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Parenting in Context: Impact of Neighborhood Poverty, Residential Stability, Public Services, Social Networks, and Danger on Parental Behaviors

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Abstract

This prospective longitudinal study examined the unique and combined effects of neighborhood characteristics on parental behaviors in the context of more distal and more proximal influences. With a sample of 368 mothers from high-risk communities in 4 parts of the United States, this study examined relations between race (African American or European American), locality (urban or rural), neighborhood characteristics, family context, and child problem behaviors, and parental warmth, appropriate and consistent discipline, and harsh interactions. Analyses testing increasingly proximal influences on parenting revealed that initial race differences in warmth and consistent discipline disappeared when neighborhood influences were considered. Although generally culture and context did not moderate other relations found between neighborhood characteristics, family context, and child behaviors, the few interactions found highlight the complex influences on parenting.

Keywords

neighborhood; parenting; race

Recent theories of socialization place parenting in the context of the cultures and neighborhoods in which it occurs (e.g., McLoyd, 1990; Sampson, 1992; Super & Harkness, 1986). Several theoretically and empirically supported neighborhood characteristics that affect parenting include poverty, residential instability, public services, limited social networks, and danger (Furstenberg et al., 1993; Leventhal & Brooks-Gunn, 2000; Sampson; Wilson, 1987, 1991a, 1991b). In general, these neighborhood characteristics tend to undermine positive parental behaviors, such as warmth and appropriate and consistent discipline, and to increase

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problematic parental behaviors, such as harsh interactions (Furstenberg et al.; Klebanov, Brooks-Gunn, & Duncan, 1994). Although distinct neighborhood characteristics may exert unique effects on different parental behaviors (Leventhal & Brooks-Gunn), these specific relations have received little empirical study. This study examined the unique and combined effects of race, locality (urban vs. rural community context), poverty, residential stability, public services, social networks, and danger on parental warmth, appropriate and consistent discipline, and harsh interactions, after controlling for the effects of family context and child behavior.

Neighborhood Characteristics, Family Context, and Child Behavior

Wilson's (1987, 1991a, 1991b) seminal discussions of the effect of urban neighborhoods highlight poverty as one of the most important influences on parenting. This effect has received empirical support in urban and rural contexts: When parents live among neighbors who are unemployed and have very limited incomes, they display less warmth and higher levels of harsh discipline and restrictive control (e.g., Jarrett, 1997; Simons, Johnson, Conger, & Lorenz, 1997). In fact, neighborhood poverty appears to exert a unique negative influence on parental warmth, even when the effect of family socioeconomic status is controlled (Klebanov et al., 1994).

Neighborhood instability also may compromise positive parenting. Communities where few residents own their homes and live in the same place over a number of years provide few opportunities for the development and maintenance of friendships and related support systems. The resulting social isolation can attenuate effective parenting (Furstenberg et al., 1993; Sampson, 1992).

In addition, the quality of public and institutional services may adversely affect parental behaviors (Sampson, 1992). Services such as community centers, convenient public transportation, and safe outdoor areas for children may minimize daily hassles for parents, thereby increasing the odds of positive parental behaviors. Parents living in high-risk neighborhoods and lacking access to community services and resources are more likely to physically abuse their children than comparable parents with access to those services and resources (Garbarino & Kostelny, 1993).

Similarly, the presence of formal and informal social and interpersonal networks in a neighborhood can promote increased social connection with others and provide an important support for positive parenting (Sampson, 1992). Communities in which residents seldom interact may promote social isolation, which can lead to nonoptimal parenting (e.g., Furstenberg et al., 1993).

Neighborhood danger also may have an important impact on parenting. Parents in more dangerous neighborhoods tend to display less warmth and to use more harsh and inconsistent discipline than similar parents in more safe neighborhoods (e.g., Burton, 1990; Earls, McGuire, & Shay, 1994; Furstenberg et al., 1993; Jarrett, 1997). One interpretation of this relation is that parents who are faced with rampant crime and violence experience chronic tension and stress and discipline reactively, using more harsh strategies in an inconsistent manner (Hill & Herman-Stahl, 2001; McLoyd, 1990). Alternatively, to prepare their children for life in a dangerous neighborhood, parents may intentionally use harsh strategies (e.g., Furstenberg et al.).

Mirroring the more distal influences of neighborhood characteristics, family context also has been linked to parenting. Low-income parents, less educated parents, single parents, younger parents, and parents with more children tend to display less warmth and more harsh discipline

(Klebanov, Brooks-Gunn, Chase-Lansdale, & Gordon, 1997; McLoyd, 1990; Menaghan, 1999).

