

Fathers are known to be unique contributors to young children's social, emotional, and academic development (Parke, 2002), and fathering is increasingly recognized as a co-constructed activity (Doherty, Kouneski, & Erickson, 1998; Whitchurch & Constantine, 1993). As such, an ecological perspective provides a useful framework from within which scholars can examine the various individual and contextual factors that influence fathers' involvement with their children. Using this and other theoretical perspectives (e.g., symbolic interactionism, family systems theory), our understanding of the factors influencing father involvement in first-married families has grown over the past two decades (Marsiglio, Amato, Day, & Lamb, 2000). However, our understanding of stepfathers remains scant, despite Census data indicating that approximately 4.4 million children currently live in stepfamilies in the U.S. (even this number is believed to underestimate the true number by as much as 1/3; Kreider, 2003). The substantial number of children reared in stepfamilies suggests the need for additional research on particular determinants of stepfather involvement, especially regarding how they differ from or are similar to the determinants of biological father involvement. Identification of factors related to involvement by fathers and stepfathers would aid our understanding of the influence of family processes on child adjustment in varying family structures (Ganong & Coleman, 2004).

Literature Review and Theoretical Framework

Father Involvement

Although early studies of father involvement focused on the amount of time spent in direct interactions with children, some scholars have argued for broader conceptualizations (Palkovitz, 1997; Pleck, 1997). Of particular importance is the quality of fathers' involvement with their children, as scholars increasingly recognize that mere father contact is insufficient and that not all father involvement, in and of itself, benefits children (Amato & Gilbreth, 1999). In light of this recommendation, here we focus on two behavioral components of father involvement: relative amount of involvement in childrearing activities and quality of engagement.

In our study, as in much past research (e.g., McBride & Rane, 1997), the level of father involvement in childrearing tasks is measured in terms of the division of work between mother and father and represents the father's perception of his contribution to child-related tasks within the family. Quality of fathers' engagement is defined here as the observed quality of interaction between father and child (e.g., sensitivity and responsiveness to the child, supportiveness, stimulation of cognitive development). In general, research suggests that stepfathers appear to assume similar levels of responsibility for childrearing as do biological fathers (Hofferth & Anderson, 2003), but they are less engaged and less emotionally close to their stepchildren than are biological fathers with their children (Fagan, Newash, & Schlosser, 2000; Hofferth, 2003). Thus, we hypothesized that stepfathers and biological fathers will not differ in their relative levels of involvement, but compared with biological fathers, stepfathers will demonstrate lower quality interactions with their stepchildren.

Ecological Perspective

Any examination of father involvement requires recognition that families are complex systems, involving a network of overlapping and sometimes competing relationships (Whitchurch & Constantine, 1993) that are affected by larger contextual factors (Doherty et al., 1998; Hofferth, 2003). Thus, Bronfenbrenner's (1979, 2005) ecological framework is particularly useful to this area of study. Ecological theory focuses on the ways in which the individual interacts with his/her environment to affect development. Specifically, Bronfenbrenner focused on four facets of development: person, process, context, and time (often referred to as the PPCT model). We discuss each facet and how they are integrated in the present study.

Person

The person refers to the individual and his/her characteristics (e.g., gender, race, age, previous experiences). This also encompasses individual differences in cognitions, such as attitudes, beliefs, and expectations. Here, we assess personal characteristics via demographic variables (sex of child, age, race/ethnicity), parenting beliefs, and marital satisfaction.

Sex of child. Although a few studies found no relationship between fathering behaviors and sex of child, most research supports the relevance of sex of child for father involvement. That is, fathers are more involved with sons than with daughters and demonstrate higher overall levels of involvement with their children when there are sons present in the family than when there are only daughters present (Wood & Repetti, 2004; also, see Pleck, 1997, for a review). No studies have examined whether such findings hold for stepfathers, although there is some related research suggesting that interactions with preadolescent and adolescent stepdaughters are more conflict-ridden (e.g., Bray & Kelly, 1998; Hetherington & Kelly, 2002). This type of interaction might dissuade stepfathers of older stepchildren from other types of involvement. Because findings regarding sex of child are somewhat similar for biological fathers and stepfathers, we did not expect differences in the association between sex of child and father involvement by father type; instead, sex of child was included here as a control variable (not a moderator).

Parental characteristics. In previous research, associations were found between some parental demographic characteristics (e.g., race/ethnicity and age) and father involvement. Minority fathers tend to take on more responsibility for childrearing than do White fathers (Hofferth, 2003), and older fathers tend to be more involved than younger fathers (Pleck, 1997). Again, no studies have replicated these findings with stepfathers, and there is no evidence to suggest differences, so we included race/ethnicity and father age as control variables.

