28.8	2.6	37.4	16.0	26.8	4.9	30.6	11.1	
P–C dysfunctional interaction	22.9	9.0	23.2	5.3	22.6	5.1	22.3	2.6	20.9	4.9	23.8	8.6	
Dyadic Adjustment Scale													
			Wife factor scores [Hotellings T² = 0.39, F(15, 122) = 0.93, p = .53]										
Total minus affection	99.9	21.1	83.8	24.8	86.7	17.0	83.2	35.8	93.6	17.4	99.3	16.8	2.30[b]
Cohesion	15.7	5.1	12.2	5.5	11.5	2.4	10.4	7.5	13.6	5.2	16.1	3.7	
Consensus	45.6	11.5	41.2	9.2	41.8	8.0	41.9	14.6	43.9	7.7	46.4	8.2	
Satisfaction	38.7	5.9	30.5	11.6	33.3	7.6	30.9	16.2	36.1	6.5	36.9	7.2	
			Husband factor scores [Hotellings T² = 0.54, F(15, 122) = 1.12, p = .35]										
Total minus affection	101.9	19.1	84.4	24.2	92.8	10.9	96.4	16.3	96.1	17.4	97.2	18.7	2.40[b]
Cohesion	15.0	4.0	10.8	3.5	12.8	2.9	12.4	3.5	12.3	3.4	15.5	3.8	
Consensus	48.3	9.6	43.2	11.9	44.8	2.9	48.4	9.0	47.4	10.5	45.9	9.1	
Satisfaction	38.6	6.2	30.4	11.7	35.2	7.6	35.6	6.1	36.5	7.4	35.7	7.7	

(continued)

Table II. *(Continued)*

Variable	Emo (n = 10)		Ang (n = 6)		Neu (n = 6)		Dep (n = 7)		Cog (n = 10)		Dis (n = 11)		F(5, 44)
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	
Support Functions Scale [Hotellings T^2 = 0.53, $F(15, 122)$ = 1.43, p = .10]													
Averge ratings of support need													
Average total support need	2.8	0.56	2.9	0.59	2.5	0.52	3.3	0.87	2.5	0.50	2.9	0.64	2.10[b]
Child support	2.9	0.91	2.9	0.93	2.7	0.65	3.6	0.99	2.7	0.87	3.1	0.87	1.00
Emotional support	3.0	0.83	3.2	0.79	2.9	0.47	3.3	1.1	2.7	0.62	3.2	0.66	0.81
Practical support	2.7	0.35	2.9	0.47	2.2	0.83	3.3	1.0	2.1	0.51	2.5	0.65	3.49[c]
Family Support Scale [Hotellings T^2 = 1.30, $F(30, 192)$ = 1.66, p = .02]													
Ratings of support helpfulness													
Total support helpfulness	31.7	18.3	18.3	8.3	18.0	8.7	18.0	9.9	18.3	8.8	24.8	8.1	2.70[b]
Family support	13.2	6.4	7.8	3.7	8.0	3.2	10.0	5.5	7.0	4.0	8.7	3.6	2.20[b]
Formal support	16.4	5.9	12.7	5.9	8.5	4.9	9.7	6.6	11.5	6.6	13.8	6.1	2.80[b]
Friend support	2.5	2.2	1.3	2.4	2.3	1.6	0.7	1.5	1.7	2.1	2.5	1.5	2.50[b]
Intimate network	9.1	3.3	3.8	3.5	5.3	1.9	5.1	3.2	5.4	1.7	7.2	2.9	3.70[c]
Other informal support	3.7	2.7	0.5	0.8	1.2	0.8	1.1	1.2	2.1	2.6	3.6	2.9	2.90[b]
No. of sources available	13.7	3.0	10.2	2.8	9.8	3.9	10.6	3.9	11.3	3.6	12.0	3.2	2.30[b]

[a]Unresolved Classifications: Emo = Emotionally Overwhelmed, Ang = Angrily Preoccupied, Neu = Neutralizing Affect, Dep = Depressed/Passive, Cog = Cognitive Distortions, Dis = Disorganized/Confused.

[b]p < .05.

[c]p < .01.

factor was the primary source of subgroup differences: the Depressed/Passive subgroup expressed more need for Practical Support than both the Neutralizing and Cognitive Distorting subgroups, $F(5, 44) = 3.49$, $p = .009$. This subgroup also indicated more Total Need for support than the Cognitive Distorting subgroup, $F(5, 44) = 2.10$, $p = .05$. Additionally, the Angrily Preoccupied subgroup indicated greater need for practical support than did the Cognitive Distorting subgroup.

Follow-up univariate analyses of the Family Support Scale yielded a number of between-subgroup differences. The Emotionally Overwhelmed subgroup indicated higher levels of support across all types except Friend Support. In particular, this subgroup was higher than the Angrily Preoccupied subgroup across the areas of Total Support, $F(5, 44) = 2.70$, $p = .03$; Family Support, $F(5, 44) = 2.20$, $p = .05$; Intimate Network, $F(5, 44) = 3.70$, $p = .009$; Other Informal Support, $F(5, 44) = 2.90$, $p = .025$; and Number of Sources Available, $F(5, 44) = 2.3$, $p = .05$. The Emotionally Overwhelmed subgroup also scored higher than the Cognitive Distorting subgroup on Total Support, $F(5, 44) = 2.70$, $p = .03$, and Family Support, $F(5, 44) = 2.20$, $p = .05$; and was higher than the Depressed/Passive subgroup on Formal Support, $F(5, 44) = 2.80$, $p = .03$, and Other Informal Support, $F(5, 44) = 2.90$, $p = .025$. Finally, the Disorganized/Confused subgroup indicated higher levels of Friend Support than did the Depressed subgroup, $F(5, 44) = 2.5$, $p = .04$.