Finally, like neighborhood characteristics and family context, past child behavior may be an important influence—albeit a reciprocal one—on parenting. From infancy, children and their mothers affect the behaviors of one another in a transactional system (Sameroff, 1975). As children get older, their behavior problems may increase the likelihood of parents' harshness, which in turn increases the likelihood of children's future behavior problems (Nix et al., 1999).

Cultural Influences and the Role of Race and Locality

Broad cultural influences may affect parenting in two ways. First, there may be differences in prevalence: Members of some cultures may be more or less likely to exhibit a specific parental behavior. Second, there may be differences in processes: Members of some cultures may experience diminished or exacerbated effects of other factors, such as neighborhood influences, on parental behaviors. In the United States, broad cultural influences may vary by family race (e.g., African American vs. European American) and locality (e.g., urban vs. rural community context) in terms of their impact on parenting.

Parents in African American families tend to display less warmth, more inconsistency, and more harsh discipline when compared to parents in European American families (e.g., Klebanov et al., 1994; Pinderhughes, Dodge, Bates, Pettit, & Zelli, 2000). At the same time, parents in African American families have community experiences that differ dramatically from those of their European American counterparts (Duncan & Aber, 1997). For example, African American families are 10 times more likely to live in urban communities where at least 30% of the residents are poor (Duncan, Brooks-Gunn, & Klebanov, 1994). African American families also live in communities with disproportionate levels of crime and violence (Sampson, Raudenbush, & Earls, 1997). Thus, if the relation between danger and parental behaviors is nonlinear, African American families may be particularly vulnerable to any adverse effects of danger on parental warmth, appropriate and consistent discipline, and harsh interactions.

Like family race, locality also might affect parental behaviors. In one comparative study of parenting beliefs, rural parents emphasized emotional and intellectual development more than urban parents, who focused on social development (Coleman, Ganong, Clark, & Madsen, 1989). However, it was not possible to determine whether those differences were due to cultural norms and values regarding what children need or whether they were due to differences in community context and the related constraints in opportunities. Simons et al. (1997) extended the work of Klebanov et al. (1994) in a direct test of Wilson's (1987, 1991a, 1991b) theories regarding the relations among urban-based neighborhood poverty, community disorganization, family socioeconomic status, and parenting. Simons et al. found that, following a decline in the local rural economy, community disorganization undermined effective parenting through the mediating processes of social support, negative life events, and distress.

The Present Study

Drawing from Bronfenbrenner's (1986) ecological theory of nested contextual influences, this study proposed that race and locality—designating broad cultural group membership—would constitute the setting in which all other influences on parental behaviors occurred. Neighborhood characteristics were considered to be the next most proximal influence on parental behaviors. Specific family context was considered to operate within the neighborhood and to constitute the next most proximal influence on parental behaviors. Child behavior was considered to operate within the neighborhood and family and to be the most proximal influence on future parental behaviors.

It was hypothesized that each level of influence would be significantly related to parental behaviors in the context of more distal influences. That is, race and locality differences were expected such that relative to European American urban parents, African American parents and European American rural parents would be less warm and less appropriate and consistent in their discipline, as well as more harsh in their interactions. Neighborhood effects were expected to add incrementally to the prediction of parenting behaviors. Specifically, higher levels of poverty, less residential stability, dissatisfaction with public services, more danger, and fewer social networks for parents were expected to be associated with lower levels of parental warmth and appropriate and consistent discipline, as well as with higher levels of harsh interactions. It was hypothesized that these initial neighborhood effects would continue to be related to parental behaviors, after controlling for the more proximal effects of family context and child behavior. Family context was expected to predict parenting such that higher levels of parental education and parental occupational status, being married, being older, and having fewer children would be positively associated with parental warmth and appropriate and consistent discipline and negatively related to harsh interactions. Child problem behaviors were expected to be negatively related to warmth and appropriate and consistent discipline and positively related to harsh interactions. Finally, it was hypothesized that there would be race and locality differences in how neighborhood characteristics, family context, and child behavior were related to parental behaviors. For example, it was expected that neighborhood characteristics would have the most adverse impact on parental behaviors in African American urban families and the least adverse impact in European American rural families.

