

Past Childhood Experiences and Current Parent-Infant Interactions¹

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To examine the relationships between adults' childhood experiences in their family of origin, current level of marital support, and quality of parenting interactions, 66 mothers and fathers were observed individually interacting with their infants during home visits using a standardized observational measure (Nursing Child Assessment Teaching Scale). Parents completed questionnaires on marital support (Dyadic Adjustment Scale) and on childhood experiences in the family of origin (Parental Acceptance-Rejection Questionnaire). For mothers, there was no relationship between childhood experiences and the quality of parenting interactions. For fathers, the relationship varied as a function of marital support. Fathers who perceived less positive childhood experiences but who had more optimal levels of marital support were predicted to have more responsive parenting interactions.

Researchers are increasingly identifying links between parent-infant interactions and children's later development. Warm, sensitive parenting is positively linked to optimal social-emotional development (Campos, Barrett, Lamb, Goldsmith, & Stenberg, 1983; Lewis, 1993) and to cognitive and language competence in children (Bee et al., 1982; Coates & Lewis, 1984). Given the positive effects of sensitive parenting on children's later development, nursing research to investigate factors that influence adults' ability to parent is warranted.

The purpose of this study was to examine one factor that is believed to influence parents' ability to parent their own children responsively: the adults' own experiences of warmth and acceptance in their families of origin. Adults raised in nurturing environments are thought to provide more optimal

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parenting (Ricks, 1985). Although the influence of past childhood experiences on current parenting behaviors seems logical, there is, in fact, a lack of supporting empirical evidence. Most knowledge concerning the influence of childhood experiences on parenting the next generation has been derived from research concerning the etiology of child maltreatment (Belsky, 1980, 1984). Studies that investigated the childhood experiences in clinical samples of abusing parents found that the vast majority of parents had themselves been abused as children (Caplan, Watters, White, Parry, & Bates, 1984; Gil, 1970; Kempe, Silverman, Steele, Droegemueller, & Silver, 1962; Spinetta & Rigler, 1972; Steele & Pollack, 1974). These studies, however, had serious methodological limitations. They were based on case histories or agency records and used identified samples of abusing parents without comparison groups of nonabusing parents. Although findings provide information about the percentage of abusing parents who were abused as children, it is not possible to understand the parenting behavior of all individuals who were abused as children from this subsample of parents.

Research that followed high-risk mothers prospectively after childbirth and compared their parenting behaviors to comparison groups of mothers (Altemeier, O'Connor, Sherrod, Tucker, & Vietze, 1986; Egeland, Jacobvitz, & Sroufe, 1988; Hunter & Kilstrom, 1979; Rutter, Quinton, & Liddle, 1983) had more inconsistent findings. Altemeier and colleagues (1986) found no evidence of a generational transmission of parenting behaviors. Other researchers found evidence of a generational transmission but not to the degree that had been indicated in studies that used clinical samples. Hunter and Kilstrom (1978) estimated the rate of a generational transmission at 18%, whereas Egeland et al. (1988) estimated it at 40%. Although these studies are confounded by the high-risk nature of the samples, they nevertheless demonstrate that certain factors decrease the likelihood that poor parenting practices were repeated over generations. Emotional support from therapists, friends, or relatives helped mitigate and even interrupt the effects of problematic childhood experiences for some mothers (Egeland et al., 1988; Rutter et al., 1983). Spousal support, in particular, was an important factor that mediated the relationship between past childhood experiences and the quality of current parenting (Crockenberg, 1987; Egeland et al., 1988; Rutter et al., 1983). Problems experienced in the past by the mothers were somehow attenuated by the supportive qualities or the modelling of good parenting provided by their spouses.

Few studies have investigated the generational influence of childhood experiences on current parenting in low-risk, nonclinical samples of parents. Cowan and Cowan (1990) found that mothers who recalled more positive childhood experiences had more positive parenting interactions, but found

that fathers who recalled more negative childhood experiences had more sensitive interactions with their infants. This counterintuitive finding on father-infant relationships was also noted by Volling and Belsky (1992) in a study of attachment behavior in fathers of firstborn infants. Fathers who recalled more negative childhood experiences were more securely attached to their infants. These researchers all concluded that fathers with more negative childhood experiences may compensate for their past histories by investing more emotionally in their relationships with their infants.