Parenting beliefs. Fathers' beliefs about parenting are associated with their involvement with children; however, differences in these associations emerge between biological and stepfamilies. Within biological families, more traditional and authoritarian parenting

beliefs are associated with greater parent-child conflict and lower quality parent-child interactions (Collins, Madsen, & Susman-Stillman, 2002). However, within stepfamilies, stepfathers who are more traditional and authoritarian (emphasizing obedience) have more positive relationships with their stepchildren (MacDonald & DeMaris, 2002; Marsiglio, 1992). We account for these potential differences by assessing both the direct association between fathers' traditional parenting beliefs and father involvement and the potential effect of father type on this association.

Marital satisfaction. Several studies link fathers' marital satisfaction and father involvement (e.g., Kalmijn, 1999; McBride & Rane, 1998), and marital relationships and father-child relationships are more closely linked in stepfamilies than in first-married families (Fine & Kurdek, 1995; Kalmijn), possibly because stepfathers lack a history of interaction with their stepchildren independent from the marital relationship. Thus, the affective quality of the marriage is likely to carry over into the affective quality of the father-child relationship and vice versa. As such, we assess fathers' marital satisfaction and test its direct association with involvement as well as the potential moderating effect of father type on the association.

Process

In ecological theory, process refers to the dynamic interaction between the person and the environment through which development occurs (Bronfenbrenner, 1979, 2005). Applied to our study, process refers to the dynamic interactions between fathers and their children, as well as between fathers and mothers and between fathers and other contexts (e.g., work) over time. Because of the cross-sectional nature of these analyses, we are unable to fully examine development as a process, but we can depict the associations between involvement and various contextual influences at a particular time (when children are in first grade).

Although somewhat different from Bronfenbrenner's conceptualization of process, here we also look at family process variables. By family process variables, we mean indicators of the ways in which families react to and interact with individual, relational, and environmental contexts to produce particular outcomes (fathering behaviors). Here, family process variables include the ways in which fathers' behaviors reflect their parenting beliefs, how parental employment affects fathering behavior, and the ways in which marital satisfaction affects fathering.

Context

To account for contextual influences, Bronfenbrenner (1979) introduced four types/levels of systems that he saw as influential to an individual's development. The microsystem, or the immediate environment surrounding the individual, is represented in our study by the family and, in particular, whether the family includes a biological father or a stepfather.

The mesosystem was described by Bronfenbrenner (1979) as interactions occurring between two or more microsystems. In our study, this level of context is represented by

the interaction between maternal employment and family type (biological versus step), as maternal employment potentially has different influences on father involvement in biological families compared with stepfamilies via its influence on marital satisfaction (discussed earlier). In stepfamilies, maternal employment is related to higher marital happiness, whereas it is associated with lower marital satisfaction in first-married families (Rogers, 1996). Thus, in stepfamilies, maternal employment might contribute to marital satisfaction and, in turn, to higher involvement by stepfathers. Too, the effects of maternal employment on mothers (and indirectly, fathers and children) vary depending upon whether or not the mother wants to work (Hock, Gnezda, & McBride, 1984) and feels adequately able to balance work and family (Lerner & Galambos, 1986). At some point virtually all mothers in stepfamilies were single (either never-married or divorced), during which time they likely relied on their own income-producing abilities. This might affect their views of maternal employment, potentially giving them a greater desire for financial self-sufficiency, even following marriage. Given this reasoning, mesosystems are included in our study through the examination of potential interaction effects of family structure and maternal work hours.

The exosystem includes those contexts in which individuals are not directly involved, but by which they are nonetheless influenced (e.g., parental work environments are seen as influencing children's development). The exosystem is incorporated here through the inclusion of parental work hours (for mother and father) and fathers' occupational status. In past research, parental employment and work characteristics are consistently associated with father involvement. Fathers tend to be more involved when they work fewer hours and have more flexible and less stressful occupations (Beitel & Parke, 1998; Hofferth & Anderson, 2003). Also, fathers take more responsibility for child-related tasks when mothers are employed outside the home (Bailey, 1994; Grych & Clark, 1999, Sanderson & Thompson, 2002), although father-child interactions tend to be less positive in these situations (Grych & Clark).

The last system is the macrosystem, or broad social influences (e.g., government policies, economic circumstances, cultural expectations).

