

Father Involvement in Infancy: Influences of Past and Current Relationships

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Men's childhood experiences with their parents, their current relationship with their partners, and demographic factors were examined in relation to father–infant interactions. Participants were 60 racially and ethnically diverse, inner-city men and their 6- to 11-month-old infants. Father–infant interactions were videotaped during semistructured free play in participants' homes. The quality of men's interactions with their infants was assessed using Likert ratings of their responsive–didactic and negative–overbearing behaviors. Men engaged in significantly more responsive–didactic behaviors than negative–overbearing behaviors. A cumulative score of protective demographic factors (i.e., men residing with their infants, being married, completing high school, and obtaining income above the sample's median level) and men's experiences of childhood acceptance from their fathers uniquely predicted their responsive–didactic behaviors. Men's relationships with their partners were homogeneously strong and unrelated to fathering behaviors. This study builds on extant literature by providing a broader conceptualization of father–infant relationships and applying observational methods to the study of fathering in minority, low-income men.

There has been a welcome growth of the literature examining father involvement over the past several decades (e.g., Belsky, Youngblade, & Pensky, 1989; Easterbrooks & Goldberg, 1984; Lamb, 2004; Parke, 2000; Power, 1985). However,

studies examining fathers from low-income, minority families have only recently begun to increase (e.g., Black, Dubowitz, & Starr, 1999; Bowman & Forman, 1997; Cabrera et al., 2004; Johnson, 2001). Much of what was initially known about low-income, minority fathers focused on maternal reports of fathers' absence or presence or fathers' lack of or provision for child support payments (Ahmeduzzaman & Roopnarine, 1992; Furstenberg & Harris, 1993). This earlier work revealed that children from father-absent homes are more likely to live in communities that lack educational, medical, and social resources as well as economic opportunities for men (McLanahan & Teitler, 1999). Moreover, children from father-absent families are more likely to have academic, behavioral, and emotional problems such as high rates of school dropout, violence, joblessness, and early sexual activity than are children from two-parent families (McLanahan & Sandefur, 1994; Sampson, 1987).

Although these studies demonstrate adverse outcomes in children from father-absent homes, investigators have also recognized the need to understand the varied nature of paternal involvement in present fathers from low-income backgrounds. An increasing number of researchers have begun to examine father involvement using large national data sets, such as the National Survey of Black Americans (Bowman & Forman, 1997), the Fragile Families and Child Well-Being study (FFCW; Johnson, 2001), and the National Early Head Start Research and Evaluation study (EHS; Cabrera et al., 2004), as well as small-scale data sets (e.g., Roopnarine, Talukder, Jain, Joshi, & Srivastav, 1990). Contrary to initially held beliefs, these studies indicate that many low-income resident and nonresident fathers (particularly those who are in a romantic relationship with their child's mother) are present and actively engaged in their children's lives. These involved fathers play a variety of paternal roles, including financial provider, caretaker, playmate, and teacher (Bowman & Forman, 1997; Cabrera et al., 2004; Johnson, 2001). For example, findings from the FFCW study indicate that the majority of unwed fathers were positively involved in their children's lives at birth (e.g., 81% contributed money during their partner's pregnancy, 75% visited their baby at the hospital, and 96% were committed to helping raise their children; Johnson, 2001). Similarly, in the EHS study, mothers reported that 80% of low-income men were present in their children's lives at 24 months, with 46% of nonresident fathers seeing their children at least a few times a week. Notably, the rates of involvement of nonresident fathers varied substantially by the mother-father relationship: 83% of fathers who continued to be in a romantic relationship with their partners saw their children regularly, as compared to 48% of fathers who were only friends with their partners and only 6% who were neither friends nor romantically involved (Cabrera et al., 2004).

Although these groundbreaking studies demonstrate that the majority of low-income men are taking on the responsibilities of financial provider, caretaker, or teacher, only a handful of studies have used observational measures to explore the quality of these men's interactions with their infants or preschoolers (e.g.,

Black et al., 1999; Brophy-Herb, Gibbons, Omar, & Schiffman, 1999; Shannon, Tamis-LeMonda, London, & Cabrera, 2002; Tamis-LeMonda, Shannon, Cabrera, & Lamb, 2004). In response, this study focuses on parenting behaviors of present fathers and examines prediction from men's demographic characteristics, childrearing history, and relationship with their partners to the quality of father–infant interactions.

Father–Infant Interactions

Observational studies of father–infant interactions have spotlighted the importance of relationship quality to infants' development and reveal that most infants establish secure attachments to their fathers (Lamb, 2002). Paternal sensitivity, for example, is associated with toddlers' problem-solving skills (Easterbrooks & Goldberg, 1984), cognitive status (Shannon et al., 2002), and social competencies (Kelley, Smith, Green, Berndt, & Rogers, 1998). Similarly, sensitivity of both mothers and fathers to their 3- and 12-month-olds predicts linguistic and cognitive abilities of these children at 18 months (Magill-Evans & Harrison, 1999).