Although the quality of the marital relationship was shown to have a buffering effect in the generational process in samples of high-risk mothers, the role of marital quality in the generational process is less clear in studies of fathers, or parents who are not in high-risk samples. Findings from low-risk parents are contradictory. Belsky, Youngblade, and Pensky (1989) found that marital quality buffered the effects of problematic childhood experiences in a sample of low-risk mothers. Problematic childhood experiences predicted negative maternal affect when the marital relationship was less positive. On the other hand, although Cox and colleagues (1985) did find that childhood experiences influenced mothers' parenting, they did not find that the relationship was mediated by the marital relationship. For fathers, the marital relationship was the only significant predictor of parenting interactions despite the fact that they also studied fathers' childhood experiences.

Because little can be done to modify adults' past childhood experiences, it is important to understand factors that are associated with the generational process. Understanding these factors offers some potential for developing nursing strategies to promote more responsive parenting interactions in parents who report maladaptive childhood experiences in their families of origin. Consequently, the present study was designed to examine the relationship between parents' childhood experiences in their families of origin and the quality of parenting interactions, to examine the role of marital support in the generational process, and to determine whether there is a difference in these relationships for mothers and fathers. We hypothesized that parents who perceived more positive childhood experiences in their families of origin would have more responsive interactions with their infants, and that the relationship between past childhood experiences and current parenting interactions would vary as a function of the level of marital support. More specifically, negative childhood experiences would more likely influence current parenting interactions when there was also less marital support.

This study adds to existing knowledge for several reasons. First, most research on the influence of childhood experiences on the quality of parenting interactions with infants has been limited to describing mothers (Campos et al., 1983; Walker, 1992), but we cannot assume that the results of mother-

infant studies apply to fathers. Second, with the exception of a few studies (Belsky et al., 1989; Cowan & Cowan, 1990; Cox et al., 1985; Volling & Belsky, 1992), current knowledge about a generational transmission process of parenting behaviors has been mainly derived from high-risk samples of mothers (Crockenberg, 1987; Egeland et al., 1988; Rutter et al., 1983). The processes may not be the same for parents in a community sample without these risk factors (Rutter, 1987). Furthermore, few studies have studied mothers and fathers in the same family (Cowan & Cowan, 1990; Cox et al., 1985). The sample in this study consisted of parents who were participants in a larger longitudinal interdisciplinary study comparing mother- and father-infant interactions and development of healthy preterm and term infants (Harrison & Magill-Evans, 1996). The sample is considered a low-risk sample because parents were a community volunteer sample without known serious physical, psychological, or social problems.

METHOD

Sample

Participants in the longitudinal study were recruited from three large urban hospitals in a midwestern Canadian city. To be included, parents had to be married or cohabiting, reside within an hour of the city limits, plan to speak English to their infants, and each agree to participate. Multiple births, infants born with congenital anomalies, or those born to mothers with suspected or confirmed substance abuse were excluded. Of the 237 families contacted in the hospital, 114 families were recruited. The majority of refusals were because only one parent wanted to participate. There was no remuneration for participation. After a year, 103 families remained in the study. Attrition was due to parents separating (3), moving out of the city (3), losing interest (3), and child illness (2). In 64% of the remaining families (34 families with term infants and 32 families with preterm infants), both parents agreed to answer a questionnaire on their childhood experiences in their families of origin. This response rate is appropriate according to a formula that calculates expected response rates for mail-out questionnaires based on Canadian statistics (Jackson, 1988).

All but one of the participating families were White and none were recent immigrants to Canada. Socioeconomic status, estimated using the Hollingshead (1975) Four Factor Index of Social Status, ranged from class 1 to class 5; however, 68% were in the upper two strata. Median family income was in the \$37,000 (U.S.) or greater category. Mothers ranged in age from 19 to 43

years ($M = 29.8$ years, $SD = 5.2$), and their levels of education ranged from less than high school to postgraduate education ($M = 14.5$ years, $SD = 2.8$). Fathers ranged in age from 21 to 46 years ($M = 32.3$ years, $SD = 5.7$), and their levels of education ranged from less than high school to postgraduate education ($M = 14.7$ years, $SD = 3.3$). Mothers of term and preterm infants did not differ significantly in age, education, or socioeconomic status using a Hotelling T^2 test. Fathers of term and preterm infants also did not differ significantly on these variables.