Although we did not assess this directly, macro-level influences likely are present in the form of differing societal expectations for first-married families and stepfamilies, as well as different (gendered) expectations for mothers and fathers.

Time

Added later to Bronfenbrenner's model was the concept of time (Bronfenbrenner, 2005), which incorporated several temporal aspects of development. In addition to the basic passage of time over which development occurs, time refers to individuals' chronological age, the historical period within which they reside, and "family time" (the developmental stage of the family). Due to the cross-sectional nature of these analyses, we do not capture change in father involvement over time. However, time is incorporated here through the inclusion of fathers' duration with the family and the similar developmental stage of the families (all had first-grade children). Previous research (Amato, 1987; Bray

& Berger, 1993) suggested that the length of time stepfathers are present in the family is associated with their involvement with stepchildren, such that longer presence is associated with greater involvement. Evidence suggests that stepchildren require time to adjust to new authority figures, and stepparents require time to settle in to the new parental role (Bray & Kelly, 1998; Hetherington & Kelly, 2002). Here, fathers' presence within the family is assessed (since birth in the case of biological fathers, or the length of time since marriage in the case of stepfamilies), as is its association with father involvement.

Previous Results from the Larger Study

The families used in the present study are a subsample of those participating in the NICHD Study of Early Child Care, a longitudinal study of 1,364 healthy newborn children of English speaking adult mothers, their family environment, and child care and early school experiences (for more information about this study, see NICHD Early Child Care Research Network, 1994). A previous report using the entire sample (NICHD Early Child Care Research Network, 2000) showed that, in contrast to findings from other studies, younger fathers and those in families where both mothers and fathers worked fewer hours reported more responsibility for childcare tasks from birth to age three. Similar to other research findings, the previous report found that fathers who were older, held less traditional parenting beliefs, and were more satisfied in their marriages were rated as more sensitive in their interactions with their children. In these analyses, biological fathers and stepfathers were not differentiated (stepfamilies were uncommon in earlier phases of the study), and children were younger than in the present sample (birth through 3 years rather than first-grade).

Given our review of the literature, it is reasonable to expect that family processes and predictors of involvement might differ for stepfathers and biological fathers. Thus, the purpose of the present study was to follow up these earlier findings with analyses that (a) differentiated between biological fathers and stepfathers and (b) utilized an ecological perspective to explain potential differences and similarities across family types.

Method

Participants

Participant families were drawn from the NICHD Study of Early Child Care. Of the 73 families with resident stepfathers when the children were in first grade, 68 participated in an observation of father-child interaction. These 68 stepfathers were matched with a sample of 68 biological fathers who had resided with their children since birth. The matching process involved selecting a biological father who had a child of the same gender and ethnicity as the stepfather and who was closest on several variables: (a) birth order of target child (first born or later born); (b) father's age; (c) family income-to-needs ratio; (d) father's occupational status; and (e) father's weekly work hours. Not all stepfathers were married to their partners (9 out of 68 were cohabiting); however, marital status was not used as a matching criterion because there were too few unmarried

biological fathers (20 of 769). The resulting sample of fathers and stepfathers (N = 136) was diverse. They ranged in age from 23 to 49 years, 30% were ethnic minorities; 60% were nonprofessionals; and the median income-to-needs ratio was 2.0 (range 0.1-15.7; 15% were below the poverty level, and another 32% were in the low-income range). As expected from the matching process, the two groups did not differ on any demographic variables, with the exception of occupational status (see Preliminary Analyses). A minimal number of cases (less than 5%) had randomly missing data on some study measures; these data were imputed using SPSS.

Procedure

Families were visited in their homes during the child's first grade year. After receiving information on the study purposes and measures, parents gave their informed consent for their own and their child's participation. Both mothers and fathers or stepfathers completed questionnaires, and fathers and stepfathers were observed in a semi-structured play session with their children.

Measures

Father Involvement

Two aspects of father involvement were assessed: relative amount of involvement in childrearing activities and quality of father engagement during interactions with the child.

Relative amount of childrearing involvement. The amount of involvement of fathers in childrearing activities relative to the child's mother was measured using age-appropriate items from the Parenting Activity Subscale of the Time Spent as a Parent Survey (Glysch & Vandell, 1992). Fathers reported how involved they and their partners were on 11 child-related tasks, such as playing with the child, monitoring the child, and putting the child to bed. Responses ranged from 1 (my partner's job) to 3 (we share the job equally) to 5 (my job). Higher scores indicated that fathers assumed a greater proportion of family responsibility for the children. Cronbach's alpha for this scale was .87.

