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Understanding the Geospatial Relationship of Neighborhood Characteristics and Rates of Maltreatment for Black, Hispanic, and White Children

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The disproportionate number of racial and ethnic minority children in the child welfare system concerns many child welfare professionals. Few studies have investigated how neighborhood processes may contribute to this disparity. This study examined how neighborhood characteristics are associated with rates of child maltreatment for black, Hispanic, and white children. Spatial regression procedures were used to analyze data from 940 census tracts in California. For black children, higher rates of poverty and higher densities of off-premise alcohol outlets were positively associated with maltreatment rates, but increases in population since 1990, a higher percentage of residents who had moved, and a higher percentage of black residents were associated with lower rates. Percentage of female-headed families, poverty, and unemployment were positively related to maltreatment rates among Hispanic children. For white children, the percentage of elderly people, percentage of poverty, ratio of children to adults, and percentage of Hispanic residents were positively associated with neighborhood rates. Reducing neighborhood poverty may reduce rates of child maltreatment for all children, but additional efforts to prevent maltreatment at the neighborhood level may need to be tailored to the specific demographic characteristics to be most effective.

KEY WORDS: child maltreatment; neighborhoods; race/ethnicity; spatial analysis

hild welfare professionals and researchers alike are concerned with the overrepresentation of racial and ethnic minority children involved in the child welfare system. For example, black children are 51 percent more likely to be removed from their home due to child maltreatment than are white children (U.S. Department of Health and Human Services [HHS], 2004). According to Needell and colleagues (2003), this disparity could be due to at least three factors: differences in the child welfare needs of different racial and ethnic groups, discrimination by society, and discriminatory practices of child welfare workers. This debate over and interest in the reasons for overrepresentation of racial and ethnic minorities in the child welfare system continues to be of concern to professions who seek to explain, prevent, and intervene in those conditions that lead to such disparities. It is

interesting that general population studies of child maltreatment have found that after controlling for family demographics, no differences exist in rates of child abuse and neglect by race or ethnicity (Sedlak & Broadhurst, 1996). This suggests that factors related to discrimination, as suggested earlier, are at play, at least on some level.

Providing additional evidence that bias may explain, at least in part, this overrepresentation is a study of substantiated maltreatment rates for Minnesota that explored the role of geography in this debate (Ards, Myers, Malkis, Sugrue, & Zhou, 2003). This study found disparities in child maltreatment rates even after controlling for information on victims, offenders, and counties. Furthermore, overrepresentation can be inflated depending on which level of aggregation is examined. For example, this study also showed that although these disparities exist, lower

level of geographic aggregation (for example, county compared with state) provided a better estimate of the true overrepresentation of racial and ethnic minority children. To that end, the present study examines how neighborhood characteristics are related to substantiated rates of child maltreatment for black, Hispanic, and white children at the census tract level for three counties in California.

Substantial research on how the neighborhood environment is related to rates of child maltreatment has been conducted over the past 30 years. These studies have found that higher rates of poverty (Coulton, Korbin, & Su, 1999; Coulton, Korbin, Su, & Chow, 1995; Deccio, Horner, & Wilson, 1994; Drake & Pandey, 1996; Young & Gately, 1988), less social support (Garbarino & Kostelny, 1992; Vinson, Baldry, & Hargreaves, 1996), higher rates of neighborhood unemployment (Gillham et al., 1998; Zuravin, 1986), greater residential instability (Coulton et al., 1995; Deccio et al., 1994; Ernst, 2001; Young & Gately; Zuravin), lower immigrant concentration (Molnar, Buka, Brennan, Holton, & Earls, 2003), more people per room (Zuravin), and greater alcohol outlet densities, particularly bars and off-premise outlets (Freisthler, 2004; Freisthler, Midanik, & Gruenewald, 2004), are associated with higher rates of child abuse and neglect.