Comparing total scores on the remaining scales (PSI, DAS), the Cognitive Distorting subgroup reported significantly less parenting stress ($M = 77.0$, $SD = 11.5$, 71st percentile) on the PSI than both the Depressed/Passive ($M = 90.3$, $SD = 16.3$, 90th percentile) and the Angrily Preoccupied ($M = 89.0$, $SD = 12.7$, 89th percentile) subgroups, $F(5, 44) = 2.44$, $p = .05$. The DAS total score of Depressed/Passive mothers was significantly less than that of Cognitive Distorting mothers, $F(5, 44) = 2.30$, $p = .05$, and the total score for husbands of Angrily Preoccupied mothers was significantly lower than husbands of Neutralizing mothers, $F(5, 44) = 2.40$, $p = .05$.

DISCUSSION

The results of this study corroborate and extend the research pertaining to maternal Reaction to Diagnosis by examining its relations with measures of family systems and social ecology. Resolved mothers experienced lower levels of total parenting stress than Unresolved mothers, who as a group reported stress in the clinically significant range. These results predict greater potential for disruption to the parent–child dyad within the Unresolved group, and are consistent with Marvin and Pianta's (1996) findings that parental resolution versus non-resolution of the child's diagnosis is a strong predictor of secure versus insecure child–parent attachment.

Results regarding marital adjustment indicate that while wives perceive marital quality in much the same way regardless of their resolution category, husbands of Resolved wives are more satisfied than husbands of Unresolved wives. Thus, it appears that maternal resolution/nonresolution of the child's diagnosis is differentially related to the *partner's* view of the marital relationship. These findings offer some evidence that maternal resolution of the child's diagnosis is associated with decreased risk to the marital system. However, the picture apparently is more complicated than we expected. This points to the importance of taking a larger, family systems perspective by investigating the additional information provided by the *fathers'* resolution status (Nicholas, 1997).

Although Resolved and Unresolved mothers did not differ in their need for social support (as measured by the SFS), the Resolved group found their support systems overall to be more helpful than did the Unresolved group. As predicted, the Resolved group found the emotional support they received from an Intimate Network of parents, spouse, friends, and parent groups to be more helpful than did the Unresolved group. It is just these relationships that are considered so important in resolving a trauma. Hence, consistent with our hypothesis, mothers who appeared to successfully complete the mourning process associated with the trauma of the child's diagnosis did in fact report more supportive and helpful relationships. This does not imply any specific causal direction: These differences in perception of support could be driven either by differences in the support systems and/or by differences in the mothers.

Turning to subgroup differences, within the Resolved subgroups we found the Feeling-oriented subgroup indicated higher need for Emotion, Child, and Practical Support, as well as Total Need for support, than did the Thinking- or Action-oriented subgroups. However, we found no differences on helpfulness of actual support, on parenting stress, or on marital adjustment. These results suggest that regardless of the orientation associated with the Resolved mothers, all three subgroups tend to experience similar levels of parenting stress, and to view their marital relationships and social support systems in much the same way. However, the Feeling-oriented subgroup seem to view *themselves* as needing more support. Although further research is required to replicate and understand this finding, we currently see it as reflecting the underlying orientation of this subgroup: They more easily attend to their feelings (including feelings of need for support) as part of their coping strategy.

In contrast to the relative homogeneity across the Resolved subgroups, among the six Unresolved subgroups there was considerable variation in perception of marital quality, parental stress, and social support. Examining the particular strategies associated with Unresolved subgroups, it was found that most of the maternal strategies were associated with differential perceptions of social ecology. Specifically, those subgroups that would be predicted to either deny need for support (Cognitive Distorting, Neutralizing), or have difficulty in mobilizing

resources (Depressed/Passive, Angrily Preoccupied), did in fact report these patterns on the SFS and the FSS. Interestingly, the Emotionally Overwhelmed subgroup reported a large number of sources of support, and high levels of support network helpfulness. On the other hand, the Disorganized/Confused subgroup did not appear to have a coherently distinct set of perceptions. These results support the validity of most of the subgroup classifications.

Thus, our major hypothesis, that Resolved versus Unresolved status would be associated with differential perceptions of marital/family functioning and social ecology, is supported. While Resolved subgroups differed from one another only on perception of *need* for support, the Unresolved subgroups differed on a wide range of perceptions. These findings are consistent with the notion that secure, resolved behavior patterns and states of mind are more homogeneous and less complex than insecure or unresolved forms (cf. Ainsworth et al., 1978; Main & Goldwyn, 1985). In what clinicians would describe as a defensive process, Unresolved mothers may have to develop fairly elaborate and heterogeneous strategies of coping with the trauma of their child's diagnosis. The heterogeneity of these strategies may be reflected in the wide variation in these mothers' perceptions of their social ecology.

In summary, it seems that a mother's capacity to successfully "grieve the loss of the perfect child" is related not only to individual and parent–child adjustment (Marvin & Pianta, 1996; Pianta et al., 1996) but also to the family and social constructs of parenting stress, marital quality, and social support. It appears that a mother's style of, and success in, coping with her child's diagnosis may have important implications at nearly all levels of the macrosystem in which the child is embedded (see Bronfenbrenner, 1979). It also appears complex patterns of variables may be the best predictors of some outcomes. For example, those subgroups with the highest (Emotionally Overwhelmed) and the lowest (Angry/Preoccupied) levels of social support are *both* at increased risk for difficulties in parent–child interaction. It is probably that social support operates differently within each of these Unresolved subgroups, as a function of other individual, family system, or macrosystem variables. Finally, we are not making suggestions about direction of effects. Understanding the causal relations between any of these groups and parent, marital, or social network variables, is beyond the scope of this paper and requires much more research.

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