Quality of father engagement. The quality of fathers' engagement with the children was measured as the level of sensitivity and supportiveness fathers demonstrated while playing with their children during a 15-minute videotaped observation. (More information on the interaction procedures and ratings can be found at <http://secc.rti.org>.) Videotapes were scored by trained coders at a single site who were blind to father status. Six dimensions of father behavior (supportive presence, respect for child autonomy, stimulation of cognitive development, quality of assistance, hostility, and confidence) were coded on a 7-point scale (from very low to very high) for the frequency and or quality of behavior. A composite score was created by summing ratings of the father's supportive presence, respect for child autonomy, and hostility (reverse-coded); the alpha for this scale was .76. Inter-observer agreement was assessed on 30% of the cases from the entire sample; the intraclass correlations were .86, .79, and .72, respectively.

Factors Associated with Father Involvement

Demographic information. Family demographic information was collected using mothers' reports of child sex, fathers' age, child ethnicity, family income, fathers' occupational status, marital status, and mothers' and fathers' weekly work hours. Occupational status was defined by collapsing the 13 classifications from the 1990 U.S. Census into three categories: professional and administrative, technical and support, and labor and service. An income-to-needs ratio was calculated for each family by dividing total family income by the poverty index for that family size that year; an income-to-needs ratio of 1.0 is equivalent to poverty.

Fathers' traditional parenting beliefs. Fathers' parenting beliefs were assessed using the traditionality subscale of the Parental Modernity Scale of Child-Rearing and Educational Beliefs (Shaefer & Edgerton, 1985). Sample items include "It's all right for a child to disagree with his/her parents" (reverse coded) and "The most important thing to teach children is absolute obedience to whoever is in authority." Fathers rated each of the 22 items on a 5-point scale, ranging from strongly disagree to strongly agree. Scores were summed, and higher scores indicated that fathers were more authoritarian, stricter, and more conservative in parenting their children ($[\alpha] = .87$).

Marital satisfaction. Fathers' marital satisfaction was assessed using the 6-item marital intimacy subscale from the Personal Assessment of Intimacy in Relationships (Shaefer & Olson, 1981). Fathers responded to items such as "My spouse listens to me when I need to talk," using a 5-point Likert-type scale which ranged from strongly disagree to strongly agree. Responses were summed, and higher scores indicated that fathers were more satisfied with their relationships ($[\alpha] = .81$).

Fathers' duration in the family. First, the amount of time fathers had resided with their child/stepchild was calculated by determining the major data collection point (6, 15, 24, 36, or 54 months, kindergarten [60 months], or first grade [72 months]) when a stepfather was first recorded as living in the household. The earliest time at which mothers reported the presence of a stepfather in the family was 15 months, and almost half of the stepfathers (47%) joined the family when the child was in kindergarten or first grade (within the year prior to data collection). All biological fathers were coded as 72 months. Thus, families were divided into three groups: father present since birth, stepfather presence between 1 and 5 years, and stepfather presence for less than 1 year.

Analyses

Analyses of variance (ANOVAs) were used to examine differences between biological and stepfather families on family demographics (as a check on the matching process), family process variables, and father involvement. Correlations between demographic factors and each component of involvement were calculated separately for biological fathers and stepfathers. Hierarchical regression analyses were conducted to examine the associations between family process variables (fathers' parenting beliefs, marital satisfaction, and mothers' and fathers' work hours) and father involvement, and the

addition of interaction terms with father type tested whether these associations differed for biological families and stepfamilies.

Results

Preliminary Analyses

Preliminary analyses using ANOVA indicated that biological fathers held occupations that were of slightly higher status ($F [1] = 5.47, p < .05$) and were less traditional in their parenting beliefs ($F [1] = 8.45, p < .01$) than stepfathers. No differences were found by father type for any other demographic variables (father age, sex of child, child race, maternal work status, and family income-to-needs ratio) or family process variables (marital satisfaction and hours of employment), nor were differences found for either fathers' involvement in child-related tasks or fathers' observed quality of engagement with their children (see Table 1 for descriptive statistics). Correlations between the demographic variables and father involvement measures indicated only one significant association, for biological fathers only, between fathers' occupational status and fathers' quality of engagement ($r = -.21, p = .01$). Thus, father occupational status was the only demographic variable retained in further analyses.