Generally missing from most studies of neighborhood rates of child maltreatment is a discussion of race or ethnicity. One problem in examining child maltreatment by race is that race and poverty often are entangled. Because neglect is more likely to occur in families with fewer resources to provide for their children, neglect allegations are frequently made when children are not provided with basic needs, such as food, shelter, or clothing. This is one reason members of racial and ethnic minority groups who have higher rates of poverty are overrepresented in the child welfare system (HHS, 2004). Two studies specifically examined the relationship between race and ethnicity and child abuse and neglect in neighborhoods using different methods. The first, Spearly and Lauderdale (1983), studied how economic and social impoverishment were related to rates of child abuse and neglect for three different racial or ethnic subgroups in Texas. They found that the only significant predictor of county rates of maltreatment for both black and Mexican American children was the urban-rural status of the county. A more urban county was positively associated with county rates of maltreatment. In addition, having a higher percentage of Mexican American population in a county was significantly related to a lower rate of maltreatment for Mexican American children. However, for white children, the proportion of affluent children and the average monthly expenditure were negatively related to rates of maltreatment, which mirrored the overall findings of this study.

The second study, Korbin and colleagues (1998), examined the association of neighborhood social organization factors in neighborhoods of different racial compositions. To determine the differential impact, this study analyzed child maltreatment rates separately for predominantly white neighborhoods (more than 75 percent of the population was non-Hispanic white) and predominantly black neighborhoods (more than 75 percent of the population was non-Hispanic black). The researchers found that neighborhood impoverishment and instability were both positively associated with rates of maltreatment in both types of neighborhood, although the interaction between impoverishment and instability was inversely related to neighborhood rates of maltreatment in both types of neighborhood. The study found that in predominantly white neighborhoods, there was a positive relationship between child care burden (measured by a factor score of ratio of men to women, ratio of children to adults, and percentage of elderly residents) and maltreatment. Children living in predominantly black neighborhoods located next to at least one high-poverty neighborhood had higher rates of maltreatment.

By examining rates of maltreatment separately for three racial and ethnic groups, the current study aims to better understand the role of neighborhood environments in the overrepresentation of minority youths in the child welfare system. To do this, we rely on social disorganization theory, which states that neighborhoods are socially disorganized when they lack a structure to help maintain social controls that allow communities to realize commonly held values (Sampson & Groves, 1989). In other words, neighborhood residents who share common goals for the neighborhood may be more likely to work together to reach those goals. However, if there is disagreement among neighbors about acceptable standards for behavior or if residents are unable to prevent individuals from acting in unacceptable ways, social disorganization may result. In this study, social disorganization is measured by variables representing concentrated disadvantage, child care

burden, residential instability, and racial and ethnic composition. Within the social disorganization framework, concentrated disadvantage impedes the process of collective efficacy, which is, in turn, related to rates of social problems in neighborhoods (Sampson, Raudenbush, & Earls, 1997). Collective efficacy is defined as the ability of a neighborhood to realize common values and provide social control over behaviors (Sampson & Groves). Other studies have found that residential instability is related to the breakdown of support networks leading to greater problems (Kasarda & Janowitz, 1974; Sampson, 1988).

Research reviewed here suggests that different racial and ethnic groups may reside in neighborhoods with different characteristics, which may explain the difference in rates of maltreatment among these groups. Different groups may also experience neighborhood characteristics differently. Examining the differences between racial and ethnic groups may provide a better understanding of how prevention or intervention efforts should be structured for neighborhoods with varying characteristics.

METHOD

A purposive sample of three counties in northern California was used in a cross-sectional ecological design to examine how the neighborhood environment differentially affects rates of maltreatment for black, Hispanic, and white children in 941 neighborhoods (as defined by census tracts). Children of Asian and American Indian descent were not included in the study due to low base rates at the census tract level. A purposive sample of these counties was chosen because the presence of both urban and rural areas within each county, which provided variation between the units of analysis (census tracts) on racial and ethnic composition of the children.

