

Sibling Relationships in Rural African American Families

Author(s): Gene H. Brody, Zolinda Stoneman, Trellis Smith and Nicole Morgan Gibson

Source: *Journal of Marriage and Family*, Nov., 1999, Vol. 61, No. 4 (Nov., 1999), pp. 1046-1057

Published by: National Council on Family Relations

Stable URL: <https://www.jstor.org/stable/354023>

REFERENCES

Linked references are available on JSTOR for this article:

https://www.jstor.org/stable/354023?seq=1&cid=pdf-reference#references_tab_contents

You may need to log in to JSTOR to access the linked references.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



National Council on Family Relations is collaborating with JSTOR to digitize, preserve and extend access to *Journal of Marriage and Family*

JSTOR

Sibling Relationships in Rural African American Families

A family process model linked mothers' and fathers' psychological functioning to sibling relationship quality in a sample of 85 9- to 12-year-old African American youths and their married parents living in the rural Southeastern United States. Members of the rural African American community participated in the development of the research methods. Better parental psychological functioning was linked to closer and more supportive relationships in the nuclear and extended families and with more supportive parenting practices. In turn, these family processes were linked with children's development of self-regulation. Self-regulated youths experienced more harmonious and less conflicted sibling relationships.

In African American families, siblings serve important functions. During childhood, older siblings provide care for their younger brothers and sisters, and during the adult and aging years, siblings provide emotional and instrumental support for one another (Chatters, Taylor, & Jackson, 1986; Hunter, 1997; Taylor, Chatters, & Mays, 1988; Young, 1970, 1974). Despite the salience of sibling

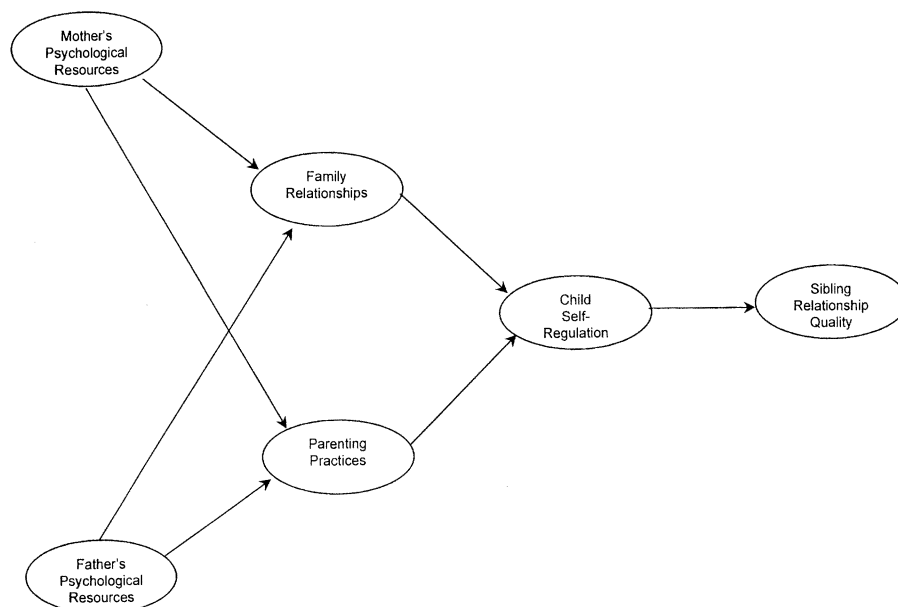
support and assistance among African Americans, very little attention has been given to understanding the family processes that contribute to variations in the quality of sibling relationships among African American children. From a developmental perspective, this issue has special significance. Because African American siblings provide substantial amounts of care for their younger brothers and sisters, conflict in sibling relationships can make it less likely that younger siblings will receive prosocial and responsive care (McHale & Crouter, 1996). Data suggest that sibling relationship quality remains stable from middle childhood into adolescence (Brody, Stoneman, & McCoy, 1994a; Dunn, 1996). Furthermore, Ross and Milgram (1982) found that feelings of rivalry originating in childhood persist well into adulthood and are associated with the closeness of adult sibling relationships. An understanding of the origins of relationship quality among African American siblings is important, given the degree to which they can serve as sources of mutual support across the life span.

In this study, we examined the role that family processes (e.g., coparenting support and parenting practices) play in linking parental psychological resources (e.g., self-esteem) to sibling relationship quality among rural African Americans. Although the proposed model is consistent with our recent findings about the influence of family processes on the quality of sibling relationships among White families, we do not know whether similar associations exist in African American families, particularly those living in sparsely populated rural areas.

Department of Child and Family Development, University of Georgia, Dawson Hall, Athens, GA 30602 (gbrody@fcs.uga.edu).

Key Words: African Americans, family processes, parental functioning, rural families, siblings.

FIGURE 1. CONCEPTUAL MODEL



We chose to focus on middle childhood in this study because, during this developmental period, older siblings often begin to assume caregiving and teaching responsibilities for their younger siblings (Brody, 1998). In addition, the quality of sibling relationships formed during this period provides the basis for supportive exchanges that can help to sustain both siblings during the transitions that accompany adolescence.

Our research is guided by the conceptual model presented in Figure 1. The first link in the model concerns the association of parents' psychological functioning with family relationships and parenting practices. Elevated levels of parental depression have been found to be associated with less involved, less communicative, more negative, and more hostile family relationships (Brody et al., 1994; Jacob & Johnson, 1997; Susman, Trickett, Iannotti, Hollenbeck, & Zahn-Waxler, 1985). Rutter (1990) found depressed and hostile parents to be less involved with and less affectionate toward their children, to feel more guilt and resentment, and to experience more difficulty in managing their children and communicating with them. The arousal generated by interacting with a depressed or hostile parent may disrupt children's ability to regulate their emotions and behavior (Fabes & Eisenberg, 1992) and may lead to more conflict and less support in their sibling relationships.