Of the 66 infants, 40 were male and 36 were firstborn. A chi-square test of independence showed no significant association between the term and preterm groups on gender or birth order. Term infants averaged 39.6 weeks gestational age at birth ($SD = 1.0$), and had a normal physical examination on discharge. Preterm infants averaged 34.3 weeks gestational age at birth ($SD = 1.3$), weighed an average of 2,322 grams ($SD = 348.5$), and were discharged from the hospital by 35.9 weeks gestational age ($SD = 1.4$). Although some studies have shown preterm infants to be at increased risk for abuse, these studies included low birth weight (<1500 grams), ill infants who were hospitalized for an extended period of time (Elmer & Gregg, 1967; Klein & Stern, 1971). All preterm infants in this sample weighed over 1,625 grams at birth, and all were diagnosed as healthy on discharge from hospital. Term and preterm infants were matched by gender, hospital of birth, and expected birth date (within one week).

Measures

Parent-infant interactions. The quality of parenting interactions was measured using the parent score of the Nursing Child Assessment Teaching Scale, a standardized observational measure of a parent teaching interaction designed for use with children up to 3 years old (Barnard, 1978). The four parent subscales (i.e., Sensitivity to Cues, Response to Distress, Social-Emotional Growth Fostering, and Cognitive Growth Fostering) consist of a total of 53 behaviors that are scored for presence or absence and summed to provide a parent score. Higher scores indicate more responsive parenting interactions. This instrument has been shown to differentiate between abusing and nonabusing mothers. Internal consistency using Cronbach's alpha for the parent score was reported as 0.83 (Barnard et al., 1989). In this study, Cronbach's alpha was 0.74 for mothers and 0.79 for fathers.

Marital support. Marital support was measured using the Dyadic Consensus subscale of the Dyadic Adjustment Scale (DAS), a self-report instrument for married or unmarried cohabiting dyads (Spanier, 1976). This tool consists of four component subscales (i.e., Dyadic Consensus, Dyadic Satisfaction,

Dyadic Cohesion, and Affectional Expression). The Dyadic Consensus subscale consists of 13 items that assess the extent of agreement between couples on matters of importance to the relationship (e.g., philosophy of life, religion, making major decisions, financial matters, friends, household tasks, time spent together, and dealing with parents and in-laws). Dyadic consensus was based on each partner's perception of how they agree on these matters, rather than the actual extent the couple's responses were in agreement or discrepant. This subscale was chosen because we believed that couples who share a common perspective about their relationship would be more likely to share a common perspective about parenting and more likely to support each other in parenting.

Correlations between the DAS and the Locke-Wallace Marital Adjustment Scale was reported as 0.86 for a married sample and 0.88 for a divorced sample ($p < 0.001$). The DAS and each item has been shown to discriminate between distressed and nondistressed couples (Spanier, 1976). Cronbach's alpha for the Dyadic Consensus subscale was 0.90 (Spanier, 1989). In the present study, Cronbach's alpha was 0.85 for mothers and 0.84 for fathers.

Childhood experiences in the family of origin. Childhood experiences in the family of origin were measured by the adult version of the Parental Acceptance-Rejection Questionnaire (PARQ) (Rohner, 1991). This 60-item self-report questionnaire asks adults to recall their perceptions of acceptance when they were between 7 and 12 years of age. The time range begins at age 7 because children do not have clear self-concepts prior to that age and ends at age 12 to avoid the teenage years, when conflict between parents and children is common (Rohner, 1991). This tool can be used to assess subjects' perceptions of maternal or paternal acceptance or their parents as a unit. During pretesting, there was confusion when subjects were asked to recall their parents as a unit. For some statements respondents recalled their mothers' behavior, whereas for other statements respondents recalled their fathers' behavior. To decrease confusion and ensure that the information could be interpreted, respondents were asked to recall their perceptions of their mothers because there is some indication that children of both sexes attribute nurturance and caring more to mothers (Troll & Bengtson, 1979).