With a focus on parenting at the time children are entering school, this study has several theoretical and methodological advantages. First, it includes a large, geographically diverse sample of African American and European American parents living in urban neighborhoods, and, somewhat uniquely, it includes European American parents living in rural communities. Second, it focuses on the unique and combined contributions of multiple neighborhood characteristics. Third, it disentangles those contributions from the effects of family context and child behavior. Fourth, in a prospective longitudinal design, the predictor variables were assessed 1 year prior to the assessment of parental behaviors, thus minimizing concurrent effects of rater bias. Fifth, it examines critical dimensions of parenting: warmth, appropriate and consistent discipline, and harsh interactions.

Method

This study was based on the data of 368 parents who were part of the normative control sample of Fast Track, a longitudinal research project on the development and prevention of children's conduct problems (Conduct Problems Prevention Research Group, 1992). Parents were recruited through schools that served predominantly poor neighborhoods or communities where children were at high risk for developing conduct problems (Lochman & the Conduct Problems Prevention Research Group, 1995). Toward the end of the kindergarten school year, letters were sent home through each participating school informing parents about the longitudinal study and inviting them to participate. The children of these parents displayed the full range of conduct problems in their schools, but neither the children nor their parents received any intervention services from Fast Track. The children were equally divided between boys and girls and were, on average, 6 years and 4 months old ($SD = 7$ months) at the beginning of this study.

Families lived in four areas of the United States: Durham, North Carolina; Nashville, Tennessee; Seattle, Washington; and rural central Pennsylvania. The rural area in Pennsylvania consisted of several small towns of less than 10,000 residents and the farms and forests that surrounded them. The communities in these rural areas tended to be small, stable, and quite insular (Bierman & the Conduct Problems Prevention Research Group, 1997). Of the parents

in the study, 168 were African American and lived in urban areas; 103 were European American and lived in urban areas; and 97 were European American and lived in rural areas. The remaining 19 parents in the normative control sample of Fast Track did not fit into these three profiles and were excluded from this study.

After parents consented to participate in the study, teams of parent and child interviewers visited children's homes during the summer after kindergarten and after first grade. Data on predictor variables (race, locality, neighborhood characteristics, family context, and child behavior) were collected during the home visit after the kindergarten school year. Data on parenting behaviors were collected after the first-grade year. The parent interviewer read all questionnaires to parents and recorded their responses. The parent and child interviewers also made independent ratings based on their observations during the home visits. Interviewers received extensive cross-site training and met high rating reliability standards before meeting with families on their own. Most interviewers were professional clinical and research staff members whose racial composition matched that of the communities in which they worked.

Study Variables

Neighborhood characteristics—This study included five neighborhood characteristics. The first was *poverty*. It was based on 1990 U.S. Census data and represented the percentage of families in the participating families' Census Bureau tract living below the federal poverty limit. Thus, higher values on this variable represented a greater number of families living in poverty.

The second neighborhood characteristic, *residential stability*, also was based on 1990 U.S. Census data, and it represented the percentage of residents who resided in the same location for at least 5 years and the percentage of residents who owned their own homes. These two items ($r = .72$) were standardized and averaged for a total score in which higher values indicated greater residential stability in the neighborhood.

The third neighborhood characteristic was dissatisfaction with *public services*. During the first-year home visit, parents were asked to evaluate police protection, garbage collection, the quality of schools, and public transportation in their communities on 4-point Likert scales. Their responses ($\alpha = .45$) were averaged for a total score in which higher values represented more dissatisfaction.

The fourth neighborhood characteristic, the *presence of social networks*, was measured during the first-year home visit with one 3-point question about the frequency of informal socializing among residents in the neighborhood and one yes-no question about the existence of formal groups, such as community associations. Parents' responses to these two questions were equated and combined ($r = .18$) for a total score in which higher values represented more social networks.

The fifth neighborhood characteristic was *neighborhood danger*. Parents rated the frequency of muggings, burglaries, and assaults on a 5-point Likert scale and the seriousness of the selling and using of drugs on a 4-point Likert scale; their scores on these items were rescaled to have equal ranges and were then averaged ($r = .58$). In addition, the parent interviewer and child interviewer independently rated neighborhood safety on a 4-point Likert scale ($r = .72$). The mean of parents' responses and the mean of the interviewers' ratings were standardized and averaged ($r = .57$) to derive a final score in which higher values represented more danger.