We predicted that the second panel in the conceptual model, involving supportive family relationships and parenting practices, would be pivotal in connecting parental psychological resources to sibling relationship quality. Relationships with members of the extended family were included in this study because in African American families relatives outside the nuclear family often have frequent contact with children and play significant supportive roles in their lives (Billingsley, 1992; McAdoo, 1997). Given that mothers, fathers, and caregivers who are part of the extended family function as an interdependent system and that parenting often takes place in a larger family context (Belsky, 1984), we examined the conceptual model from a family systems perspective. The construct formed to assess family relationships includes three dimensions that are hypothesized to be associated with sibling relationship quality: (a) the quality of the children's relationships with their mothers, fathers, and extended family caregivers; (b) caregiver support that parents receive from their spouses; and (c) conflict between each spouse and the caregiver from the extended family on matters of childrearing.

Close relationships between children and their adult caregivers are hypothesized to contribute to the development of prosocial orientations in siblings, according to attachment (Sroufe & Fleeson,

1986) and social learning (Parke, MacDonald, Beitel, & Bhavnagri, 1988) theories. Attachment theorists propose that children develop internal representations of relationships from caregivers, which they subsequently use in maintaining other relationships. Social learning theorists have shown that behavior patterns enacted with caregivers are generalized to children's interactions with siblings (Patterson, 1984) and peers (Parke et al., 1988).

Parental caregiving functions optimally when parents provide one another with instrumental and emotional support. Earlier studies indicated that both emotional encouragement and tangible help enhance effective parenting in African American families (Brody, Stoneman, & Flor, 1995; Brody et al., 1994; Brown & Gary, 1988; Lewis, 1989; Stevens & Duffield, 1986; Taylor & Roberts, 1995; Wilson, 1984, 1986). In addition, spouses who model cooperation in discharging their parental responsibilities are exemplifying standards of interpersonal sharing and caring that their children observe on a daily basis. Repeated observation of supportive coparenting can transmit a set of prosocial norms that children can use to govern their behavior toward their siblings.

Extended childrearing networks function optimally when caregivers cooperate and generally agree on childrearing practices. Wilson (1984, 1986) has noted, however, that the extended caregiver network also holds the potential for dissension and strain. Contradictory, confusing messages from disagreeing caregivers stress children's loyalties and complicate their ability to discern order and predictability in their homes. The anger that children witness between caregivers produces negative emotional reactions in the children, who often direct these affects toward others. Open conflict between caregivers has, in fact, been found to be associated with less positivity and more negativity in sibling relationships (Brody, Stoneman, & Burke, 1987; Brody, Stoneman, & McCoy, 1994b; Brody, Stoneman, McCoy, & Forehand, 1992; Hetherington, 1988; MacKinnon, 1989).

We also predicted that particular childrearing practices would be linked with variations in sibling relationship quality. Studies involving White families have demonstrated that negativity, intrusiveness, and psychological overcontrol in parent-child relationships are associated with aggressive, self-protective behavior in sibling relationships (Brody, Stoneman, & MacKinnon, 1986; Brody et al., 1987; Brody, Stoneman, & Gauger, 1996; Brody, Stoneman, & McCoy, 1992, 1994a, 1994b; Brody, Stoneman, McCoy, & Forehand, 1992; Dunn & Kendrick,

1982; Hetherington, 1988; Howe, 1986; Stewart, Mobley, Van Tuyl, & Salvador, 1987; Stocker, Dunn, & Plomin, 1989). The same studies showed that greater parental support is linked with more positive affectivity and prosocial behavior in sibling relationships.

The empirical literature on White families includes few studies of the mechanisms that mediate the impact of family processes on the quality of sibling relationships. In our model we proposed as a mediator self-regulation, which includes the ability to set and attain goals, to plan actions and consider their consequences, to persist, and to refrain from directing aggressive behavior toward others. These abilities are likely to engender greater satisfaction, more prosociability, and less antagonism in sibling relationships. This hypothesis was derived from the work of Brody and associates (1994), Fabes and Eisenberg (1992), Greenberger (1982), and Steinberg, Elmen, and Mounts (1989), who found both parenting practices and family relationship quality to be linked with children's development of strategies for regulating their behavior and emotions.

In the following analyses, we empirically evaluated our model of parental psychological functioning, family processes, and sibling relationship quality with a sample of rural African American two-parent families. Rural African American community members participated in the development of the research methods, a collaboration that resulted in the multi-informant research design described in the following sections.

METHOD

Participants

Eighty-five African American families with married parents and a 9- to 12-year-old firstborn child (45 females and 40 males) were recruited from rural counties in Georgia and South Carolina. Only counties in which 25% or more of the population was African American were sampled in order to ensure that a viable African American community existed in the county. The mothers and fathers were in their mid-30s, and both parents had, on average, more than a high school education. An economic cross-section of rural African American families was included in the sample. Table 1 presents the means, ranges, and standard deviations for each demographic variable.

Families were recruited with the help of contact persons in schools, churches, and communities.

TABLE 1. MEANS, STANDARD DEVIATIONS, AND RANGES FOR DEMOGRAPHIC VARIABLES

Demographic Variable	<i>M</i>	<i>SD</i>	Range
Total family income	\$29,592	\$11,187	\$2,500–55,000
Family per capita income	\$ 5,543	\$ 2,395	\$ 357–11,375
Mother's age (years)	33	4.25	26–43
Father's age (years)	36	5.20	25–54
Child's age (years)	11	.99	9–12
Mother's education ^a	4.29	1.19	1–6
Father's education ^a	3.94	1.22	1–6
Family size (persons)	2.45	.96	1–6

^aEducation scale: 1 = less than high school, 2 = high school graduate, 3 = high school equivalence diploma, 4 = technical training, 5 = junior college, 6 = college.