Differences in the association between family process variables and father involvement for the two groups of fathers were addressed in separate hierarchical regression analyses with the two outcome measures (relative amount of involvement in childrearing activities and quality of engagement). In both, the demographic variable (occupational status) was entered first; then father type and the set of family process variables were entered next; and finally interactions between each of the family process variables and father type were examined. Moderating effects of father type were tested and interpreted using the approach of Aiken and West (1991) and Whisman and McClelland (2005). That is, analyses were conducted with all of the interactions entered as a single block and with each interaction run separately; because the results were identical, only the results for the full model are reported.

Relative Amount of Childrearing Involvement

Across the entire sample, neither occupational status, father status, nor family process variables (parental work hours, parenting beliefs, marital satisfaction, and fathers' family duration) were significantly related to the relative amount of fathers' involvement in childrearing activities, accounting for only 1% of the variance ($[\Delta]F [1] = .20$ and $AF [6] = 1.46$, respectively; see Table 2).

Upon entering interactions by father type, a significant interaction between father type and marital satisfaction was found ($[\beta] = 0.29, p = .001$), explaining an additional 7% of the variance in fathers' involvement in childrearing activities. Post-hoc examination of the simple slopes for biological fathers and stepfathers separately revealed that marital satisfaction was significantly linked to amount of involvement in childrearing tasks for stepfathers ($[\beta] = 0.43, p < .001$) but not for biological fathers ($[\beta] = -0.15, p = .23$).

Thus, stepfathers were more involved with their stepchildren relative to their partners when they were more satisfied with their marital relationships, whereas involvement in childrearing was unrelated to biological fathers' marital satisfaction.

Quality of Father Engagement

Neither demographic nor family process variables were significantly associated with the quality of father engagement ($[\Delta]F [7] = 7.34$). Demographic and family process variables together accounted for 4% of the variance explained in quality of father engagement.

Once interaction terms were entered into the model, the traditionality of parental beliefs became significantly associated with the quality of father engagement ($[\beta] = -0.19, p < .05$). Further, there was a significant interaction between maternal work hours and father type ($[\beta] = 0.20, p < .05; [\Delta]F [4] = 1.98$). Post-hoc analyses of the simple slopes revealed that maternal work hours were significantly and negatively related to the quality of engagement for biological fathers ($[\beta] = -0.29, p = .02$) but not for stepfathers ($[\beta] = 0.13, p = .26$). When mothers in biological father families worked more hours, these fathers showed a lower quality of engagement with their children; although this association was in the opposite direction for stepfathers, it was not significant.

Discussion

The results of this study support the proposition that family dynamics within stepfamilies differ from those in first-married families, and that an ecological framework is a useful perspective for examining father involvement among different family types. Although no personal or family process variables were related to father involvement in analyses combining biological fathers and stepfathers, type of father moderated the association between two of the family process variables and the indicators of father involvement.

Biological Father versus Stepfather Involvement

Bronfenbrenner suggested that the microsystem was the most immediate context for development, and here this was reflected in the biological or stepfamily status of the fathers. We did not expect to find differences between biological fathers and stepfathers regarding their relative level of involvement in childrearing activities, and we were not disappointed. Prior research suggests that the relative distribution of childrearing tasks does not vary widely across family types (Ishii-Kuntz & Coltrane, 1992). Research does suggest that stepfathers have lower quality interactions with their stepchildren than do biological fathers with their children (e.g., Coleman, Ganong, & Fine, 2000; Fagan, Newash, & Schlosser, 2000; Hofferth, 2003); however, we found no such differences. This might be due to the fact that our sample involved stepfathers of first-grade children, whereas most stepfather family research has been conducted in families with preadolescent and adolescent children; adolescents typically demonstrate poorer adjustment to stepfamily life and experience more stepparent-child conflict than do

younger children (Bray & Kelly, 1998; Hetherington & Clingempeel, 1992). As such, it might be that differences in the quality of parenting do not emerge until later in the stepparent-child relationship or do not emerge at all if the stepfather is involved with the child from a young age.

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Biological fathers and stepfathers did not differ on most of the variables of interest in the present study, although biological fathers tended to hold less traditional parenting beliefs than did stepfathers. Research suggests that stepfathers tend to be less involved in parenting and show less warmth and affection (be more authoritarian) than biological fathers, particularly early on in the stepparent-stepchild relationship (Pasley, Dollahite, & Ihinger-Tallman, 1993). Given that half of the stepfamilies in this sample are relatively new (having joined the family within the past year), it might be that the newness of these relationships made these stepfathers particularly traditional in their parenting beliefs. Too, stepfathers tend to vary more in their experience in the fathering role than biological fathers (some stepfathers are also biological fathers whereas others are not). Less experienced stepfathers might, therefore, rely more on traditional approaches to parenting (although we note that we do not have information regarding stepfathers' other/prior parenting experience).