Although these studies highlight the significance of positive fathering on infants' socioemotional and cognitive growth, most compare the interactions of fathers to mothers and most target White, middle-income families (Heermann, Jones, & Wikoff, 1994; Lamb, 2004; Power, 1985). Comparative studies often portray men as engaging in “rough and tumble” physical and social play (Roopnarine et al., 1990). Others find that men frequently tease their children (Labrell, 1994) and encourage risk-taking behaviors (Fitzgerald, 1977).

A number of studies suggest that men can be sensitive and responsive caregivers (Black et al., 1999; Shannon et al., 2002). For instance, men were found to respond in sensitive ways to their infants' cries and smiles (Berman, 1980) and to their 1-year-olds when preoccupied with a task (Notaro & Volling, 1999). In contrast, other investigators describe men as insensitive (Heerman et al., 1994) and intrusive with their infants (Labrell, 1994). Studies focusing on didactic behaviors indicate that men encourage visual exploration and manipulation of activities during play with their infants (Power, 1985), and alter their speech patterns when talking with their infants by speaking more slowly, imitating, and using shorter phrases (Golnikoff & Ames, 1979). In summary, although fathers typically engage in more physical and rough and tumble play than mothers, they similarly engage in responsive and didactic interactions with their infants.

Determinants of Parenting

Fathering is multidetermined, and greater consideration of the synergistic relations among predictors is necessary for a more complete understanding of father–infant interactions (Doherty, Kouneski, & Erickson, 1998). Parenting behaviors are affected by characteristics and experiences of the parent (e.g., childrearing history,

education), characteristics of the child (e.g., gender), and social-contextual influences (e.g., marital quality, social support; Belsky, 1984). Although a handful of studies have examined the roles of men's childrearing history and the father-mother relationship in father-infant interactions (e.g., Belsky et al., 1989; Onyskiw, Harrison, & Magill-Evans, 1997), these predictors remain untested in men from minority, low-income backgrounds.

Demographic protective factors. Many men from economically disadvantaged, minority families are frequently living in communities characterized by insufficient schools and educational opportunities; high levels of unemployment, crime, and drug use; and a lack of social and health care resources (Duncan & Brooks-Gunn, 1997; Gadsden & Smith, 1994). However, studies of men suffering from economic hardship have found several demographic factors that can positively affect men's well-being and their involvement with their children. Specifically, men who are married to or reside with their partners have higher levels of education, have higher incomes, and are more nurturing and sensitive in their paternal interactions than men without these protective factors (Black et al., 1999; Bowman & Forman, 1997; Brophy-Herb et al., 1999; McAdoo, 1988; Tamis-LeMonda et al., 2004). Moreover, the accumulation of these demographic factors has been associated with positive fathering (Brophy-Herb et al., 1999). That is, the potential negative impacts on men's parenting associated with poverty may be buffered by such factors as residing with partners and securing an adequate education and job. Across studies, the effect sizes for predictors of positive fathering have been small to medium in magnitude.

Men's childhood relationships. Research indicates that mothers' accounts of their childhood experiences of parental acceptance and rejection predict their interactions with their infants (e.g., Belsky et al., 1989). However, few scholars have investigated men's childhood experiences in relation to their parenting. Men's childhood relationships with both their parents have been evaluated as a unit (C. P. Cowan & Cowan, 1990) and men's relationships to their mothers have been related to paternal interactions (Onyskiw et al., 1997; Volling & Belsky, 1992). Only one known study examined the associations between father-infant relationships and men's relationships with their mothers and fathers separately (Cox et al., 1985).

These studies have resulted in inconsistent findings. Men with secure childhood attachment histories have been found to be more engaged, warm, and sensitive toward their children than men with insecure attachment histories (P. A. Cowan, Cohn, Cowan, & Pearson, 1996). However, in another study, men with negative childhood memories of their relationships with their parents, as measured on the Parental Acceptance-Rejection Questionnaire, had infants who were more securely attached (Volling & Belsky, 1992). Others have found that men who re-

called more negative parental childhood experiences had more sensitive interactions with their infants, perhaps compensating for their lack of accepting parents in childhood by displaying sensitivity and nurturance to their infants (C. P. Cowan & Cowan, 1990). Moreover, findings from one group of investigators indicate that men's recollection of intrusive fathering, but not intrusive mothering, predicted men's attitudes toward their infants (Cox et al., 1985). However, these recollections did not relate to men's actual engagements with their infants. Similar to demographic predictors of fathering, the effects of fathers' past relationships on current fathering tend to be small to medium in size. In light of these inconsistencies, further examination of the differential roles of men's earlier relationships with their fathers and mothers in relation to the quality of father–infant engagements is warranted.