Each contact person gave the names of families who expressed interest in the project to an African American research staff member, and the staff member contacted the families. Each family was paid \$60 for their participation.

To enhance rapport and cultural understanding, African American graduate and undergraduate students served as interviewers to collect data in the families' homes. Prior to data collection, the interviewers received 1 month of training in administering the self-report instruments.

Development of Measures with the Assistance of Community Members

We were concerned about the accurate assessment of the population we were to study because most instruments used to evaluate family processes and individual outcomes have been developed for use with and standardized on White, middle-class families. Consequently, the available measures may not validly describe the family dynamics of rural African Americans. We dealt with this issue by forming focus groups of rural African American community members. Most of the group members served as peer agents for two Georgia state agencies. Some of these agents recommended other African American community leaders for participation. The final focus group included 40 people from throughout Georgia who were representative of the population we planned to study.

The group addressed the development of valid self-report instruments. Each member rated each instrument that we planned to use on a 5-point Likert scale ranging from 1 (*not appropriate*) for rural African American families to 5 (*very appropriate*). Instruments that attained a mean rating of at least 3.5 were retained. A few items were changed slightly because the members of the focus group were unfamiliar with some of the words in them. These words were replaced with others that were more familiar to the group members.

PROCEDURE

Three home visits, each lasting 2–3 hours, were made to each family, arranged close to a week apart, depending on the families' schedules. Interviewers visited the families in teams of two, one male and one female. The male interviewer worked primarily with the father, and the female interviewer, with the mother and child. During the first visit, informed consent forms were completed. The parents consented to their own and their child's participation in the study, and the child agreed to participate.

During each home visit, self-report questionnaires were administered to each parent and the target child in an interview format. Each interview was conducted privately between the family member and an interviewer. No other family members were present or able to overhear the conversation. At no time during the presentation of the self-report instruments did the interviewers assume that a family member could read. This concern about literacy was one of the reasons for presenting the questionnaires in an interview format. When responses to a Likert scale were required, the family member was shown a card with a series of dots in graduated sizes that corresponded to the magnitude of the responses from which he or she was to choose. The interviewer asked the family member to indicate an answer using the dots on the card.

MEASURES

Parental psychological functioning. This construct was assessed using two indicators: 16 items from the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) and the Rosenberg Self-Esteem Scale (Rosenberg, 1965). The CES-D items were rated on a 4-point Likert-type scale, indicating how often in the last week the respondent experienced various symptoms, ranging from *rarely or none of the time (less than 1 day)* to *most or all*

of the time (5–7 days). Examples of the items include: “How often did you feel like not eating; had a poor appetite?” “How often did you feel that everything you did was an effort?” “How often did you feel that you could not shake off the blues?” The Cronbach alphas for mothers’ and fathers’ reports were .87 and .88, respectively.

The Rosenberg Self-Esteem Scale contains 10 items rated on a 5-point Likert-type scale, ranging from *completely false* to *completely true*. Examples of the items include: “I feel that I’m a person of worth, at least on an equal basis with others,” “I take a positive attitude toward myself,” and “on the whole, I am satisfied with myself.” The Cronbach alphas for mothers’ and fathers’ reports were .78 and .82, respectively.

Family relationships. The family relationships construct included 3 indicators: caregiver support received from spouse, caregiver conflict between the spouses and between each spouse and the caregiver from the extended family, and the closeness of the children’s relationships with their mothers, fathers, and extended-family caregivers. Mothers and fathers assessed spousal caregiver support independently using the support subscale of Ahrons’ (1981) Quality of Coparenting Scales, Revised. A 5-point Likert-type scale, ranging from *never* to *always*, was used to indicate the frequency of agreement on issues of parenting support. The three coparenting support items were: “When you need help with this child, how often do you go to your spouse for help?” “Would you say that your spouse is a help to you in raising your child?” “Would you say you are a help to your spouse in raising your child?” Estimates of internal consistency were .55 for mothers and .60 for fathers. Mothers’ and fathers’ responses were z-scored and summed to obtain a measure of each couple’s caregiving support. Data were also collected on the parents’ perceptions of the caregiving support they received from the extended-family caregivers. These data, however, did not relate meaningfully with any of the other variables in the study, so they were excluded from analysis.

Mothers and fathers identified a member of the extended family who assisted with child care. Two thirds of the parents selected the maternal grandmother, and approximately one third selected a maternal aunt. Mothers and fathers independently assessed conflict among caregivers using the O’Leary-Porter Scale (Porter & O’Leary, 1980), a 10-item instrument that indexes the frequency of conflict between caregivers in the children’s pres-

ence. Respondents used a 5-point Likert-type scale, ranging from *never/very little* to *a lot*, to rate items such as “How much do you argue with your spouse (or [extended family caregiver]) in front of your child?” Each parent completed the scale twice, once concerning conflict with the spouse and once for conflict with the caregiver from the extended family. Estimates of internal consistency exceeded .77 for mothers and .85 for fathers. The mothers’ and fathers’ reports of conflict with their spouses and extended-family caregivers were z-scored and summed to create an assessment of conflict among caregivers.

The third indicator, children’s reports of closeness to their mothers, fathers, and caregivers from the extended family, was evaluated using the three-item Relationship Assessment Scale, Revised (Hendrick, 1988). A 5-point Likert-type scale with responses indicating low to high satisfaction was used to rate items such as: “How well does your [mother, father, extended-family caregiver] meet your needs?” Estimates of internal consistency exceeded .70. Children’s reports of closeness to their mothers, fathers, and extended-family caregivers were z-scored and summed to create an index of children’s closeness to their caregivers.