Examples of one item from each of the four subscales are: "made me feel wanted and needed" (Warmth/Affection); "ridiculed and made fun of me" (Aggression/Hostility); "totally ignored me" (Neglect/Indifference); and "did not really love me" (Undifferentiated Rejection). A score of 150 or higher reveals that the person perceives, overall, more maternal rejection than

acceptance. Interscale correlations were high and statistically significant, ranging from -0.43 to 0.89 (Rohner, 1991). The Warmth/Affection subscale was negatively correlated with the Neglect/Indifference subscale ($r = -0.71$), the Aggression/Hostility subscale ($r = -0.45$), and the Rejection subscale ($r = -0.43$). Evidence of convergent and construct validity of the PARQ (Child Version) was established through statistically significant correlations with two other related measures, the Child's Report of Parent Behavior Inventory and Bronfenbrenner's Parental Behavior Questionnaire. Cronbach's alpha was reported as 0.90 . In this study, Cronbach's alpha was 0.98 for both mothers and fathers.

Procedures

Demographic information was collected from parents when they enrolled in the study. During home visits, parents independently completed the questionnaire on marital support and were observed interacting with their infants. The questionnaire on childhood experiences was mailed to all parents after the home visits.

Observations of parenting interactions were done 12 months after the infant was discharged from the hospital. By this age, infants are demonstrating more independence and autonomy and have increased mobility and verbal skills, which present greater parenting challenges. We believed the additional stress might cause parents to rely more on their childhood experiences of being parented and on their spouses for support. The task selected for the observation (i.e., teaching the infant to build a tower using three cubes) was age-appropriate but developmentally challenging, which placed some stress on the dyad (Barnard et al., 1989). Each parent was observed independently because previous research has shown that patterns of interaction differ in dyadic and triadic situations (Parke & Anderson, 1987). To control for order effects, an equal number of mothers and fathers of term and preterm infants were observed first.

Data collectors were trained using standardized videotapes and home observations, and achieved a minimum of 85% interrater reliability prior to data collection. Reliability checks were done on 10% of the home visits during data collection and agreement averaged 88%. Cohen's (1960) Kappa correlational statistic, a conservative estimate of interrater reliability because it corrects for chance agreements, was 0.61 for the total score (parent and child score) for all parents in the longitudinal study. This is acceptable for a scale that consists of nominal data (Landis & Koch, 1977; Law, 1987).

FINDINGS

Analysis of the scores for mothers' and fathers' childhood experiences, marital support, and parenting interactions were subjected to a Hotelling T^2 test to determine if there were any significant differences on these measures between the parents of term and preterm infants. As there were no significant differences, the results are displayed for the total sample of mothers and fathers (see Table 1). Zero-order correlations between mothers' and fathers' predictor variables and parent responsiveness are displayed in Table 2.

In order to test the hypothesis that childhood experiences would predict the quality of parenting interactions, separate regression analyses were performed for mothers and fathers. For each sample, parenting interaction scores were regressed on the predictor variables of socioeconomic status, parental age, infant birth status, marital support, and childhood experiences of acceptance. Demographic variables were entered to control for the effects of these variables. Socioeconomic status was entered in the first step, followed by parental age in the second step. The infant's birth status, coded as a dummy variable (preterm = 0; term = 1) was entered in the third step. We controlled for infant birth status, even though all preterm infants were healthy, because some studies have shown that parents interact less responsively with preterm infants (Barnard, Bee, & Hammond, 1984; Brooten et al., 1988; Harrison & Magill-Evans, 1996). Marital support was entered at the fourth step, followed by childhood experiences of acceptance. The interaction of Marital Support \times Childhood Experiences was entered in the last step to test whether the influence of childhood experiences on the quality of current parenting interactions varies as a function of marital support. A hierarchical method of entry was chosen to determine how much variance in parenting was accounted for by childhood experiences after accounting for the variance attributed to the other predictor variables.