Father–mother relationship. Men's relationship with their partners is another possible determinant of men's interactions with their infants (Belsky, Youngblade, Rovine, & Volling, 1991; Grych & Clarke, 1999; Lamb & Elster, 1985). Men who felt supported by their partners in their role as father exhibited more responsive (Volling & Belsky, 1991), sensitive (Belsky et al., 1991), positive (Belsky et al., 1991), and playful (Levy-Shiff & Israelashvili, 1988) behaviors with their children than fathers involved in less satisfying relationships. Reciprocally, in a study of middle-class White families, relationships that deteriorated in quality were associated with an increase in negative and intrusive paternal behavior, with effects being moderate in magnitude (Belsky et al., 1991).

Associations between the quality of father–infant and father–partner relationships have mostly been documented in middle-class White populations. However, similar results were obtained in low-income, adolescent parents (Lamb & Elster, 1985) and lower to middle-income African American fathers (Ahmeduzzaman & Roopnarine, 1992). Nonresident men in unstable or hostile father–mother relationships were more likely to be uninvolved (Gavin et al., 2002) and to display negative involvement with their children (Coley & Chase-Lansdale, 2000). For nonresident fathers, their partners frequently act as gatekeepers to their children. As a result, mother and father harmony may be especially critical to nonresident fathers' involvement with their children.

Moreover, men who report rejecting childhood experiences may be protected from perpetuating a cycle of negative parenting when involved in supportive marital relationships (C. P. Cowan & Cowan, 1990; Onyskiw et al., 1997). In one study, middle-class White men who recalled experiencing maternal rejection during childhood, but who were involved in supportive relationships, engaged in more positive parenting interactions than men in unsupportive relationships (Onyskiw et al., 1997). In another study examining men's childhood experiences and the quality of the mother–father relationship, only the quality of men's relationships with their partners predicted father–infant interactions (Cox et al., 1985). These studies

underscore the importance of considering men's past and current relationships in fathers' interactions with their infants.

This Study

This study extends research on men's interactions with their infants in five key ways. Specifically, we (a) describe father–infant interactions in an underrepresented group of racially and ethnically diverse, inner-city men who are present in their infants' lives; (b) document the nature of within-group variation in fathers' interactions with infants, rather than comparing fathers to mothers; (c) examine the associations of individual demographic factors and cumulative protective factors with father–infant interactions; (d) investigate whether men's childhood relationships with both their parents independently contribute to the quality of their engagements with their infants; and (e) ask how the men's current relationship with their partners relate to their parenting interactions in a mixed group of resident and nonresident men, rather than focusing solely on married men.

The accumulation of protective factors was expected to predict fathering quality. Men's perception of their childhood acceptance was expected to relate to their interactions above demographic protective factors. In particular, we anticipated men's experience of acceptance from their fathers to be the stronger predictor of their parenting. Men in high-quality relationships with their partners were expected to be more responsive and didactic and less negative and overbearing than those in poor-quality relationships.

METHOD

Participants

Families were recruited when they applied to have their newborns receive child care or parenting services from one of various community agencies located in New York City from 1998 to 2000. Mothers were the gatekeepers to contacting men because many of the study participants did not reside with their infants and had not established legal paternity. When mothers registered for these programs, they were informed about the research study from a posted flyer or a service provider working at the program. Mothers interested in participating either contacted a researcher or provided written consent to their service providers for a researcher to telephone them directly. After receiving oral and written permission from mothers to contact men, researchers contacted the identified men by telephone and informed them of the research. A father visit was scheduled and written consent to participate in the study was obtained from men.

Of the 74 biological adult (e.g., age 20 and over) fathers that were recruited into the study when their infants were newborns, 67 men (91%) agreed to participate in the 6-month assessment. Of the 7 nonparticipating men, 2 could not be located, 4 refused because of their schedules (e.g., working two jobs, moving), and 1 refused because he felt uncomfortable with the research. When compared to the group of participating men, nonparticipating men were similar in ethnic and racial composition, but were slightly older ($M = 28.71$, $SD = 7.95$), less educated (43% with high school diploma), and more likely to be immigrants (57%) and married with more than one child (71%).

In the resulting sample of 67 participating fathers, 6 men completed the interview but not the videotaped portion: 2 due to scheduling difficulties, 2 were uncomfortable being videotaped, and 2 reported that their partners had a drug relapse and randomly left with their infants, so neither of them had contact with their infants at the time of interview. One completed videotape was discarded because of mother presence in the videotaped portion. The final sample, therefore, comprised the 60 men and their infants (33 boys and 27 girls) who had completed both surveys and videotaped interactions.