Parenting practices. The parenting practices construct included two 2 indicators: children’s perceptions of supportive parenting from their mothers and fathers and children’s perceptions of their parents’ use of psychological control. Two subscales from the short form of the Children’s Report of Parental Behavior Inventory (Schwartz, Barton-Henry, & Pruzinsky, 1985), a measure of parental discipline practices, were used. The support subscale assesses parents’ supportive behavior toward the child, and the psychological control subscale indexes nagging and the induction of guilt and anxiety. Estimates of internal consistency for these subscales were .78 (support) and .74 (psychological control).

Children’s assessments of their mothers’ and fathers’ use of support and psychological control were z-scored. For each parent, the score for psychological control was subtracted from the support score to yield an index of relative parental warmth and support. A score of 0 indicates a balance of supportive and negative parenting practices, negative scores indicate more use of nagging, guilt induction, and anxiety induction, and positive scores indicate more supportive parenting. Previous research has indicated that higher ratios of supportive to negative parenting practices are associated, both

contemporaneously and longitudinally, with the quality of the sibling relationship (Brody, 1998).

Children's self-regulation. Self-regulation was assessed with two indicators: the Children's Self-Control Scale (Humphrey, 1982) and the conduct problems subscale of the Revised Behavior Problems Checklist (Quay & Peterson, 1987). The Self-Control Scale contains five items that mothers and fathers rated on a 5-point scale: (a) thinks ahead of time about the consequences of his or her actions, (b) plans ahead before acting, (c) pays attention to what he or she is doing, (d) works toward goals, and (e) sticks to what he or she is doing, even on long, unpleasant tasks, until finished. Cronbach's alphas were .80 for mothers and .71 for fathers. Mothers' and fathers' responses were standardized and summed to derive a multi-informant indicator. The conduct problems subscale includes 10 items that index angry, disruptive behavior patterns. Mothers' and fathers' responses to this indicator were also standardized and summed to yield a second multi-informant assessment. Cronbach's alphas exceeded .80 for both parents.

Sibling relationship quality. Target children reported the quality of their relationships with their younger siblings using the satisfaction, prosociality, and antagonism subscales from the Sibling Relationship Questionnaire (Furman & Buhrmester, 1985). Only the target children completed these scales because most of their younger siblings were younger than 9 years old, and Furman and Buhrmester found that younger children typically provide less reliable responses to self-report assessments of the quality of their sibling relationships. The satisfaction ($\alpha = .71$) and prosociality ($\alpha = .80$) subscales were standardized and summed to form an indicator of sibling harmony, and the antagonism subscale ($\alpha = .83$) served as an indicator of sibling conflict. In past research, sibling's responses to these scales were associated with observed rates of positive and negative behavior toward one another (Brody et al., 1992, 1994a, 1994b).

RESULTS

We constructed latent variable structural equation models to test the hypothetical model presented in Figure 1. Maximum likelihood estimates of the model coefficients were derived using LISREL 8 (Jöreskog & Sörbom, 1993). We obtained χ^2 values, comparative fit indexes, and goodness-of-fit in-

dexes. Table 2 presents the correlation matrices, means, and standard deviations for the variables used in the analysis. The data presented in Table 2 are consistent with the hypothesized links depicted in Figure 1.

The model was estimated by examining the measurement and structural models simultaneously. The first indicator in each construct was fixed at 1.0. Figure 2 presents the completely standardized factor loadings of the measured variables on the latent constructs and the standardized structural coefficients. The factor loadings of the measured variables on the latent constructs were all significant. Because mothers' and fathers' psychological resources are exogenous constructs in this model, we allowed them to covary ($r = .43, p < .05$). We also allowed several substantively meaningful measurement errors (e.g., indicators derived from the same informant) to covary. These correlated error terms were omitted from Figure 2, however, to preserve the figure's clarity.

Family income was controlled throughout the estimation of all structural coefficients but is not shown in Figure 2 in order to simplify the presentation. Family income was correlated with both mothers' and fathers' reports of depressive symptoms, $r(84) = -.30, p < .01$, and $r(84) = -.31, p < .004$, respectively, and self-esteem, $r(84) = .36, p < .01$, and $r(84) = .32, p < .003$, respectively. Family income was also associated with coparenting support, $r(84) = .23, p < .04$, and parents' reports of the target child's behavior problems, $r(84) = -.30, p < .005$. No significant associations emerged between family income and any of the other variables presented in Table 2.

The sample included in this study was too small to allow separate tests of the hypothetical model for girls and boys. We did, however, execute hierarchical multiple regression analyses to determine whether the gender of the older sibling moderated the associations between sibling relationship quality and any of the other variables. No significant effects emerged.

The goodness-of-fit index (GFI = .91), the non-normed fit index (NNFI = .97), and the comparative fit index (CFI = .98) suggest that the data adequately fit the hypothesized mediational model, $\chi^2(53) = 58.29, p < .297$. (See Bollen, 1989.) We hypothesized that mothers' and fathers' psychological resources would be linked with family relationships and parenting practices. In turn, we hypothesized that the latter variables would be linked to variations in the quality of sibling relationships via their associations with children's self-regulation. The