Family context—This study included five family context variables assessed during the first-year visit. The first was *parent education*, scored according to the 7-point Hollingshead (1975) scale in which a score of 1 represented 6 or fewer years of formal education, 4

represented 12 years, and 7 represented 18 or more years. The second family context variable was *parent occupation*, scored according to the 10-point Hollingshead scale in which a score of 0 represented unemployed, a score of 5 represented owners of small businesses, and a score of 9 represented executives or professionals. Based on sample means, the average parent included in this study would have been a high school graduate employed as a machine operator or semiskilled worker. The third family context variable was *single parent* status, in which a score of 1 represented being single and a score of 0 represented being married or having lived with a partner for more than 1 year. In this study, 68%, 24%, and 12% of African American urban, European American urban, and European American rural families, respectively, included a single parent. The fourth family context variable was *maternal age* at the time of the target child's birth. The fifth family context variable was *number of children* in the family.

Child behavior—The total problems scale from the Child Behavior Checklist (Achenbach, 1991) was used to assess *child behavior*. Parents used a 3-point Likert scale to rate how often their children displayed each of 118 specific problem behaviors during the 6 months preceding the first-year home visit. As recommended, the scores on the individual items were summed ($\alpha = .93$) for a total problems score in which higher values represented more behavior problems.

Parental behaviors—As outcome measures, this study included three parental behaviors that were assessed during the second-year home visit. *Parental warmth* was based on a parent-child activity involving free play and a structured task with Lego blocks. During this activity, the child interviewer made six ratings of the mother's enjoyment or gratification while interacting with the child, her sensitivity or responsiveness to the child's wishes, and her level of involvement with the child on 5-point Likert scales in which higher scores represented greater parental warmth. These ratings ($\alpha = .90$ for this sample), which were part of the Interaction Rating Scales (Crnic & Greenberg, 1990; see Conduct Problems Prevention Research Group, 1999, for more details), were averaged for a total score that was normally distributed.

The second parental behavior, *appropriate and consistent discipline*, was based on six items from a revised version of the Parent Practices Scale (Strayhorn & Weidman, 1988). Using a 5-point Likert scale, parents answered questions such as "How often is your child able to get out of a punishment when she really sets her mind to it?" Their responses ($\alpha = .68$) were averaged for a total score that was normally distributed and in which higher values represented more appropriate and consistent discipline.

The third parental behavior, *harsh interactions*, was based on parents' responses to 14 items from a revised version of the Conflict Tactics Scales (Straus, 1979). Using a 7-point scale, parents reported their own hostile, verbally aggressive, and physically aggressive behaviors, such as "Yelled, insulted, or swore at your child" and "Threw something at your child," during the previous year. These items ($\alpha = .76$) were averaged such that higher total scores represented more harsh interactions. Parents' scores on harsh interactions were log transformed so that the values of skewness and kurtosis were less than 1.

Results

Analyses for this study proceeded in three stages. First, differences among the African American urban, European American urban, and European American rural families in means on the independent and dependent variables were examined. Second, bivariate correlations among variables were examined to assess the full associations—or potential total effects—among constructs. Third, hierarchical regression analyses were conducted to determine the pattern of relations among sets of independent variables and the three outcome variables.

Initial Race and Locality Differences

The means and standard deviations of the variables included in this study are presented in Table 1. When compared to the European American urban families or the European American rural families, the African American urban families had worse scores on all of the neighborhood characteristics except dissatisfaction with public services and on all of the family context variables. They also displayed less parental warmth and reported using less appropriate and consistent discipline. In contrast, there were few significant differences between the European American urban and rural families.

Initial Bivariate Correlations

The initial correlations among the variables included in this study are presented in Table 2. Overall, the correlations among the neighborhood characteristics, the correlations among the family context variables, and the correlations among the parental behaviors were low to moderate. This suggested that the measures within each of those three categories were not overly redundant and should not be combined into composite scores.

Parental warmth was significantly correlated with four of the neighborhood characteristics, four of the family context variables, and child behavior. Higher levels of parental warmth were associated with less neighborhood poverty, more residential stability, less dissatisfaction with public services, less neighborhood danger, more parental education, higher occupational status, being married or having a partner, being an older parent, and fewer child behavior problems. Appropriate and consistent discipline was significantly correlated with four of the neighborhood characteristics, all five of the family context variables, and child behavior. As with parental warmth, higher levels of appropriate and consistent discipline were associated with less neighborhood poverty, more residential stability, less dissatisfaction with public services, less neighborhood danger, more parental education, higher occupational status, being married or having a partner, being an older parent, having fewer children, and fewer child behavior problems. Harsh interactions was significantly correlated with three of the neighborhood characteristics, four of the family context variables, and child behavior. More harsh interactions were associated with more neighborhood poverty, more dissatisfaction with public services, more neighborhood danger, less parental education, lower occupational status, being a single parent, being a younger parent, and more child behavior problems.