For these analyses, the dependent variable was the number of substantiated reports of maltreated children by racial or ethnic group per 10,000 children of that specific race or ethnicity living in the census tract for the year 2000. Data were obtained from the Center for Social Services Research at the University of California, Berkeley, which is contracted by the California Department of Social Services to archive the referral and placement child welfare data for the state of California (Needell, Webster, et al., 2003). Race or ethnicity of each child recorded in the archives is identified by his or her respective caseworker. In determining race

and ethnicity of the child where more than one racial or ethnic group was reported, we used the primary ethnicity field as determined by the child's caseworker. For the purposes of this study, each child with a substantiated report is included only once, for the most severe allegation of child maltreatment for that year. We created rates of children with a substantiated report of maltreatment based on race or ethnicity in these neighborhood areas by dividing the number of children of a particular racial or ethnic background with a substantiated report by the total child population of the same racial or ethnic group for that area.

The address of each child with a substantiated report of child maltreatment was geodcoded using ArcView 3.2a (Environmental Systems Research Institute, Inc., 1999). Ninety-six percent of all addresses were successfully geocoded. (Table 1 shows the means, standard deviations, and range for all the independent variables used in this study.)

The independent variables included measures of population density, social disorganization, and effects-coded variables representing county of residence. Measures of population density and social disorganization were obtained from the 2000 Census. Population density was measured by total population size and population per square mile. Social disorganization was measured using variables found in earlier studies to represent domains related to neighborhood disorganization (Coulton et al., 1995; Sampson et al., 1997). Concentrated disadvantage was measured by the percentage of female-headed families, percentage of poverty, percentage unemployed, percentage of vacant housing units, and 1990-2000 population change. Child care burden was measured by percentage of elderly residents, ratio of adult men (older than 20) to adult women (older than 20), and ratio of children (13 or younger) to adults. Residential instability was measured by percentage of people who moved from 1995 to 2000. Racial and ethnic composition was measured by percentage of black residents, percentage of foreign-born residents, and percentage of Hispanic residents.

Alcohol outlet density was measured by the number of bars and restaurants that serve alcohol and off-premise alcohol outlets per 1,000 population. Data were obtained from the California Department of Alcoholic Beverage Control and coded by license type. Establishments with license types of 23, 40, 42, 48, 61, and 75 were coded as bars and those with license types 41 or 47 were coded as restaurants. An

Variable	M	SD	Minimum	Maximum
Dependent variable (substantiated rate per 10,000 children)	* 4.4 0	. 9		
Black children	238.6	536.5	0.0	6,666.7
Hispanic children	96.4	213.7	0.0	2,857.1
White children	151.8	441.2	0.0	10,000.0
Population density				
Total population	4,622.6	1,856.9	28.0	11,485.0
Population/mile-squared	7,666.0	5,670.0	1.4	38,905.3
Impoverishment				
% female-headed families with children	10.4	7.9	0.0	100.0
% people living in poverty	11.0	10.0	0.0	85.8
% unemployed residents	3.5	2.7	0.0	35.4
% vacant housing units	3.5	4.6	0.0	75.5
% 1990–2000 population change	-2.5	100.0	-31.9	164.8
Instability				in high
% people who moved between 1995 and 2000	50.2	12.8	24.0	100.0
Child care burden				
Ratio children (0-12 years)/adults (≥ 21 years)	0.3	0.1	0.0	0.7
Ratio adult males (≥ 21 years)/adult females (≥ 21 years)	1.2	4.4	0.6	134.3
% adults ≥ 65 years	10.6	5.6	0.0	42.9
Racial/ethnic composition				
% Hispanic residents	19.0	15.5	1.7	84.6
% foreign-born residents	25.4	14.4	0.0	82.8
% Black residents	10.7	14.6	0.3	81.5
Alcohol outlet density				
Bars per 1,000 population	3.5	3.4	0.0	95.2
Restaurants per 1,000 population	1.8	14.0	0.0	412.7
Off-premise outlets per 1,000 population	0.8	1.4	0.0	31.8

establishment was coded as an off-premise outlet if the license type was 20 or 21. Off-premise outlets are those where customers purchase alcohol onsite but take it somewhere else for consumption (for example, liquor or convenience stores). Only establishments with active licenses at the beginning of January 2000 were used in this study. Ninety-nine percent of outlets were successfully geocoded.