Personal Factors: Parenting Beliefs and Marital Satisfaction

From an ecological perspective, parenting beliefs and marital satisfaction are personal factors that would be expected to affect parenting. As noted, more traditional parenting beliefs and the emphasis on parental authority are linked to parent-child conflict and lower quality parent-child interactions within biological families (Collins et al., 2002), but within stepfamilies, research finds that more authoritarian stepfathers have more positive relationships with their stepchildren (MacDonald & DeMaris, 2002; Marsiglio, 1992). Although our analyses did not reveal a significant moderating effect for father type on the association between parenting beliefs and quality of father engagement, the correlation between these variables was significant and negative for biological fathers ($r = -.32, p < .01$) and nonsignificant for stepfamilies ($r = -.12, p = .32$; r -to- z transformations revealed that the two correlations differed at the $p < .05$ level), reflecting a similar trend. Namely, biological fathers with more traditional parenting beliefs had significantly lower quality interactions with their children, whereas traditional parenting beliefs were not associated with the quality of stepfathers' engagement. Further research regarding the development and evolution of fathers' parenting beliefs and attitudes, particularly when they become fathers through marriage, is clearly needed.

Regarding marital satisfaction, stepfathers' involvement in childcare tasks was more dependent upon the quality of their marriage than was true for biological fathers. This finding supports prior research suggesting that marriage and parenting are more closely intertwined in stepfamilies than in biological families (Fine & Kurdek, 1995; Ganong & Coleman, 2004; Kalmijn, 1999). By joining an already existing family, a stepfather accepts a "package" that includes a child as well as a partner. Therefore, the stepfather-

stepchild relationship develops alongside the marital relationship, and the two are tightly linked. In fact, research suggests that the stepfather-stepchild relationship is a key to maintaining the marital relationship (Ganong & Coleman; Pasley et al., 1993). Thus, greater willingness of a stepfather to be involved with a spouse's child might contribute to greater marital satisfaction in stepfamilies. By contrast, biological fathers who were more involved in childcare tasks tended to be less satisfied with their marriages, although this association was non-significant. Unlike stepfathers, biological fathers might be more satisfied with their marriages when the responsibility for child-related tasks follows gendered expectations, such that they assume less and their partners assume more of the responsibility (Porter & Hsu, 2003).

Of course, an ecological perspective is simply one of many theoretical frameworks that have been used to explain variations in father involvement, both within and between various family structures. Another possible explanation for the moderating influence of family structure on marital satisfaction is provided by the maternal gatekeeping literature, which suggests that fathers' involvement with their children is controlled by mothers. Although research on maternal gatekeeping typically has not differentiated between first and higher-order marriages (e.g., Allen & Hawkins, 1999), our findings regarding the particular importance of marital satisfaction for stepfather involvement suggests that gatekeeping might be relevant within this population as well. Because stepfathers have no rights or obligations to stepchildren outside of their romantic relationship with the children's mother, mothers might exert even more control over stepfather-stepchild relationships than they do over relationships between biological fathers and children. Thus, fathers in unhappy remarriages probably are prone to having the gates between them and their stepchildren "closed" by mothers.

Context: Maternal Employment

According to Bronfenbrenner, an often understudied systemic influence on development is that of systems in which the person is not directly involved, yet by which he is nonetheless influenced (exosystems). Here we examined the influence of maternal work hours on fathering and how this association differed for biological and stepfathers. We found that maternal work hours were more important to the quality of engagement for biological fathers than stepfathers, such that when mothers worked more hours, biological fathers' behaviors were lower in quality. Recall that for stepfathers the association was the opposite, although non-significant. This is consistent with previous findings regarding paternal quality of engagement and maternal employment in biological families. For example, Grych and Clark (1999) found that biological fathers were more sensitive in interactions with their infants when mothers were not employed or only employed part-time. Further, Rogers (1996) reported that within first-married families, full-time maternal employment is related to mothers' lower marital satisfaction and more marital conflict due to increased role strain/role overload. If mothers who work more hours are less content and more stressed, such distress might spill over into interactions with their partners and contribute to less positive father-child interactions. However, within stepfather families, Rogers found that maternal employment was positively linked to mothers' reports of marital satisfaction. The roles within stepfamilies are less clearly