Hierarchical Regression Analyses

Hierarchical regression analyses were conducted with each of the three parental behaviors as outcome measures. Consistent with the theoretical conceptualization of this study, in the first step of these analyses, only race and locality, the most distal influences on parental behaviors, were included as independent variables. In the second step, the five neighborhood characteristics were added; in the third step, the five family context variables were added; and in the fourth step, child behavior, the most proximal influence on parental behaviors, was added. Although interactions between race and each independent variable and locality and each independent variable were assessed at each step, they were retained only if their partial regression coefficients were significant or marginally significant ($p < .10$). The results of these three hierarchical regression analyses, including the F change, R^2 , and standardized partial regression coefficients at each step, are presented in Tables 3, 4, and 5.

Parental warmth—In the first step of the regression analysis that included parental warmth as the outcome measure, race and locality produced a significant F statistic and accounted for 7% of the variance. Only race, however, was uniquely related to parental warmth: African American parents displayed less warmth than European American urban and rural parents. This finding is consistent with the initial group mean differences.

In the second step of this analysis, the addition of the neighborhood characteristics produced a significant change in the F statistic and accounted for an additional 11% of the variance in parental warmth. Only poverty and danger, however, were uniquely related to parental warmth, and both were associated with less parental warmth. The interaction between race and danger, however, which was marginally significant, revealed that the negative relation between danger and parental warmth in European American urban and rural families did not apply in African American urban families. Interestingly, in the presence of the neighborhood characteristics, the effect of race was no longer significant.

In the third step of this analysis, the addition of the family context variables also produced a significant change in the F statistic and accounted for an additional 8% of the variance in parental warmth. The significant or marginally significant partial regression coefficients suggested that parent education and maternal age each were uniquely and positively related to parental warmth. The interactions between race and parent education and locality and parent education, which were marginally significant, suggested that the positive relation between parent education and parental warmth applied only to the European American urban families.

In the fourth step of this analysis, the addition of child behavior produced a marginally significant change in the F statistic but only accounted for an additional 1% of the variance in parental warmth. The marginally significant negative partial regression coefficient suggested that lower levels of child behavior problems were related to higher levels of parental warmth.

Appropriate and consistent discipline—In the first step of the regression analysis that included appropriate and consistent discipline as the outcome measure, race and locality yielded a significant F statistic but only accounted for 2% of the variance. Only race was uniquely related to appropriate and consistent discipline: African American parents reported using less appropriate and consistent discipline.

In the second step of this analysis, the addition of the neighborhood characteristics produced a significant change in the F statistic and accounted for an additional 8% of the variance in appropriate and consistent discipline. The significant or marginally significant negative partial regression coefficients suggested that lower levels of danger and dissatisfaction with public services were uniquely related to more appropriate and consistent discipline. Again, in the presence of the neighborhood characteristics, the effect of race was no longer significant.

In the third step of this analysis, the addition of the family context variables also produced a significant change in the F statistic and accounted for an additional 3% of the variance in appropriate and consistent discipline. Parent education was uniquely and positively related to appropriate and consistent discipline.

Finally, in the fourth step of this analysis, the addition of child behavior produced another significant change in the F statistic and accounted for an additional 8% of the variance in appropriate and consistent discipline. The partial regression coefficient for child behavior was nonsignificant, but the interaction between race and child behavior was significant, and the interaction between locality and child behavior was marginally significant. Thus, it appears that the negative relation between child behavior and appropriate and consistent discipline did not apply to the European American urban families, but only to the African American urban and European American rural families. Among these latter families, higher rates of child behavior problems were linked to less appropriate and consistent discipline. In the presence of child behavior, only the partial regression coefficients for danger and parental education remained significant.

Harsh interactions—In the first step of the regression analysis that included harsh interactions as the outcome measure, race and locality yielded a nonsignificant F statistic and did not account for any of the variance. Neither race nor locality was uniquely related to harsh interactions.

In the second regression equation, the addition of the neighborhood characteristics produced a significant F statistic and accounted for 8% of the variance in harsh interactions. The significant or marginally significant positive partial regression coefficients suggested that higher levels of dissatisfaction with public services and danger were uniquely related to more harsh interactions.

In the third step of this analysis, the addition of the family context variables produced a significant change in the F statistic and accounted for an additional 4% of the variance in harsh interactions. Being a single parent was uniquely related to more harsh interactions. In the presence of the family context variables, the partial regression coefficient for danger became nonsignificant.