Statistical Analysis

To analyze the relationship between rates of maltreatment by child race or ethnicity, we used spatial regression models that assess and control for spatially autocorrelated errors. The use of place as the unit of measurement (in this case, census tract) requires this application of specialized techniques that control for correlations between spatial units, called *spatial autocorrelation*. Whereas temporal autocorrelation

occurs where individual units analyzed over time exhibit similarities at each time point, spatial autocorrelation occurs when neighborhoods located next to each other (that is, that share a boundary) share similar characteristics. Application of ordinary least squares regression procedures in the presence of significant spatial autocorrelated error biases statistical tests and can result in Type I or Type II errors (Griffith, 1988). Spatial regression models use generalized least squares (GLS) regression analyses that account for the uniqueness of the spatial features in the data.

Spatial autocorrelation is measured in two ways. In the first, analysis of the dependent variable is conducted to determine whether, indeed, census tracts located next to each other have similar rates of maltreatment. The resulting number, called the Moran coefficient, gives a sense of the magnitude

of spatial autocorrelation that exists (Cliff & Ord, 1973). The Moran coefficient can be interpreted similarly to a correlation coefficient, with values closer to 1 and –1 indicating either complete positive or negative autocorrelation. It is possible, however, that the independent variables introduced into the model "explain away" or account for the spatial autocorrelation in the dependent variable. Second, spatial autocorrelation in the full analysis model must also be tested to determine the appropriateness of spatial regression models. Once the level of spatial autocorrelation had been assessed and found to be present in the analysis, the GLS regression procedure is used to control for spatial autocorrelation (Griffith, 1988).

For this study, we used Spatial Statistical System (S3) version 4.32, proprietary software of the Prevention Research Center, to conduct the analyses (Ponicki & Gruenewald, 2003). In addition to spatial autocorrelation, another problem that arises when conducting analyses of small areas is that neighborhoods with small populations are given the same weight in the analysis as neighborhoods with large populations. Called the small area analysis problem (Bailey & Gatrell, 1995), this refers to the condition in which variances are not equal across units (that is, heteroskedasticity). For instance, a census tract area with 10 substantiated reports of maltreatment and only 10 children would have a maltreatment rate of 100 percent. Those same 10 substantiated reports in a census tract with 100 children would have a rate of 10 percent. Thus, changes in numbers of substantiations in areas with small child population rates can vastly change the maltreatment rate. To control for this heteroskedasticity, each model is weighted by the square root of the racial or ethnic child population under study for that area (Greene, 1993), effectively downweighting those small areas that are prone to these larger variances.

To determine whether high-influence census tracts existed, studentized t statistics of Cook's distances for the residuals were calculated and assessed (Cook & Weisburg, 1982). Cook's distance was calculated for each observation (that is, census tract) and measured the combined influence of that observation on all regression coefficients. A Cook's distance of greater than or equal to 1 signals the existence of a high-influence census tract. Assessments of these distances in the preliminary spatial regression models revealed one high-influence census tract, which was subsequently dropped from further analysis.

RESULTS

Base rate models determined the average number of children abused in neighborhood areas by race and ethnicity. These models regressed the number of children by racial or ethnic group for each census tract on the number of maltreated children for that group. According to those models, on average per census tract, 1 in 32 black children, 1 in 91 Hispanic children, and 1 in 167 white children experienced substantiated reports of child maltreatment. In other words, black children were three times more likely than Hispanic children and five times more likely than white children to have experienced a substantiated report of child maltreatment (Table 2 shows the results of the three spatial regression analyses examining the relationship between rates of maltreatment and neighborhood characteristics separately for each group.) Spatial autocorrelation was positive and significant in all three models, indicating that spatial regression models are needed to control for biases in the statistical tests that result when adjacent census tracts have similar characteristics.