scripted by social convention (Ganong & Coleman, 2004), and factors such as maternal employment that tend to be associated with stress and conflict in first-married families might be perceived as resources in stepparent families (Rogers). Consistent with Rogers' hypothesis, stepfathers in this study whose spouses worked more hours had slightly but not significantly higher quality interactions with their stepchildren. However, post-hoc analyses did not reveal a significant 3-way interaction effect between father status, maternal employment, and marital satisfaction. Too, as noted earlier, mothers in stepfamilies might have more positive attitudes about the desirability of employment, likely having been financially independent for some time before the remarriage. Mothers who have more positive attitudes about employment (who want to be working) are less likely to be depressed and are more satisfied with their employment, potentially decreasing the amount of negative spillover into the father-child relationship.

Interestingly, hours of maternal employment were not related to the amount of involvement in childrearing activities for either biological fathers or stepfathers, a finding that is inconsistent with previous research (Bailey, 1994; Gottfried, Gottfried, & Bathurst, 1995). However, studies of maternal employment often assess employment status rather than employment hours (Bailey; Grych & Clark, 1999). We created a variable to reflect mothers employment status as either unemployed, employed part-time (less than 30 hours/week), or employed full-time (30 or more hours/week) and found that this variable was associated marginally with fathers' amount of involvement with the child ($r = .16$, $p = .06$). As such, it might be that maternal work status is more important to fathers' relative involvement with the child or stepchild than are the actual hours of work (in contrast to work regarding paternal employment, which finds that hours of employment are more influential than is employment status; Crouter, Bumpas, Head, & McHale, 2001). However, given our relatively small sample size and the weak correlation between maternal work status and father involvement, the lack of association between maternal work hours and father involvement might be simply an artifact of our sample.

Time

The final component of Bronfenbrenner's model was that of time; here, length of time the father had resided with the family was examined. Unlike the findings of previous research, fathers' duration in the family did not account for variation in either the relative amount of involvement in childrearing or the quality of fathers' engagement with their children. Because of the newness of most of these stepfamilies (almost half having formed within the previous year), it is likely that insufficient time had passed for stepfathers to fully adjust to their role; estimates suggest that 2.5 to 6 years are needed for stepfathers to successfully adopt a parental role equal to that of the biological parent (Amato, 1987; Bray & Berger, 1993). Thus, for families in this study, time was not yet a major factor in the level or quality of father involvement.

Limitations

Given the particular focus of our study, several potentially influential factors were not assessed. One important aspect of fathering that was not measured is the influence of

fathers' identities as fathers, and there is research to show its effects on father involvement (Minton & Pasley, 1996; Rane & McBride, 2000). Further, fathers' gender-role orientation and perceptions of their own competence at performing child-related tasks have been found to predict father participation in childrearing (Sanderson & Thompson, 2002). Also, no information was available on the prior fathering experience of either biological fathers or stepfathers. Thus, we did not know whether any of the fathers in the present sample had children from a prior marriage, which could influence his present level of involvement (Ganong & Coleman, 2004). Also, we did not examine the stepchildren's relationship with their nonresident biological fathers, a relationship known to affect the stepfather-stepchild relationship (MacDonald & DeMaris, 2002). Some research suggests that minority fathers take more responsibility for childrearing compared with White fathers (Hofferth, 2003); however, the number of minority families included in the sample was too small for us to examine potential differences.

Our findings suggest that family dynamics differ between first-married families and stepfamilies. By using an ecological perspective to frame this study, we were able to cohesively integrate several different levels and types of influential factors, as well as the ways in which those factors interact to uniquely affect biological father and stepfather involvement. However, like most studies of stepfathers or fathers, this one is a snapshot, a glimpse of father-child relationships at a single point. Longitudinal research examining the development of father-child relationships (and stepfather-stepchild relationships) over time would contribute greatly to our understanding of changes in family dynamics as children mature, and to our knowledge of the role fathers and stepfathers play in children's development.