In the fourth step of this analysis, the addition of child behavior produced another significant change in the F statistic and accounted for an additional 16% of the variance in harsh interactions. Once child behavior—which was uniquely and positively related to harsh interactions—was included, the partial regression coefficient for being a single parent became nonsignificant, and the partial regression coefficients for dissatisfaction with public services and for locality became marginally significant.

Discussion

With a relatively large sample of families living in high-risk urban and rural communities in four different regions of the United States, this study examined multiple influences on parenting. It found that race and locality, neighborhood characteristics, family context, and child behavior accounted for a significant portion of the variance in parental warmth, appropriate and consistent discipline, and harsh interactions. Although the African American urban families were at greater risk than European American urban or rural families and displayed lower mean levels of parental warmth and appropriate and consistent discipline, the findings of this study suggest that the factors affecting parental behaviors operate in mostly similar ways across race and locality.

The Influences of Race and Locality

Race was uniquely related to parental warmth and appropriate and consistent discipline, but locality was not. Interestingly, though, race-related differences in those parental behaviors disappeared once neighborhood characteristics were considered. Thus, what appeared to be a broad cultural difference was actually subsumed by more proximal neighborhood characteristics.

In contrast, locality was marginally related to harsh interactions—rural families engaged in more harsh interactions—but only after the effects of neighborhood characteristics, family context, and child behavior were jointly considered. This suggests that the combination of those factors initially may have suppressed a cultural difference.

With few exceptions, however, race and locality did not moderate relations among neighborhood characteristics, family context, child behavior, and parental behaviors. Consistent with other comparative studies of parenting in ethnic minority and European American families (e.g., Hill, Bush, & Roosa, 2001), these findings suggest that factors such as neighborhood danger and parent education may exert a somewhat universal effect on

parental behaviors in high-risk communities. Culturally related differences in parental behaviors may be apparent only in lower-risk communities.

Influences of Neighborhood Characteristics

As a set, the neighborhood characteristics were significantly related to parental behaviors assessed 1 year later. Even so, only a few of these neighborhood characteristics, namely poverty, dissatisfaction with public services, and danger, remained as uniquely related to those parental behaviors once more proximal influences were considered. These findings replicate ethnographic and quantitative findings indicating that neighborhood poverty, inadequate public services, and danger undermine positive parenting (e.g., Coulton, Korbin, & Su, 1996; Jarrett, 1997). It may be that, when faced with the chronic stress of living in a neighborhood with few economic resources, few public services, and much violence and crime, parents are less able to marshal the energy necessary to be warm, appropriate and consistent, and non-harsh.

It was surprising that, despite higher mean levels of neighborhood danger and lower mean levels of parental warmth in African American families, neighborhood danger did not appear to undermine parental warmth in African American families as it did in European American urban and rural families. It may be that the many stressors associated with minority status (Kessler & Neighbors, 1986; McLoyd, 1990) already have limited parental warmth in African American families and that the additional impact of neighborhood danger is negligible. It also may be that for African American urban families, the impact of neighborhood danger was offset by greater access to social support from extended family and friends.

Influences of Family Context

As a set, the family context variables always accounted for a significant increment in parental behaviors beyond that accounted for by race and locality and by neighborhood characteristics. Only parent education and maternal age, however, were uniquely related to parental behaviors once the more proximal influence of child behavior was considered. Klebanov and colleagues (1994) found a positive relation between parents' educational level and parental warmth, after controlling for neighborhood economic effects. This study found such a relation for parent education, but not for parent occupation, and for European American urban families, but not for African American urban or European American rural families.

Unexpectedly, single-parent status and the number of children in the family were not uniquely related to parental behaviors. It appears that the bivariate correlations that did exist between these indices of risk and parental behaviors overlap substantially with the neighborhood characteristics, parent education, and maternal age.

The Influences of Child Behavior

Child behavior always accounted for a significant increment in parental behaviors beyond that accounted for by the more distal influences. Children who exhibited more behavior problems had parents who displayed less warmth and reported lower levels of appropriate and consistent discipline and higher levels of harsh interactions. When attempting to predict variation in appropriate and consistent discipline, there were significant interactions between race and child behavior and between locality and child behavior. For European American urban families only, there was no relation between child behavior and parental behaviors. This suggests that, relative to African American urban or European American rural parents, parents in European American urban families may be more consistent in responding to their children's natural but coercive attempts (Patterson, 1982) to avoid punishment and consequences.