Neighborhood rates of child maltreatment were positively related to percentage of poverty and number of off-premise alcohol outlets per 1,000 population for black children and negatively associated with percentage of black population and percentage of people moving in the past five years. For Hispanic children, percentage of female-headed families, percentage of poverty, and percentage of unemployment were positively associated with neighborhood rates of child abuse and neglect, and percentage of black residents and population per square mile were negatively related to rates of maltreatment. There was a positive association between percentage of families in poverty, percentage of Hispanic residents, percentage of elderly residents, and the ratio of children to adults for white children. For all three analyses, the county indicators were also statistically significant, with county A having higher rates of maltreatment for each racial and ethnic group and county B having lower rates of maltreatment than county C.The pseudo- R^2 shows that these models explain about 50 percent of the variation in neighborhood rates of maltreatment for black and white children, but only about 40 percent of the variance for Hispanic children (Table 2).

DISCUSSION

Few studies have examined the effects of neighborhood structural characteristics on different racial or

Table 2: Spatial Regression of Neighborhood Substantiated Rates of Child Maltreatment and Social Disorganization by Race/Ethnicity of the Child (Weighted by Number of Children in Each Racial/Ethnic Group; N = 940)

Variable Raw Moran Spatial autocorrelation Variables	Child Maltreatment per 10,000 Children (by Race/Ethnicity of Child)											
	Black 0.4072 0.2048***		Hispanic 0.3152 0.1792**		White 0.5342 0.4186***							
							b	se	b	se	b	se
							Constant	122.33	113.024	122.33	113.02	-113.83
	Sacramento County	129.08	20.06***	28.07	9.05**	44.16	10.40***					
Alameda County	-103.32	17.96***	-45.26	6.93***	-27.22	9.29**						
Population	0.0057	0.0048	0.0002	0.0021	-0.0008	0.0023						
Population/square mile	0.0005	0.0018	-0.0021	0.0008*	-0.0005	0.0014						
% female-headed families	1.07	1.86	4.65	1.02***	2.44	1.25						
% persons living in poverty	9.28	1.54***	2.15	0.80**	8.85	1.34***						
% unemployed persons	7.71	4.28	6.16	2.39**	5.56	3.17						
% vacant housing units	2.00	2.98	1.91	1.69	1.66	1.87						
% 1990-2000 population change	-0.03	0.11*	-0.06	0.07	-0.11	0.08						
% elderly people	2.83	2.57	1.09	1.21	2.77	1.15*						
Ratio of adult men to adult women	86.66	70.51	40.99	35.61	6.54	47.58						
Ratio of children ≤ 12 to adults	-140.49	142.31	-33.63	72.17	193.89	81.71*						
% persons moved past 5 years	-2.36	1.03*	-0.79	0.43	0.09	0.50						
% foreign born residents	-0.01	1.15	-0.10	0.43	-0.33	0.58						
% Hispanic residents	0.61	91.05	-5.76	32.55	1.44	0.59*						
% Black residents	-2.15	0.77**	-1.38	0.48**	0.34	0.89						
Bars per 1,000 population	6.00	3.34	1.26	1.32	2.17	1.47						
Restaurants per 1,000 population	-0.83	0.89	-0.16	0.34	-0.14	0.35						
Off-premise outlets per 1,000 population	29.07	14.44*	5.10	6.03	-1.42	7.28						
Pseudo R ²	0.54		0.39		0.56							

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

ethnic groups. The current study found that neighborhood rates of maltreatment differed by structural factors of the neighborhoods for black, Hispanic, and white children. Consistent with social disorganization theory, measures of concentrated poverty (particularly poverty) are positively related to child maltreatment. However, the measure of residential stability was significant only for black children and opposite of the hypothesized direction. Measures of child care burden were significantly related to maltreatment only for white children. Thus, we find partial support that dimensions of social disorganization are related to rates of maltreatment, but these findings are not consistent across the three racial and ethnic groups studied here. It may be that neighborhood dynamics related to social disorganization have different effects as what constitutes

"disorganization" in one area may be a strength of another area (for example, child care burden) based on cultural or community values and response to certain problems.