Most men were American-born (70%), and they came from diverse racial and ethnic backgrounds, with the majority being Latino (53%; 22 Puerto Rican, 2 Dominican, 6 Mexican, 2 Ecuadorian, 1 Guatemalan, 1 Panamanian, and 1 Peruvian) or Black or African American (42%; 5 West Indian, 1 Nigerian, and 1 Guyanese). The remaining 3 were Asian American (5%; 2 Chinese and 1 Surinamese). Most men were single and first-time fathers, with over half of them living with their infants since birth (see Table 1). At the time of the interview, men ranged from 20 to 40 years of age ($M = 26.4$, $SD = 5.96$), and their infants ranged from 6 to 11 months of age ($M = 7.89$, $SD = 1.33$). All men were low-income, and their families were eligible to receive some form of governmental assistance (e.g., Medicaid, food stamps, WIC); however, the majority of men (77%) were working part time or full time.

Procedures for Videotaping

Father visits consisted of an interview and videotape of father–infant interactions during three activities, including 8 min of semistructured free play, which form the basis of this investigation. During the play session, dyads were provided with a standard set of age-appropriate toys: a set of plastic rings, soft plastic book, musical ball, plastic colorful bolster with bells, and a brightly colored double-star fine motor toy. Men were asked to sit on a mat with their infants, to ignore the camera, and to do whatever was most natural to them. They were instructed to only play with the toys presented to them and to divide up the 8 min as they chose. Men were asked to not allow their infants to use a pacifier during the videotaping, so that any vocalizations by the infants could be heard. Men were given \$30, a small gift for

TABLE 1
Demographics, Relationship Variables, and Behavior Scales: Descriptives and Intercorrelations

	<i>M</i>	<i>or</i> %	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
Men's demographics														
1. Resident (%)	63%		—	—	.33**	-.22	-.01	.46***	-.03	.09	.05	.14	.18	.18
2. Married (%)	28%		—	—	—	.21	.08	.68***	.06	.04	.21	.24	.23	-.13
3. Education (<i>M</i>)	12.02		2.04		—	—	.21	.42***	.12	-.11	.02	.01	.16	.09
4. Monthly income (<i>M</i>)	1,250.00		1,036.00				—	.48***	.15	.12	-.06	-.01	.09	.09
5. Protective index (<i>M</i>)	2.06		1.09					—	.20	.10	.08	.19	.31**	.03
Relationship variables														
6. Paternal acceptance (<i>M</i>)	40.42		7.13						—	.23	.30*	.20	.35***	.03
7. Maternal acceptance ^a (<i>M</i>)	43.83		5.68							—	.22	.32***	.15	.22
8. Global M-F relationship (<i>M</i>)	3.98		1.13								—	.69***	.22	.03
9. LRS (<i>M</i>)	18.80		4.44									—	.13	.10
Behavior scales														
10. Responsive-didactic (<i>M</i>)	3.07		0.71										—	.17
11. Negative-overbearing (<i>M</i>)	1.88		0.69											—

Note. M-F = mother-father; LRS = Love and Relationship Scale.

^aMen's scores on maternal acceptance were negatively skewed (skewness = -2.35); reflect and inverse transformation best reduced the skewness of this item (skewness = -0.62). All inferential statistics were based on the transformed variable.

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

their children, and a copy of the videotaped interaction. All interviews and videotaping were completed in the family's primary language.

Measures

Interaction coding. The quality of participants' interactions with their infants was assessed from the videotape after the 8-min observation was completed using the Caregiver–Child Affect, Responsiveness, and Engagement Scale (C–CARES; Tamis-LeMonda, Rodriguez, Ahuja, Shannon, & Hannibal, 2002; see Table 2), which includes 18 father behaviors that were rated on 5-point Likert scales ranging from 1 (*not observed*) to 5 (*constantly observed*). The C–CARES was adapted from the Meadow–Orlans (Meadow & Schlesinger, 1976) and the Mahoney (1992) Scales of Mother–Child Interaction. Our research team's goal was to develop a coding scale appropriate for our racially and ethnically diverse low-income population, so new variables were added and definitions were revised based on coding of more than 150 low-income, minority mother–child and father–child dyads at 6, 14, 24, and 36 months from 1996 through 2003. In line with previous research, responsive–didactic (12 items) and negative–overbearing (6 items) scale scores were computed based on documented reliability and predictive validity for children's cognitive outcomes at 24 months (see Shannon & Tamis-LeMonda, 2003; Shannon et al., 2002). Both scales demonstrated good internal consistency with a coefficient alpha of .86 for the responsive–didactic scale and .77 for the negative–overbearing scale.