Limitations of the Present Study

This study's findings should be considered in relation to its limitations. First, many of the findings in this study were only marginally significant. Although some of these may have been spurious, most were interactions, which have less statistical power to begin with. Given the general conclusions of this study regarding the lack of moderation, excluding marginally significant findings could have created a more parsimonious impression than is merited.

Second, some of the neighborhood characteristics assessed in this study were based on Census Bureau tracts, which may have been larger than parents' conceptions of their own neighborhoods. Other neighborhood characteristics, such as the presence of social networks, had low reliability estimates. Third, this study could not control for the violation of independence in data for all participating families. Because this study included so many families living in so many different neighborhoods—for example, between 1 and 29 families lived in 81 different Census Bureau tracts—it was not feasible to conduct sound multilevel or hierarchical linear modeling and obtain reliable estimates of neighborhood clustering effects. Fourth, this study lacked a group of African American rural families. Thus, it could not examine fully the interplay among race, locality, and parental behaviors. Finally, although longitudinal, this study did not constitute an explicit test of causality. The theorized direction of effects seemed plausible; however, it is likely that parental behaviors also affected child behavior and that other factors, such as mother's symptoms of depression, may have affected multiple variables examined in this study.

Conclusions and Implications

These findings call for more careful study of the multiple influences on parental behaviors. Initial race differences in parental behaviors were quickly eliminated once neighborhood characteristics were considered. In addition, locality differences in harsh interactions emerged only after neighborhood characteristics, family context, and child behavior were jointly considered. Thus, the most potent or important influences on parental behaviors are not necessarily what first meets the eye. Without consideration of more proximal influences, a true neighborhood effect might look like a race effect, and a locality effect may not be apparent.

The few interactions found provide glimmers of cultural differences in processes that might emerge in lower-risk communities. To carefully and completely disentangle cultural and contextual effects on parenting, future studies should include as many proximal influences as possible with a variety of cultural groups. In the meantime, these findings should serve as a caution against misconstruing racial differences in parental behaviors. In our attempts to be sensitive and respectful of differences in childrearing attitudes and approaches, we might fail to recognize when parental behaviors such as lower levels of warmth result not from overarching cultural norms or values, but rather from stressful neighborhood and family conditions.

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Table 1

Means and Standard Deviations for Study Variables

	African American Urban (AAU)		European American Urban (EAU)		European American Rural (EAR)		Significant Group Differences
	M	SD	M	SD	M	SD	
Neighborhood characteristics							
Poverty	0.32	0.17	0.11	0.09	0.12	0.06	AAU > EAU, EAR
Residential stability	-0.53	0.84	-0.01	0.65	0.92	0.52	EAR > EAU > AAU
Public services	0.82	0.54	0.84	0.55	0.78	0.48	ns
Social networks	1.13	0.67	1.23	0.59	1.35	0.58	EAR > AAU
Danger	0.47	0.95	-0.27	0.52	-0.56	0.58	AAU > EAU > EAR
Family context							
Parent education	3.89	0.96	4.11	1.20	4.34	0.85	EAR > AAU
Parent occupation	3.00	2.19	3.72	2.08	3.45	2.12	EAU > AAU
Single parent	0.68	0.47	0.24	0.43	0.12	0.33	AAU > EAU, EAR
Maternal age (years)	23.91	6.15	25.61	5.83	25.17	4.79	EAU > AAU
Number of children	3.16	1.41	2.73	1.26	2.50	1.13	AAU > EAU, EAR
Child behavior							
Child Behavior Checklist	31.51	20.61	29.91	17.57	28.84	14.52	ns
Parental behaviors							
Warmth	3.49	0.87	3.92	0.70	3.93	0.69	EAU, EAR > AAU
Discipline	2.65	0.67	2.86	0.52	2.79	0.52	EAU > AAU
Harshness	0.53	0.33	0.51	0.26	0.55	0.24	ns