In the mothers' analyses, the only variable to significantly predict mothers' parenting scores was socioeconomic status, accounting for 6.6% of the variance ($\beta = 0.26, p < 0.05$). Higher socioeconomic status was associated with more optimal parenting interactions. There were three outliers noted in the residuals. After determining that there were no computational or transcriptional errors, the outliers were examined to understand why the cases were discrepant. All three mothers had preterm infants and none of the infants were firstborn; otherwise, there was no consistent pattern. Outliers make a disproportionately strong pull on the regression equation and can have a major impact on regression estimates. This is more likely to occur when the sample size is small (Bollen & Jackman, 1990), as it is in this study. A decision was made to remove the outliers to determine the effect on the regression

TABLE 1: Ranges, Means, and Standard Deviations of Parent Measures for Mothers and Fathers^a

	<i>Mothers</i>			<i>Fathers</i>		
	<i>Range</i>	<i>Mean</i>	<i>SD</i>	<i>Range</i>	<i>Mean</i>	<i>SD</i>
Childhood experiences	62-216	104.4	34.7	64-215	96.6	29.9
Marital support	23-59	48.2	6.3	29-60	48.2	5.9
Parenting interactions	25-48	39.1	4.8	19-47	37.8	5.5

a. *N* = 66.**TABLE 2: Zero-Order Correlations Between Parenting Interactions and All Predictor Variables for Mothers and Fathers^a**

<i>Parenting Interactions</i>	<i>SES</i>	<i>Age</i>	<i>Infant Birth Status</i>	<i>Marital Support</i>	<i>Childhood Experiences</i>
Mothers					
Parenting interactions	0.26*	0.08	0.25*	0.14	-.07
SES		0.38**	0.23	0.24	0.09
Age			-0.02	0.07	0.03
Infant birth status				0.11	0.18
Marital support					0.15
Childhood experiences					
Fathers					
Parenting interactions	0.18	-0.03	0.23	-0.22	-0.08
SES		0.25*	0.23	-0.17	-0.31**
Age			-0.11	-0.08	-0.22
Infant birth status				-0.08	-0.12
Marital support					0.03
Childhood experiences					

NOTE: SES = socioeconomic status.

a. *N* = 66.**p* < 0.05. ***p* < 0.01.

estimates. This strategy allowed us to determine if the cases were influential in the regression analysis in addition to being outlying observations, a technique advocated by Bollen and Jackman (1990). When the outliers were removed and the regression analyses repeated, socioeconomic status continued to be the only variable to predict mothers' responsiveness in parenting, although it now accounted for 16.6% of the variance ($\beta = 0.41$, $p < 0.001$).

In the fathers' analyses, none of the variables significantly predicted fathers' parenting interactions. There were three outlying observations in the residuals. Compared to the total sample, all three fathers had male infants,

TABLE 3: Summary of Hierarchical Regression Analysis for Variables Predicting Fathers' Parenting Interactions With Outliers Removed^a

Variable	B	SE B	β
Step 1			
SES	0.11	0.05	0.25*
Step 2			
SES	0.10	0.06	0.24
Age	0.04	0.11	0.05
Step 3			
SES	0.08	0.06	0.19
Age	0.06	0.11	0.07
Infant birth status	1.61	1.23	0.17
Step 4			
SES	0.06	0.06	0.15
Age	0.05	0.10	0.06
Infant birth status	1.38	1.17	0.15
Marital support	-0.25	0.10	-0.32*
Step 5			
SES	0.06	0.06	0.13
Age	0.04	0.11	0.05
Infant birth status	1.33	1.18	0.14
Marital support	-0.26	0.10	-0.32*
Childhood experiences	-0.01	0.02	-0.06
Step 6			
SES	0.06	0.06	0.14
Age	0.05	0.10	0.06
Infant birth status	1.14	1.15	0.12
Marital support	-1.02	0.36	-1.28*
Childhood experiences	-0.41	0.18	-2.63*
Marital Support \times Childhood Experiences	0.01	0.00 ^b	2.76*

NOTE: SES = socioeconomic status. $R^2 = 0.06$ for Step 1 ($p < 0.05$); $\Delta R^2 = 0.00$ for Step 2; $\Delta R^2 = 0.03$ for Step 3; $\Delta R^2 = 0.10$ for Step 4 ($p < 0.01$); $\Delta R^2 = 0.00$ for Step 5; $\Delta R^2 = 0.06$ for Step 6 ($p < 0.05$).

a. $N = 63$.

b. $SE B = 0.0036$.