Two graduate research assistant coders were trained and reached 85% agreement (within 1 point) with seven “gold standard” tapes before coding interactions. The final 53 videotapes were coded independently in three passes. In the first pass, the researchers watched the dyad more generally and recorded notes about the interaction. In a second pass, they observed and coded the father's behavior. In a third pass, they observed and coded the infant's behavior. Ten percent of the remaining tapes were randomly assigned to ensure reliability. Interrater reliabilities ranged from 87% to 100% agreement (exact and within 1-point agreement). Correlations ranged from .71 to .97. Videotapes of men who spoke Spanish or Cantonese were viewed and coded by trained researchers who spoke the family's primary language. Coders were unaware of how men perceived their childhood relationships or their relationship with their partners.

Demographics. Men were interviewed about their residency and marital status, age, race and ethnicity, immigration status, educational background, income, and parity. Their infants' age and gender were gathered from mother interviews.

Protective index. A protective index score was created by tallying the number of protective factors experienced by each participant, which was based on

TABLE 2
Men's Behaviors

<i>Behavior Items</i>	<i>Definitions</i>	<i>M</i>	<i>SD</i>
Responsive–didactic scale			
Positive affect	Show enjoyment, approval, or affection through facial expressions or tone of voice	3.57	1.27
Positive touch	Amount and quality of gentle, playful touch using hands, face, or body	3.63	1.15
Positive verbal statements	Expression of approval, praise, and positive reinforcement	1.83	1.04
Participation with infant	Amount of involvement with the infant, not the quality	4.17	0.89
Responsiveness to nonverbal cues	Contingent and appropriate responsiveness to infant's nonverbal cues	3.23	0.99
Responsiveness to vocalizations	Contingent and appropriate responsiveness to infant' verbal cues	2.37	1.55
Emotional attunement	Emulate infant's emotions using voice, gestures, and facial expressions	2.63	1.19
Structuring	Organize environment and materials to maximize infants' play and learning	3.50	1.14
Achievement orientation	Encourage cognitive achievement through directive teaching	2.33	1.11
Toy play	Amount of the father's play with the toys, not sophistication of play	3.62	1.17
Amount of language	Amount of verbal stimulation provided, regardless of content and style	3.08	1.21
Quality of language	Quality of verbal stimulation; level of explanatory verbal style	2.90	1.23
Negative–overbearing scale			
Negative affect	Show disapproval, anger, or impatience through facial expressions or tone of voice	1.45	0.83
Negative touch	Amount and quality of forceful, abrupt touch using hands, face, or body	1.70	1.00
Negative verbal statements	Expression of disapproval for noncompliance and negative behavior	1.47	0.74
Teasing	Contradict infant's actions in a playful or antagonistic manner	1.98	1.16
Intrusiveness	Interrupt, restrict, or hover over the infant's play	2.45	1.14
Flexibility ^a	Willingness to let the infant direct an activity	3.78	1.14

^aThis item was reverse coded prior to calculating the negative–overbearing scale.

dichotomized scores of the following four demographic variables: (a) residential status (reside with infant = 1, nonresident = 0), (b) marital status (married = 1, not married = 0), (c) education (high school graduate/GED or more = 1, less than high school graduate = 0), and (d) monthly income (median split of \$1,200 or more = 1, \$1,199 or less = 0). The cumulative protective index score could range from 0 to 4.

Childhood experiences. Men were first asked questions about their family of origin: (a) who raised them (i.e., biological father or father figure; biological mother or mother figure), and (b) how frequently they saw each parent or parent figure. Responses ranged from 1 (*never*) to 5 (*every day or almost every day*) on a 5-point Likert scale.

Next, the adult version of the Parental Acceptance–Rejection Questionnaire (PARQ) was administered. The PARQ measures men’s perception of their acceptance and rejection from their father (or father figures) and mother (or mother figures) during childhood (Rohner, 1991). The PARQ is a 60-item, self-report instrument in which men were asked, separately, how their father and mother treated them while they were growing up, with responses on a 4-point Likert scale ranging from 1 (*almost never true*) to 4 (*almost always true*). Sample questions included, “My father/mother said nice things about me,” and “My father/mother punished me severely when he/she was angry.” Its reliability and validity have been documented across a range of populations, including Black, Vietnamese, Korean, and Latino, with Cronbach’s alphas for scales ranging from .86 to .95 (Rohner, 1991).