Table 2

Correlations Among Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Race															
2. Locality	-.54														
3. Poverty	.62	-.34													
4. Residential stability	-.52	.60	-.70												
5. Public services	.00	-.04	.14	-.01											
6. Social networks	-.13	.13	-.20	.11	.01										
7. Danger	.50	-.37	.67	-.44	.23	-.19									
8. Parent education	-.16	.16	-.30	.22	-.05	-.05	-.34								
9. Parent occupation	-.14	.04	-.13	.04	-.06	-.09	-.22	.48							
10. Single parent	.50	-.35	.42	-.39	.05	-.07	.39	-.16	-.03						
11. Maternal age	-.13	.05	-.24	.20	-.16	-.03	-.20	.32	.17	-.17					
12. Number of children	.20	-.17	.19	-.14	.00	-.12	.30	-.13	-.10	.02	.11				
13. Child behavior	.06	-.05	.24	-.15	.24	.02	.21	-.26	-.11	.17	-.20	.02			
14. Warmth	-.27	.15	-.37	.24	-.12	-.01	-.34	.36	.26	-.20	.25	-.08	-.24		
15. Discipline	-.15	.05	-.21	.12	-.16	-.03	-.28	.26	.14	-.12	.14	-.11	-.35	.23	
16. Harshness	.01	-.04	.14	-.06	.23	.04	.17	-.19	-.15	.14	-.19	.01	.49	-.12	-.40

Note: All correlations greater than .10 are significant at the .05 probability level (two-tailed).

Table 3
Hierarchical Regression Analysis Summary for Parental Warmth

Independent Variables	Step 1	Step 2	Step 3	Step 4
Race (Black = 1/White = 0)	-.27**	-.02	.42	.42
Locality (rural = 1/urban = 0)	.01	.01	.47**	.47**
Poverty		-.33**	-.28**	-.26**
Residential stability		-.10	-.11	-.11
Public services		-.05	-.03	-.01
Social networks		-.08	-.03	-.02
Danger		-.36**	-.25**	-.25**
Race × Danger		.23	.18*	.18*
Parent education			.32**	.30**
Race × Parent education			-.44*	-.45*
Locality × Parent education			-.47*	-.48*
Parent occupation			.09	.09
Single parent			-.03	-.02
Maternal age			.10*	.10*
Number of children			.02	.02
Child behavior				-.10*
F	13.25**	8.81**	7.48**	7.28**
Degrees of freedom	2,335	8,329	15,322	16,321
R ² (adjusted R ²)	.07 (.07)	.18 (.16)	.26 (.22)	.27 (.23)

Note: Standardized partial regression coefficients for each predictor were included at each step.

*
 $p < .10$.

**
 $p < .05$.

Table 4
Hierarchical Regression Analysis Summary for Appropriate and Consistent Discipline

Independent Variables	Step 1	Step 2	Step 3	Step 4
Race (Black = 1/White = 0)				
Locality (rural = 1/urban = 0)	-.17**	-.04	-.05	.14
Poverty	-.04	-.08	-.10	.12
Residential stability		-.03	.01	.08
Public services		.02	.02	.03
Social networks		-.09*	-.10*	-.06
Danger		-.08	-.05	-.04
Parent education		-.27**	-.21**	-.20**
Parent occupation			.18**	.14**
Single parent			-.01	.00
Maternal age			.00	.03
Number of children			.03	.00
Child behavior			-.04	-.04
Race × Child behavior				-.05
Locality × Child behavior				-.34**
F	3.93**	5.39**	4.16**	5.74**
Degrees of freedom	2,336	7,331	12,326	15,323
R ² (adjusted R ²)	.02 (.02)	.10 (.08)	.13 (.10)	.21 (.17)
Change in F	NA	5.86**	2.28**	10.61**

Note: Standardized partial regression coefficients for each independent variable were included at each step.

*
p < .10.

**
p < .05.

Table 5
Hierarchical Regression Analysis Summary for Harsh Interactions

Independent Variables	Step 1	Step 2	Step 3	Step 4
Race (Black = 1/White = 0)	.04			-.05*
Locality (rural = 1/urban = 0)	.06	-.07	.11	.12*
Poverty		.12	.01	-.09
Residential stability		.04	-.06	-.08
Public services		-.08	.17**	.09*
Social networks		.19**	.03	.01
Danger		.06	.09	.10
Parent education		.15*	-.09	-.01
Parent occupation			-.08	-.09
Single parent			.13**	.07
Maternal age			-.07	-.04
Number of children			-.02	-.02
Child behavior				.43**
<i>F</i>	0.41	4.15**	3.72**	9.40**
Degrees of freedom	2,334	7,329	12,324	13,323
<i>R</i> ² (adjusted <i>R</i> ²)	.00 (.00)	.08 (.06)	.12 (.09)	.28 (.25)
Change in <i>F</i>	NA	5.63	2.94**	68.30

Note: Standardized partial regression coefficients for each independent variable were included at each step.

*
 $p < .10$.

**
 $p < .05$.