* $p < 0.05$.

had less marital support ($M = 44$, $SD = 1.7$), and were less responsive in parenting ($M = 24.7$, $SD = 4.9$). Regression analyses were repeated with the outliers removed (see Table 3). In the repeated analyses, marital support, childhood experiences of acceptance, and the interaction of Marital Support \times Childhood Experiences of Acceptance were all significant predictors of the quality of fathers' parenting interactions, explaining a modest 25.7% of the variance. As expected, perceiving more acceptance in childhood was associ-

ated with more responsive parenting interactions, but the direction of the relationship between marital support and the quality of parenting interactions was opposite to what one would intuitively expect. Less marital support was associated with more responsive parenting interactions. These main effects, though, are qualified by the significant interaction of Childhood Experiences of Acceptance \times Marital Support. The magnitude of the impact of fathers' childhood experiences of acceptance on the quality of parenting interactions was conditional on the level of marital support. Fathers who perceived less acceptance in childhood but reported greater marital support were more responsive in their parenting interactions. This finding provides some preliminary evidence that the level of marital support buffers the effect of less optimal childhood experiences.

Although fathers' childhood experiences of acceptance was significant at the final step in the regression, it was not significant when it was first entered at the fifth step. Instead, this variable became significant only after the interaction term (Marital Support \times Childhood Experiences of Acceptance) was entered, which indicates that the interaction term was acting as a suppressor variable. A suppressor variable is a variable that generally has a low correlation with the criterion, but is highly correlated with the other predictor variable that is correlated with the criterion variable. It acts to suppress some variance in the other predictor variable that is irrelevant to the prediction of the criterion variable (Cohen & Cohen, 1983; Pedhazur, 1982; Stevens, 1996). Consequently, when the interaction term was entered, it improved the predictability of childhood experiences of acceptance by removing the portion of variance that does not contribute to the predictability of parenting interactions. When it removed the error variance, this caused the beta values for childhood experiences of acceptance to change substantially from -0.06 in Step 5 to -2.63 in Step 6 and to significantly enter the regression.

DISCUSSION

We found different predictors of the quality of parenting interactions for mothers and fathers. For fathers, there was a relationship between childhood experiences of acceptance and current responsiveness in parenting and the relationship varied as a function of marital support. Fathers who recalled less positive childhood experiences but who had more optimal levels of marital support were predicted to have more optimal parenting interactions. This finding does provide support to those researchers who maintain that the quality of the marital relationship may protect individuals from continuing

the tradition of parenting they experienced (Belsky et al., 1989; Egeland et al., 1988; Hamner & Turner, 1990; Kaufman & Zigler, 1987; Rutter et al., 1983).

Although the results of this analysis helped to elucidate one factor that may protect fathers, it also raised more questions about the precise component of childhood experiences that are involved in the generational process of parenting for fathers. The evidence of a suppressor variable suggests that there is some particular component of childhood experiences of acceptance that is important for fathers and that we have not tapped. The instrument used to measure childhood experiences measured perceptions of maternal acceptance. Men's later ability to have responsive interactions with their infants may be influenced more by their perceptions of paternal acceptance. The more salient figure in the father's childhood experiences may be the parent of the same sex.

Childhood experiences of acceptance did not predict the quality of mothers' parenting in this low-risk sample. The lack of predictability of childhood experiences for mothers is contrary to the findings of the few studies that also used low-risk samples (Belsky et al., 1989; Cox et al., 1985; Main & Goldwyn, 1984). Altemeier and colleagues (1986), however, found that childhood experiences did not predict the quality of parenting in a sample of high-risk mothers. Although it is difficult to explain the different pattern of results for mothers and fathers, there is considerable debate in the literature about the generational influence of childhood experiences on the quality of current parenting. Many theorists (Joy, 1986; Kaufman & Zigler, 1987, 1993; Widom, 1989) argue that the generational influence has been overstated and lacks empirical evidence from true prospective designs because even designs that followed mothers prospectively used accounts of childhood experiences that were retrospective in nature, just as this study did. Memories of events occurring long after childhood can be subject to selective memory, distorted memory, and subjective interpretation of those events.