A short form of the PARQ was developed based on factor analyses conducted by Sherman and Donovan (1991). The short form consisted of 24 items and has internal reliability scores ranging from .80 to .90. These 24 items were further reduced to 12 in this study—those with the highest loadings on the PARQ. To ensure the validity of the short form of the PARQ, a sample of 23 men completed both the long form (60 items) and the short form (12 items) on their fathers and mothers prior to the full study. Because the correlation between the scores on the two different forms was high for perceptions of mother (.91) and father acceptance (.92), the 12-item short form was used for the remaining 37 participants. Two separate composite scores were calculated—paternal acceptance scale and maternal acceptance scale. The negatively worded items were reverse coded. Scores could range from a low of 12 to a high of 48. A high score reflected maximum perceived acceptance and minimum perceived rejection. Three men with no biological father or father figure had missing data for experiences of paternal acceptance. Results were essentially similar when results excluding cases with missing data were compared with results based on all cases with mean substitution. Although replacing data with means reduces variability (which would therefore lead to a more conservative interpretation of effect sizes; Enders, 2004), these men were included in analyses.

Reliability analyses with this sample were very good, with coefficient alphas of .89 for paternal acceptance scale and .88 for maternal acceptance scale.

Father–mother relationship. Men’s relationship with their partners was based on one general question and six specific questions. First, men were asked, “In general, how would you rate the quality of your relationship with [child]’s mother?” Responses were rated on a 5-point Likert scale ranging from 1 (*poor*) to 5 (*excellent*). Next, using six items from the Love and Relationship Scale (LRS; Braiker & Kelley, 1979), men were asked more specific questions about the quality of their relationship with their partner. Responses were rated on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Example questions included “My spouse/partner listens to me when I need someone to talk to,” and “I can state my feelings without her getting defensive.” A composite score was created. Negatively worded items were recoded so that higher scores indicated more positive relationships. Possible scores range from a low of 6 to a high of 24. Five men had missing LRS scores. Results were essentially similar when results excluded cases with missing data, so these men were retained in all analyses. The LRS demonstrated adequate internal consistency for this sample, with a coefficient alpha of .81.

RESULTS

Descriptives and intercorrelations among the independent variables (i.e., men’s protective index scores, childhood relationships with their fathers and mothers, and their relationship with their partners) are presented first. Next, correlations among all three independent variables, individual demographic items, the cumulative protective index, and fathering behaviors were conducted. Finally, multiple regressions examined the joint and unique contributions of significant predictors to fathers’ interactions with their infants.

Men’s Protective Index

Examining the four individual items as dichotomized variables, the majority of men resided with their partner and obtained a high school degree or GED. Only a quarter of men were married. When the four items were aggregated into a protective index score, men had an average number of two protective factors, with a range of 0 to 4 (see Table 1). A third of the men had none (5%) or one (28%) protective factor, and over half had a score of two (33%) or three (22%). Only 12% of men were classified as having all four protective factors. Surprisingly, the four protective factors were unrelated, with the exception that married men were more likely to reside with their partners.

Men's Childhood Relationships and Current Relationship With Their Partners

The majority of men (95%, $n = 57$) had a father or father figure during their childhood (i.e., 43 biological fathers, 7 grandfathers, 2 uncles, and 5 adoptive or stepfathers), and all men had a mother or mother figure (i.e., 55 biological mothers, 4 grandmothers, and 1 aunt). Sixty-five percent of men ($n = 39$) saw their father or father figure every day or almost every day ($M = 4.05$, $SD = 1.58$). Ninety-three percent of fathers saw their mother or mother figure every day or almost every day ($M = 4.83$, $SD = 0.69$). Although men had predominantly positive memories of their childhood relationships with both parents (see Table 1), they perceived significantly more positive childhood experiences with their mothers than with their fathers, $t(59) = 3.15$, $p < .01$. Surprisingly, men's report of paternal acceptance was unrelated to their report of maternal acceptance.

Men overwhelmingly viewed their relationship with their partner as friendly and satisfying, as indicated by their high scores on both the global scale and the LRS (see Table 1). The majority of men (75%) rated the overall quality of their relationship with their partner as excellent ($n = 24$) or very good ($n = 21$). Only 3 reported having a poor relationship. Men were also more likely to report being able to state their feelings without their partner getting defensive ($M = 3.13$, $SD = 1.00$) and that their partner understood their hurts and joys ($M = 3.22$, $SD = 1.07$) and listened to them when they need someone to talk to ($M = 3.55$, $SD = 0.74$); they were less likely to feel distant ($M = 2.11$, $SD = 1.13$), neglected ($M = 2.15$, $SD = 1.22$), or lonely ($M = 1.84$, $SD = 1.83$) when with their partner, $F(5, 54) = 26.37$, $p < .05$. Men's level of paternal acceptance positively related to the overall quality of their relationship with their partner; level of maternal acceptance positively related to their relationship with their partner as measured on the LRS.

Fathering Behaviors

Men's behaviors displayed modest to strong variation (see Table 2). They engaged in significantly more responsive and didactic behaviors than negative and overbearing behaviors, $t(59) = 8.67$, $p < .001$. Men's scores on the responsive–didactic scale did not relate to their scores on the negative–overbearing scale.