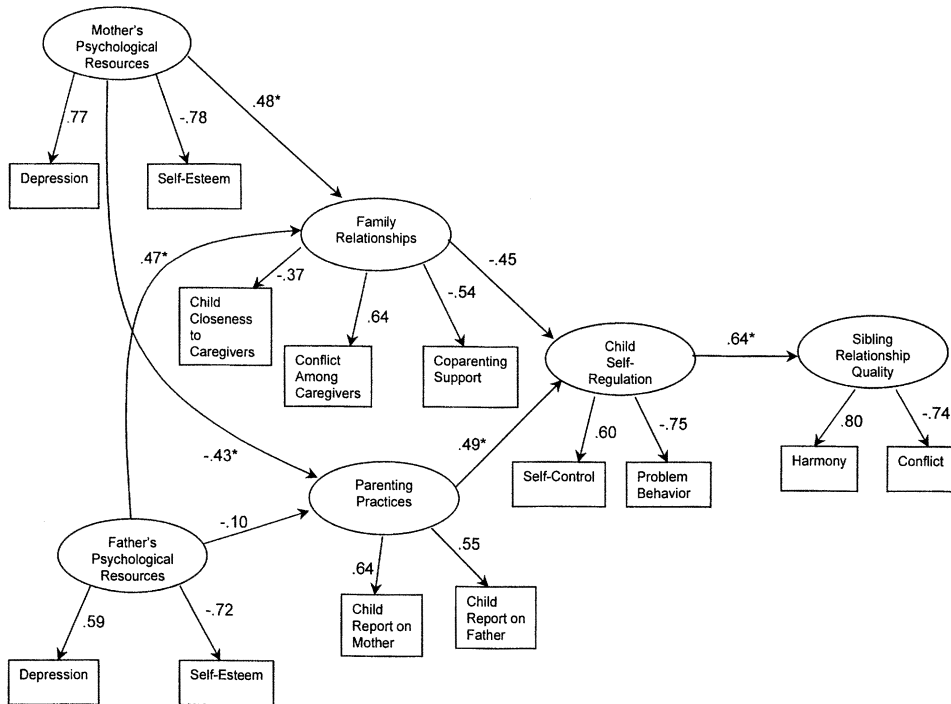
TABLE 2. INTERCORRELATIONS, MEANS, AND STANDARD DEVIATIONS FOR ALL STUDY VARIABLES

	1	2	3	4	5	6	7	8	9	10	11	12	13
Mother's psychological resources													
1. Depression	—												
2. Self-esteem	-.59*	—											
Father's psychological resources													
3. Depression	.24*	-.35*	—										
4. Self-esteem	-.15	.22*	-.41*	—									
Family relationships													
5. Relationship assessment	-.22*	.11	.01	.12	—								
6. Family conflict	.32*	-.27*	.44*	-.25*	-.17	—							
7. Family support	-.08	.27*	-.14	.29*	.22*	-.30*	—						
Parenting practices													
8. Child report on mother	.02	.15	.02	.10	.26*	-.11	.09	—					
9. Child report on father	-.10	.14	-.07	.16	.23*	-.23*	-.20*	.36*	—				
Individual child characteristics													
10. Self-control	-.25*	.17	-.05	.13	.10	-.26*	.17	.20*	.25*	—			
11. Conduct disorder	-.36*	-.43*	.35*	-.22*	-.15	.44*	-.22*	-.25*	-.24*	-.48*	—		
Sibling relationships													
12. Harmony	-.18	.08	.03	.12	.38*	-.29*	.13	-.29*	.15	.36*	-.31*	—	
13. Conflict	.27*	-.29*	.09	-.25*	-.43*	.07	-.21*	-.32*	-.13	-.21*	.23*	-.57*	—
<i>M</i>	23.3	43.2	21.3	43.7	.06	.04	.002	-.002	-.002	-.001	.0004	22.4	8.6
<i>SD</i>	7.2	5.3	6.6	5.9	2.2	2.6	1.4	1.5	1.5	1.6	1.7	4.7	3.4

n = 85.

**p* < .05.

FIGURE 2. STRUCTURAL MODEL

* $p < .05$

results of the LISREL analyses were consistent with these propositions. Mothers' ($\beta = .48$) and fathers' ($\beta = .47$) psychological resources were linked with the quality of family relationships. Because mothers' and fathers' depressive symptoms and conflict among caregivers were all fixed at 1.0, the paths indicate that more depressive symptoms among mothers and fathers were linked with more conflicted, less supportive family relationships. Mothers' ($\beta = -.43$), but not fathers' ($\beta = -.10$), psychological resources were linked with the parenting practices latent construct. Children whose mothers reported fewer psychological resources were more likely to report receiving less supportive parenting.

Consistent with the theoretical model (Figure 1), family relationships ($\beta = -.45$) and parenting practices ($\beta = .49$) were linked directly with self-regulation and linked indirectly, through self-regulation, with sibling relationship quality ($\beta = .64$ for the association between self-regulation and sibling relationship quality). Parents reported that children displayed lower levels of self-regulation in families in which caregiver conflict was higher, coparenting support was lower, and children experienced less closeness with their caregivers. Conversely, supportive parenting practices were linked

with fewer self-regulatory problems among children. Children who were more self-regulated experienced more harmonious and less conflicted sibling relationships.

Tests of alternative models. Three alternative models were tested to determine whether they fit the data better than the original hypothetical model. Direct paths were added from mothers' and fathers' psychological resources to children's self-regulation in the first alternative model and to sibling relationship quality in the second. In the third alternative model, direct paths were added from parenting practices and family relationships to sibling relationship quality. None of the additional paths attained a t of 1.8, indicating no improvement over the hypothetical model. None of the alternative models evinced a significant reduction in χ^2 with a sacrifice of 2 degrees of freedom.

DISCUSSION

Prior research addressing the links between family processes and variations in the quality of sibling relationships has focused on a narrow cross-section of White families in metropolitan areas. Although

much of this work has contributed to an understanding of factors that promote or detract from sibling relationship quality, theories about these processes must be tested with samples that reflect a range of family characteristics to determine generalizability. When we began this research, it was not clear whether findings from the existing literature would be relevant to African American families living in rural areas. Researchers have suggested that childrearing demands may differ for urban and rural parents. McLaughlin and Sachs (1988) identified a lack of employment opportunities, low income, and few child-care resources as challenges with which rural parents, particularly African Americans, must cope. Rural African American parents must also cope with an oppressive social structure (Tickamyer & Duncan, 1990). The lack of opportunities and parenting supports could combine with the stress of discrimination to affect the sibling relationships of rural African American children. If so, the heuristic value of prior research would be minimal. The results of the study presented here, however, support the proposed mediational model of the relationships among parental psychological functioning, family processes, and sibling relationship quality.