On the other hand, there is reason to believe that studies using the retrospective approach may underestimate the association between childhood experiences and the quality of current parenting. Mothers have been shown to idealize their childhood experiences, remembering childhood experiences more positively than reality would suggest (Egeland, 1993; Main & Goldwyn, 1984). Research using a clinical sample of mothers (Frailberg, Adelson, & Shapiro, 1975) as well as nonclinical samples of mothers (Egeland et al., 1988; Main & Goldwyn, 1984) found that one method of coping psychologically with negative childhood experiences was to consciously or unconsciously forget them and/or to repress personal emotions associated with the negative experiences. Mothers who remember little of their childhood expe-

riences may not volunteer to be in a study of this nature. They may not want to evoke memories they have chosen to forget, or believe they cannot contribute to the study. Both mothers and fathers in this study included a greater number of people who recalled more positive than negative childhood experiences. Out of a possible range of scores from 60 to 240, with low scores reflecting more positive childhood experiences, the median score for mothers was 91.5 ($M = 104.4$) and 85.6 ($M = 96.6$) for fathers. Because of this fact, the findings are more likely to underestimate the true association between childhood experiences and current parenting. Nevertheless, without a true prospective research design that follows children who have experienced maladaptive parenting forward to the time when their parenting can be assessed, we can only speculate whether these findings truly underestimate or overestimate the association between past childhood experiences and current parenting.

For mothers, socioeconomic status was the only predictor of the quality of parenting interactions. Higher socioeconomic status was associated with more optimal parenting interactions. Other studies have found a positive correlation between socioeconomic status and warm, responsive parenting interactions (Crittenden & Bonvillian, 1984; Herrenkohl, Herrenkohl, Toedter, & Yanushefski, 1984; Simons, Lorenz, Wu, & Conger, 1993). There are several possible explanations for the relationship between socioeconomic status and parenting. First, women with higher socioeconomic status have more financial resources to obtain baby-sitters, send infants to day care, and take time out from the constant demands of parenting. More financial resources means mothers can engage in other activities that are rewarding and self-fulfilling, thereby helping to reduce stress. Stress, especially in relation to inadequate financial resources, has been associated with physical and mental health problems, especially depression (Pesnecker, 1984), and with child maltreatment (Caplan et al., 1984; Egeland et al., 1988; Herrenkohl, Herrenkohl, & Toedter, 1983; Hunter & Kilstrom, 1979; Straus, Gelles, & Steinmetz, 1980; Zuravin, 1989).

A second possible explanation is that there is a relationship between socioeconomic status and discipline practices or parenting styles. Research has shown that parents with lower socioeconomic status use more authoritarian practices (Baumrind, 1991) and more coercion (Herrenkohl et al., 1984) as a control technique than parents with higher socioeconomic status. The tendency to control children's behavior may have been reflected in the parenting scores obtained in this study. Several items in the observational measure of parenting interactions are sensitive to parents' controlling behaviors (e.g., "physically forcing the child to complete the task" or "asking for more than three performances when the child is successful"). It is not entirely

clear why socioeconomic status was not important for fathers. This variable may be less important for fathers because they spend less time with children, especially during the infancy period. With one exception, the primary caregivers of the infants in this study were mothers.

In summary, this study offers an exploratory analysis of the relationship between retrospectively reported perceptions of maternal acceptance in childhood and the quality of parenting interactions in a low-risk sample. For mothers, there was no relationship between childhood experiences and the quality of parenting interactions. For fathers, the relationship between childhood experiences and the quality of parenting interactions varied as a function of marital support. Fathers who perceived less positive childhood experiences but who had more optimal levels of marital support were predicted to have more responsive parenting interactions. The predictors of parenting in this study differed for mothers and fathers. Researchers and practitioners need to be cautious in assuming that the mechanisms underlying parenting behavior in men and women are identical and that knowledge derived from mother-infant studies can be applied to fathers.

The results, however, should be viewed with caution. The sample consisted only of predominantly well-educated, Caucasian, two-parent families. The results should not be assumed to apply to other parents from differing social, racial, and cultural backgrounds. In addition, parents who believed they functioned less adaptively as parents may not have volunteered for the study. The reliance on the use of a questionnaire that asks individuals to recall perceptions of events that occurred years ago has disadvantages; however, many researchers (Belsky & Isabella, 1985; Perris et al., 1986; Rohner, 1986) agree that it is the parent's perceptions of his or her experiences that are important because an individual's development is affected only to the extent that he/she perceived being rejected.

If we are to better understand how fathers' childhood experiences in the family of origin influence parenting interactions, other factors need to be considered in further research because, even with all predictors in the model, the portion of explained variance was modest. Also, what determines the quality of parenting interactions may change as children get older and place more demands on parents.

NOTE

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