Zero-order correlations. Relations among men's demographic characteristics, perceived childhood relationships, current relationship with their partner, and fathering behaviors were assessed at the zero-order level (see Table 1). First, men's demographic characteristics were examined in relation to their fathering. Individual demographic characteristics did not relate to men's scores on the responsive–didactic or negative–overbearing scales; however, men who obtained higher

scores on the protective index had higher scores on the responsive–didactic scale, with the effect size being medium in magnitude.

Men's childhood and current relationships were next examined in association with fathering. Men's perception of paternal acceptance was positively associated with their scores on the responsive–didactic scale. Surprisingly, no associations were found between men's relationship with their partner and their scores on the responsive–didactic and negative–overbearing scales.

Multiple regressions. A hierarchical regression model was tested to examine the unique and joint contributions of men's childhood experiences to their scores on the responsive–didactic scale. This sequential approach permitted examination of the amount of variance in fathering that was accounted for by men's paternal childhood experiences after considering the variance attributed to the protective index score. Because men's relationship with their partner and their childhood relationship with their mother did not relate to responsive–didactic fathering, these variables were not entered in the model. In addition, because none of the predictors related to men's negative–overbearing behaviors, hierarchical regressions were not conducted for this scale.

Men's scores on the protective index (i.e., resident, married, obtained high school diploma/GED or more education, and obtained income greater than the median) was entered as a first step. Men's experiences of acceptance from their fathers was entered in the second step to assess whether men's childhood recollections of their fathers mattered above the protective index score. Together, these two variables accounted for 18% of the variance in men's scores on the responsive–didactic scale, with each contributing uniquely to the fathering outcome at medium effect sizes (men's scores on the protective index: $\beta = 0.25$, $p < .05$; $\Delta R^2 = .097$, $p < .05$; paternal acceptance: $\beta = 0.30$, $p < .05$; $\Delta R^2 = .086$, $p < .05$). As hypothesized, men with higher scores on their protective index and those who perceived more paternal acceptance during childhood were more likely to engage in responsive–didactic behaviors with their infants.

DISCUSSION

This study moves beyond traditional matriarchal and deficit models in understanding the nature and determinants of low-income fathers' interactions with their infants. Several researchers have called for examination of variation in fathering in diverse racial and ethnic and economic groups (Brophy-Herb et al., 1999; McAdoo, 1988; Parke, 2000). Rather than dichotomizing fathers as absent or present, we focused on fathering in a group of present fathers. Through observational methods, we examined the contributions of men's past and current rela-

tionships to their engagements with their infants over and above protective demographic factors.

Although we did not examine demographic differences between participating and nonparticipating men in this investigation, similar research studies conducted in our lab have demonstrated that participating men appear to come from more stable and higher functioning families than men who do not participate (see Shannon et al., 2002; Tamis-LeMonda et al., 2004). Specifically, the men participating in this study were identified by their partners and, therefore, were more likely to be residing with their infants, better educated, and employed than the nonparticipating men and low-income men in general. Our findings should be considered accordingly.

Men in this study displayed moderate to high levels of responsiveness and warmth toward their infants and less frequent negative and overbearing behaviors, which coincides with the observations of others (Black et al., 1999; Shannon et al., 2002). In the context of this group tendency, however, substantive variation existed.

The majority of men perceived their childhood relationships with their fathers or father figures and mothers or mother figures as warm and accepting, and reported little to no rejection. Similarly, fathers perceived the quality of their relationships with their partners very positively, with little variability. This finding accords with that of the FFCW study in which most low-income, unmarried mothers and fathers reported to be in very positive relationships with their partners early in their infants' lives (Johnson, 2001). Men may experience a "honeymoon period" on becoming new fathers and be eager to share the parenting role with their partners. Alternatively, because mothers were gatekeepers to men's participation in the study, those who agreed to let us contact men were minimally in stable relationships.

Our first goal examined how men's protective factors relate to father–infant relationships. Men's scores on the cumulative protective index (i.e., men residing with their infants, being married, being high school graduates, and having incomes above the median), and not individual demographic factors, were found to best predict their responsive and didactic interactions, which parallels findings with a similar population of men (Brophy-Herb et al., 1999). These results support the need to examine the cumulative effect of multiple protective demographic factors on fathering rather than examining these characteristics in isolation. It may be that the qualities of men who commit to one partner and who commit to and complete their education and maintain employment are the same qualities that allow men to maintain a responsive connection to their infants in the face of poverty. Alternatively, men who complete high school, sustain employment, and live with and are married to their partners might reduce stress in ways that enable them to be responsive to their infants' needs. Surprisingly, neither individual nor cumulative protective factors predicted men's negative and

overbearing behaviors, suggesting there are varying pathways to explaining different types of fathering. Perhaps this lack of association is due to the limited variability in men's negative behaviors.