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Table 1
Means and Standard Deviations for Variables for the Total Sample and by Group

Variables	Total (N = 136)		Biological (n = 68)	
	Mean	(SD)	Mean	(SD)
Father age	34.55	(6.07)	35.00	(5.55)
Income-to-needs ratio	2.78	(1.27)	2.84	(1.30)
Maternal work hours	24.41	(19.77)	24.03	(18.91)

Paternal work hours	43.53	(15.98)	42.58	(18.92)
Traditional parenting beliefs	66.83	(14.55)	63.30	(13.46)
Marital satisfaction	24.92	(4.32)	24.82	(4.16)
Father involvement	28.67	(4.18)	28.73	(3.43)
Quality of father engagement	14.91	(2.47)	15.00	(2.55)
	%	N	%	N
Sex of child				
Male	50.0	68	50.0	34
Female	50.0	68	50.0	34
Child race/ethnicity				
European American	74.3	101	76.5	52
African American	9.6	13	8.8	6
Other ethnicity	16.2	22	14.7	10
Father occupational status				
Professional/administrative	21.3	29	26.5	18
Technical/support	27.2	37	36.8	25
Labor/service	51.5	70	36.8	25
Maternal work status				
Employed full-time (30+)	48.5	66	47.1	32
Employed < 30 hours/wk	22.8	31	26.5	18
Not employed	28.7	39	26.5	18

Stepfathers
(n = 68)

	Mean	(SD)
Father age	34.10	(6.56)
Income-to-needs ratio	2.73	(1.25)
Maternal work hours	24.79	(20.72)
Paternal work hours	44.49	(12.45)
Traditional parenting beliefs	70.37	(14.84)
Marital satisfaction	25.03	(4.51)
Father involvement	28.61	(4.83)
Quality of father engagement	14.82	(2.42)
	%	N
Sex of child		
Male	50.0	34
Female	50.0	34
Child race/ethnicity		
European American	72.1	49
African American	10.3	7
Other ethnicity	17.6	12

Father occupational status		
Professional/administrative	16.2	11
Technical/support	17.6	12
Labor/service	66.2	45
Maternal work status		
Employed full-time (30+)	50.0	34
Employed < 30 hours/wk	19.1	13
Not employed	30.9	21

Table 2
Results of Hierarchical Regression Analysis for Two Dimensions of
Father Involvement (N = 136)

	Relative amount of father involvement in childrearing		
	B	Model 1 SE B	[beta]
Father occupational status	.39	0.5	.08
Father type	.05	1.66	.01
Mother work hours	.03	.02	.15 [dagger]
Father work hours	-.03	.02	-.12
Father family duration	.18	1.03	.03
Traditional parent beliefs	-.01	.03	-.03
Marital satisfaction	.16	.08	.17 [dagger]
F type X M work hours			
F type X F work hours			
F type X parent beliefs			
F type X marital satisfaction			
Adjusted [R.sup.2]			.01
F for change in [R.sup.2]			1.46
[dagger]p<.10, *p<.05, **p<.01.			

	Relative amount of father involvement in childrearing		
	B	Model 2 SE B	[beta]
Father occupational status	.35	.49	.07
Father type	.19	1.63	.02
Mother work hours	.03	.02	.14
Father work hours	-.05	.02	.17 [dagger]
Father family duration	.22	1.02	.04
Traditional parent beliefs	-.01	.03	-.04
Marital satisfaction	.15	.08	.15 [dagger]
F type X M work hours	-.01	.04	-.03
F type X F work hours	-.03	.05	-.06
F type X parent beliefs	.01	.05	.01
F type X marital satisfaction	.55	.17	.29**
Adjusted [R.sup.2]			.08
F for change in [R.sup.2]			3.08*

[dagger]p<.10, *p<.05, **p<.01.

Quality of father engagement

	B	Model 1 SE B	[beta]
Father occupational status	-.49	.29	.16 [dagger]
Father type	-.20	.97	-.04
Mother work hours	-.01	.01	-.07
Father work hours	.02	.01	.14
Father family duration	-.26	.60	-.09
Traditional parent beliefs	-.03	.02	.16 [dagger]
Marital satisfaction	-.01	.05	-.01
F type X M work hours			
F type X F work hours			
F type X parent beliefs			
F type X marital satisfaction			
Adjusted [R.sup.2]			.04
F for change in [R.sup.2]			7.34*

[dagger]p<.10, *p<.05, **p<.01.

Quality of father engagement

	B	Model 2 SE B	[beta]
Father occupational status	-.44	.29	-.14
Father type	-.34	.97	-.07
Mother work hours	-.01	.01	-.09
Father work hours	.02	.01	.14
Father family duration	-.37	.60	-.12
Traditional parent beliefs	-.03	.02	-0.19*
Marital satisfaction	-.02	.05	-.03
F type X M work hours	.05	.02	.20*
F type X F work hours	.02	.03	.05
F type X parent beliefs	.03	.03	.09
F type X marital satisfaction	-.03	.10	-.03
Adjusted [R.sup.2]			.07
F for change in [R.sup.2]			1.98

[dagger] p<.10, * p<.05, ** p<.01.