We found parental psychological functioning to be indirectly associated with sibling relationship quality via its links with family relationship quality and parenting practices. The psychological functioning of both mothers and fathers was associated with the quality of relationships among parents and children, between spouses, and among spouses and caregivers from the extended family. Mothers', but not fathers', psychological functioning was linked to supportive parenting practices. The latter finding is consistent with a recent report on White families in which this link was stronger for mothers than for fathers (Jacob & Johnson, 1997). It seems likely that this result may be linked with mothers' greater responsibility for child care in rural African American families (Tolson & Wilson, 1990).

Prior research with White families typically has examined the links between mother-child and sibling relationship quality. In recognition of the extended family caregiving system that is part of the lives of many rural African American children, we expanded the study of family relationships to include relationships that caregivers from the extended family form with children and their parents. All of these relationships were conceptualized as part of an interactive, interdependent network in which one set of relationships affects the others. This assumption was translated into a latent con-

struct that evinced acceptable measurement properties in the LISREL analysis.

The importance of supportive caregiving systems in the nuclear family and the extended family for the development of positive sibling relationships among rural African Americans is particularly apparent when the context of the participants' lives is considered. In many of the families, both parents work at several jobs to earn enough money to support their families. More often than not, these jobs involve physical labor, which contributes to parental fatigue. Because these parents arrive home tired and in many cases immediately assume childrearing responsibilities while the other parent goes to work, the quality of communication and the continuity between caregivers is perhaps more important than it is for families in other ecological niches. If the fatigue of family members interferes with cooperative and supportive caregiving and positive family relationships, children will receive contradictory messages from their caregivers. By undermining the children's loyalties and complicating their ability to discern order and predictability at home, such conflict compromises their ability to regulate their own behavior and emotions. Dysregulation in children was found, as hypothesized, to be associated with less prosocial and more conflicted sibling relationships.

Mothers' and fathers' perceptions of the caregiving support they received from extended family caregivers was not linked with the other variables in this study. This finding is not uncommon in the literature. (See Kessler, Price, & Wortman, 1985.) Perceived support appears to be less salient than perceived conflict in governing family members' thoughts about and reactions to one another (Beach, Sandeen, & O'Leary, 1990). Conflict with family members appears to mobilize attributional and interactional processes that maintain negative reactions long after episodes of conflict are over (Brody, Arias, & Fincham, 1996).

In our study, firstborn siblings provided the assessments of sibling relationship quality. It is not known whether similar links between family processes and sibling relationship quality would have been detected if the younger siblings' perspectives had been included. Prior research (Brody, 1998; Brody et al., 1992, 1994a, 1994b) indicates that firstborn and second born siblings' assessments of the quality of their relationship using the Sibling Relationship Questionnaire (Furman & Buhrmester, 1985) are moderately correlated. These studies also indicate that the assessments of the quality of sibling relationships obtained from both first-

and second-born siblings are linked similarly with family processes, both contemporaneously and longitudinally. Future research should be designed to replicate these findings with African American siblings.

The research to date has examined direct links between family processes and the quality of sibling relationships. In this study, we found family relationships and parenting practices to be linked indirectly with sibling relationship quality via child self-regulation. We determined that the link between family processes and the quality of sibling relationships was fully mediated through self-regulation. These data suggest that events in the family are associated with children's ability to organize their behavior and manage their emotions. Children can take these competencies with them into their daily caregiving, nurturing, and play interactions with their brothers and sisters.

Several limitations of this study and some caveats must be noted. First, the proposed model is not intended to be exhaustive. Models that include different parameters than those in our model could also account for variation in the quality of the sibling relationship. Second, although the paths may imply causality, at this point we can only test the extent to which the observed variables can be predicted from the hypothesized model without respect to direction of effects. Third, the results need to be replicated with a larger sample; results obtained from structural equation modeling techniques tend to be more reliable with larger samples. Despite the limitations created by the sample's size, the consistency between the theoretical hypotheses and the results obtained makes it unlikely that the results were produced by random fluctuations in data. Finally, our sample is nonrandom; it does, however, represent an economic cross-section of rural two-parent African American families. Cautions notwithstanding, this study demonstrates that research on sibling relationships can serve as a window through which to understand general family processes and child development in diverse contexts.

NOTE

This study was supported by a grant from the Spencer Foundation.