Our second goal was to examine links between men's past and current relationships and their interactions with their infants. Men's perceptions of their childhood relationships with their fathers and mothers related to their perceptions of their current relationships with their partners. This finding further supports the notion that men's early relationships are linked, in part, to subsequent relationships (P. A. Cowan et al., 1996). On the other hand, the quality of men's current relationships with their partners or their feelings about being new fathers may have shaped their recollections of their childhood experiences.

Men's childhood relationships with their fathers directly contributed to the quality of men's parenting, supporting theory and empirical research linking childrearing histories with parent–infant relationships (P. A. Cowan et al., 1996; Rohner, 1986). Specifically, men's experiences of paternal acceptance, but not maternal acceptance, predicted whether or not fathers were responsive and didactic with their infants, and did so after considering significant demographic protective factors (i.e., men's resident and marital status, education, and income). Men with high perceptions of paternal acceptance were more likely to share a responsive relationship with their infants than were fathers who perceived low paternal acceptance, with the effect being of medium size (see also P. A. Cowan et al., 1996). These findings contrast with others that found men's childhood experiences to be unrelated to their interactions with their own children (C. P. Cowan & Cowan, 1990; Cox et al., 1985; Volling & Belsky, 1992). However, only Cox et al. included men's childhood experiences with their fathers, rather than solely their mothers, or their fathers and mothers combined as a unit. This study further supports the value of examining men's maternal and paternal childhood experiences to more thoroughly understand the complexity of how earlier relationships link to current fathering.

Surprisingly, men's relationship to their partners, in our study, was unrelated to their parenting interactions, a finding that differs from much of the literature on father–mother relationships (Belsky et al., 1991; Lamb & Elster, 1985; Levy-Shiff & Israelashvili, 1988; Volling & Belsky, 1991). However, previous investigators focused on middle-class, married couples, and studies of father–mother relationships in low-income populations commonly emphasized links to paternal absence or presence or type of father involvement (Coley & Chase-Lansdale, 2000; Gavin et al., 2002). Because participants in our study were a maternally referred, self-selecting group, and because virtually all men reported sharing positive relationships with their partners, this may have accounted for the lack of an association between father–mother and father–infant relationships. Men we failed to observe may interact differently with their infants, and findings might have differed had they and mothers agreed to their par-

ticipation. It is also possible that we did not accurately measure the quality of men's relationships with their partners and, therefore, failed to find any associations between men's relationships with their partners and fathering behaviors.

Several limitations to this work should be noted. First, findings are based on a small, self-selected sample, thus limiting the generalizability of the findings and limiting the ability to examine differences across cultural groups or the moderation effects of protective factors. This select sample of men who were nominated for study participation by their infant's mothers reported consistently positive father-mother relationships. Thus, there was a restricted range in how men viewed the quality of their relationships with their partners and the number of protective factors exhibited. Second, when the determinants of responsive and didactic fathering were examined, only two of nine correlations (the protective index and childhood experiences with father) achieved statistical significance. Therefore, results should be interpreted with caution. Third, men's relationships with their parents were assessed through men's purely retrospective accounts of their childhood experiences. Retrospective accounts are likely to be affected by men's present circumstances or personalities. Men who report more experiences of rejection from their parents might have been particularly difficult as children. In addition, men might reflect back on and interpret their childhood experiences of acceptance or rejection differently based on their racial or ethnic and cultural background (Lewis, 1999).

In the context of these caveats, several practical and policy implications are evident. It may be important for programs to help fathers to access resources that support fathering, for example, by offering fathers educational and work training programs. This is particularly important because men from communities of poverty typically have limited access to adequate education and well-paying jobs (Gadsden & Smith, 1994). Furthermore, providers should consider making an effort to better understand fathers' current and childhood relationships to design more individualized and effective interventions. This might be particularly relevant for men who have experienced low acceptance and high rejection from one or both parents, and are struggling to maintain positive emotional and economic commitments to their children. Fathers should be supported in breaking the cycle of negative parenting. However, service providers must also be sensitive to the father-mother relationship. Mothers can be resistant to fathers who want to participate, and service providers are challenged to recognize when a mother is inappropriately gatekeeping versus when her resistance is justified.

In summary, the majority of present fathers engaged in sensitive and sophisticated interactions with their infants, and this fathering behavior was positively associated with men's childhood relationships with their fathers. This study builds on extant literature by offering a broader conceptualization of father-infant relationships and by applying observational methods to the exploration of parenting in minority, low-income men. Research of the multiple determinants

of positive father involvement will prove beneficial to clinicians and providers serving this population of families.

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