REFERENCES

- Ahrons, C. R. (1981). The continuing coparental relationship between divorced spouses. *American Journal of Orthopsychiatry*, *51*, 415-428.
- Beach, S. R. H., Sandeen, E. E., & O'Leary, K. D. (1990). *Depression in marriage*. New York: Guilford.
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, *55*, 83-96.
- Billingsley, A. (1992). *Climbing Jacob's ladder: The enduring legacy of African American families*. New York: Simon & Schuster.
- Bollen, K. A. (1989). *Structural equations with latent variables*. New York: Wiley.
- Brody, G. H. (1998). Sibling relationship quality: Its causes and consequences. *Annual Review of Psychology*, *49*, 1-24.
- Brody, G. H., Arias, I., & Fincham, F. D. (1996). Linking marital and child attributions to family processes and parent-child relationships. *Journal of Family Psychology*, *10*, 408-421.
- Brody, G. H., Stoneman, Z., & Burke, M. (1987). Child temperaments, maternal differential behavior, and sibling relationships. *Developmental Psychology*, *23*, 354-362.
- Brody, G. H., Stoneman, Z., & Flor, D. (1995). Linking family processes and academic competence among rural African American youths. *Journal of Marriage and the Family*, *57*, 567-579.
- Brody, G. H., Stoneman, Z., Flor, D., McCrary, C., Hastings, L., & Conyers, O. (1994). Financial resources, parent psychological functioning, parent co-caregiving, and early adolescent competence in rural two-parent African American families. *Child Development*, *65*, 590-605.
- Brody, G. H., Stoneman, Z., & Gauger, K. (1996). Parent-child relationships, family problem-solving behavior, and sibling relationship quality: The moderating role of sibling temperaments. *Child Development*, *67*, 1289-1300.
- Brody, G. H., Stoneman, Z., & MacKinnon, C. (1986). Contributions of maternal child-rearing practices and play contexts to sibling interactions. *Journal of Applied Developmental Psychology*, *7*, 225-236.
- Brody, G. H., Stoneman, Z., & McCoy, J. K. (1992). Associations of maternal and paternal direct and differential behavior with sibling relationships: Contemporaneous and longitudinal analyses. *Child Development*, *63*, 82-92.
- Brody, G. H., Stoneman, Z., & McCoy, J. K. (1994a). Contributions of family relationships and child temperaments to longitudinal variations in sibling relationship quality and sibling relationship styles. *Journal of Family Psychology*, *8*, 274-286.
- Brody, G. H., Stoneman, Z., & McCoy, J. K. (1994b). Forecasting sibling relationships in early adolescence from child temperaments and family processes in middle childhood. *Child Development*, *65*, 771-784.
- Brody, G. H., Stoneman, Z., McCoy, J. K., & Forehand, R. (1992). Contemporaneous and longitudinal associations of sibling conflict with family relationship assessments and family discussions about sibling problems. *Child Development*, *63*, 391-400.
- Brown, D. R., & Gary, L. E. (1988). Unemployment and psychological distress among Black American women. *Sociological Focus*, *21*, 209-221.
- Chatters, L. M., Taylor, R. J., & Jackson, J. S. (1986). Size and composition of informal networks of elderly Blacks. *Journal of Gerontology*, *40*, 605-614.
- Dunn, J. (1996). Brothers and sisters in middle childhood and early adolescence: Continuity and changes in indi-

- vidual differences. In G. H. Brody (Ed.), *Sibling relationships: Their causes and consequences* (pp. 31-46). Norwood, NJ: Ablex.
- Dunn, J., & Kendrick, C. (1982). *Siblings: Love, envy, and understanding*. Cambridge, MA: Harvard University Press.
- Fabes, R. A., & Eisenberg, N. (1992). Young children's coping with interpersonal anger. *Child Development, 63*, 116-128.
- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the qualities of their sibling relationships. *Child Development, 56*, 448-461.
- Greenberger, E. (1982). Education and the acquisition of psychosocial maturity. In D. McClelland (Ed.), *The development of social maturity* (pp. 155-189). New York: Irvington.
- Hendrick, S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family, 50*, 93-98.
- Hetherington, E. M. (1988). Parents, children, and siblings: Six years after divorce. In R. A. Hinde & J. Stevenson-Hinde (Eds.), *Relationships within families: Mutual influences* (pp. 311-331). New York: Oxford University Press.
- Howe, N. (1986). *Socialization, social cognitive factors, and the development of the sibling relationship*. Unpublished doctoral dissertation, University of Waterloo, Ontario, Canada.
- Humphrey, L. L. (1982). Children's and teachers' perspectives on children's self-control: The development of two rating scales. *Journal of Consulting and Clinical Psychology, 50*, 624-633.
- Hunter, A. G. (1997). Counting on grandmothers: Black mothers' and fathers' reliance on grandmothers for parenting support. *Journal of Family Issues, 18*, 251-269.
- Jacob, T., & Johnson, S. L. (1997). Parent-child interaction among depressed fathers and mothers: Impact on child functioning. *Journal of Family Psychology, 11*, 391-409.
- Jöreskog, K. G., & Sörbom, D. (1993). *LISREL VIII user's guide*. Mooresville, IN: Scientific Software.
- Kessler, R. C., Price, R. H., & Wortman, C. B. (1985). Social factors in psychopathology: Stress, social support, and coping processes. *Annual Review of Psychology, 36*, 531-572.
- Lewis, E. A. (1989). Role strain in African American women: The efficacy of social support networks. *Journal of Black Studies, 20*, 155-167.
- MacKinnon, C. E. (1989). An observational investigation of sibling interactions in married and divorced families. *Developmental Psychology, 25*, 36-44.
- McAdoo, H. P. (Ed.). (1997). *Black families* (3rd ed.). Thousand Oaks, CA: Sage.
- McHale, S. M., & Crouter, A. C. (1996). The family contexts of children's sibling relationships. In G. H. Brody (Ed.), *Sibling relationships: Their causes and consequences* (pp. 173-196). Norwood, NJ: Ablex.
- McLaughlin, D. K., & Sachs, C. (1988). Poverty in female headed households: Residential differences. *Rural Sociology, 53*, 287-306.
- Parke, R. D., MacDonald, K. D., Beitel, A., & Bhavnagri, N. (1988). The role of the family in the development of peer relationships. In R. D. Peters & R. J. McMahon (Eds.), *Social learning and systems approaches to marriage and the family* (pp. 17-44). New York: Bruner-Mazel.
- Patterson, G. R. (1984). A microsocal process: A view from the boundary. In J. C. Masters & K. L. Yarkin (Eds.), *Boundary areas in psychology: Social and developmental psychology* (pp. 43-66). New York: Academic Press.
- Porter, B., & O'Leary, K. D. (1980). Marital discord and childhood behavior problems. *Journal of Abnormal Child Psychology, 8*, 287-295.
- Quay, H. C., & Peterson, D. R. (1987). *Manual for the Revised Behavior Problem Checklist*. Unpublished manuscript, University of Miami, Coral Gables, FL.
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Ross, H. G., & Milgram, J. (1982). Important variables in adult sibling relationships: A qualitative study. In M. E. Lamb & B. Sutton-Smith (Eds.), *Sibling relationships: Their nature and significance over the lifespan* (pp. 225-247). Hillsdale, NJ: Erlbaum.
- Rutter, M. (1990). Commentary: Some focus and process considerations regarding effects of depression on children. *Developmental Psychology, 26*, 60-67.
- Schwarz, J. C., Barton-Henry, M. L., & Pruzinsky, T. (1985). Assessing child-rearing behaviors: A comparison of ratings made by mother, father, child, and sibling on the CRPBI. *Child Development, 56*, 462-479.
- Sroufe, L. A., & Fleeson, J. (1986). Attachment and the construction of relationships. In W. Hartup & Z. Rubin (Eds.), *Relationships and development* (pp. 51-71). New York: Cambridge University Press.
- Steinberg, L., Elmen, J. D., & Mounts, N. S. (1989). Authoritative parenting, psychosocial maturity, and academic success among adolescents. *Child Development, 60*, 1424-1436.
- Stevens, J. H., & Duffield, B. N. (1986). Age and parenting skill among Black women in poverty. *Early Childhood Research Quarterly, 1*, 221-235.
- Stewart, R. B., Mobley, L. A., Van Tuyl, S. S., & Salvador, M. A. (1987). The firstborn's adjustment to the birth of a sibling: A longitudinal assessment. *Child Development, 58*, 341-355.
- Stocker, C., Dunn, J., & Plomin, R. (1989). Sibling relationships: Links with child temperament, maternal behavior, and family structure. *Child Development, 60*, 715-727.
- Susman, E. J., Trickett, P. K., Iannotti, R. I., Hollenbeck, B. E., & Zahn-Waxler, C. (1985). Child-rearing patterns in depressed, abusive, and normal mothers. *American Journal of Orthopsychiatry, 55*, 237-251.
- Taylor, R. D., & Roberts, D. (1995). Kinship support and maternal and adolescent well-being in economically disadvantaged African American families. *Child Development, 66*, 1585-1597.
- Taylor, R. J., Chatters, L. M., & Mays, V. M. (1988). Parents, children, siblings, in-laws, and non-kin as sources of emergency assistance to Black Americans. *Family Relations, 37*, 298-304.
- Tickamyer, A. R., & Duncan, C. M. (1990). Poverty and opportunity structure in rural America. *Annual Review of Sociology, 16*, 67-86.
- Tolson, T. F. J., & Wilson, M. N. (1990). The impact of two- and three-generational Black family structure on

- perceived family climate. *Child Development*, 61, 416-428.
- Wilson, M. N. (1984). Mothers' and grandmothers' perspectives of parental behavior in three-generational Black families. *Child Development*, 55, 1333-1339.
- Wilson, M. N. (1986). The Black extended family: An analytical consideration. *Developmental Psychology*, 22, 246-258.
- Young, V. H. (1970). Family and childhood in a Southern Negro community. *American Anthropologist*, 72, 269-288.
- Young, V. H. (1974). A Black American socialization pattern. *American Ethnologist*, 1, 415-431.

Students, professionals, & professors rely on these research tools!

Journal of Marriage and the Family

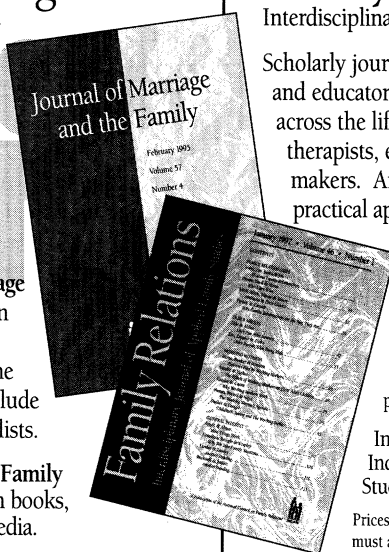
Prestigious quarterly journal features original theory, research interpretation, and critical discussion of topics related to marriage and the family. During more than a half century of continuous publication, *Journal of Marriage and the Family* has earned an international reputation as a premier research journal in the family field. Contributors include a wide range of family specialists.

Journal of Marriage and the Family articles are cited extensively in books, classroom texts, and in the media.

ISSN: 0022-2445 284 pages of original family and marriage research four times per year

Institution:	U.S. \$121.00	Non-U.S. \$138.00
Individual:	U.S. \$ 86.00	Non-U.S. \$104.00
Student:	U.S. \$ 40.00	Non-U.S. \$ 55.00

Prices include shipping and handling. Canadian orders must add 7% GST or 15% HST tax 123-830-465.



Family Relations:

Interdisciplinary Journal of Applied Family Studies

Scholarly journal for family practitioners and educators. Emphasis is on relationships across the life cycle. Relevant for family therapists, educators, and public policy makers. Articles include original research and practical applications. Published quarterly.

Family Relations articles are referenced in numerous articles, books, and research documents.

ISSN: 0197-6664 120 pages of research with practical applications four times a year.

Institution:	U.S. \$109.00	Non-U.S. \$123.00
Individual:	U.S. \$ 81.00	Non-U.S. \$ 94.00
Student:	U.S. \$ 40.00	Non-U.S. \$ 52.00

Prices include shipping and handling. Canadian orders must add 7% GST or 15% HST tax 123-830-465.



National Council on Family Relations

P.O. Box 1897
Lawrence, KS 66044-8897
E-mail: orders@allenpress.com
Fax: 785-843-1274
National Office: 888-781-9331, ext. 23