This study corroborates the finding that poverty was positively associated with rates of maltreatment (Korbin et al., 1998) and a higher percentage of black residents was negatively related to rates of maltreatment (Ards, 1992) for black children. The current study also found that areas that had experienced increases in population since 1990 and a higher percentage of residents who had moved had lower rates of maltreatment, but higher density of off-premise outlets was associated with higher rates of maltreatment among black children. Wilson (1987) found that as wealthy families began to move out of inner city neighborhoods, black neighborhoods

experienced increased isolation from employment opportunities and other resources. He theorized that this process created a separate underclass that continued to suffer disadvantage with little opportunity for employment. This same process may contribute to higher rates of maltreatment, particularly child neglect, among black children.

The negative relationship between percentage of black children and rates of maltreatment for black children may be the result of how maltreatment is reported in those areas. For example, residents of predominantly black neighborhoods may be more distrustful of child welfare agencies, making them less likely to report suspected abuse. A similar negative relationship of percentage of black residents with maltreatment rates was found among Hispanic children as well, which may indicate that this potential distrust by black residents might be present in neighborhoods with greater populations of all racial and ethnic minority children. An alternate explanation is that there may be less discrimination in those neighborhood areas, as caseworkers and residents may be more familiar with differing parenting styles and are less suspicious of other residents' parenting behaviors. As we do not know the race or ethnicity of the person who reported the child maltreatment incident, more research should be conducted that further examines how race and ethnicity of the neighborhood interacts with reporter of maltreatment to produce higher or lower rates of maltreatment.

Alcohol access was not related to rates of maltreatment for Hispanic and white children. The neighborhood impoverishment variables of female-headed families, poverty, and unemployment were positively related to rates of maltreatment among Hispanic children. For white children, the structural factors related to poverty, child care burden (percentage of elderly residents and ratio of children to adults), and racial and ethnic composition (percentage of Hispanics) were positively associated with neighborhood rates of abuse and neglect, similar to findings by Korbin and colleagues (1998).

Spearly and Lauderdale (1983) concluded that black and Hispanic families relied more heavily on informal support networks for resources and white families relied on greater access to economic and formal resources for support. Because variables representing neighborhood child care burden were only significant for white children, this study provides support for that conclusion. The use of informal

support networks may protect minority children from maltreatment related to child care burden, but less reliance on economic resources makes these children more vulnerable to child abuse and neglect related to concentrated disadvantage.

As the base rate models show, black children are five times more likely than white children and three times more likely than Hispanic children to have a substantiated report of maltreatment at the census tract level. These rates are different from those that examine the three counties as one entity. At the aggregate level for all three counties combined, black children were about 2.5 times more likely to experience a substantiated report of child maltreatment than either Hispanic or white children (Needell, Brookhart, & Lee, 2003), supporting claims by Ards and colleagues (2003), who stated that lower levels of aggregation provide better estimates of the true disparities that exist within the child welfare system. In this study, the disparity is greater at the census tract level than one would estimate on the basis of county-level data. Coupled with the findings that neighborhood characteristics are differentially related to rates of maltreatment for each group, this suggests that this disparity or overrepresentation may be a function of the areas in which they live. If this is true, interventions that seek to improve these neighborhood areas based on the specific correlates related to maltreatment for a specific ethnic or racial minority group would result in decreasing rates of maltreatment for that group, thus decreasing disparities in the system.

For the child welfare system, these results suggest that some neighborhood areas have much higher rates of overrepresentation of ethnic minority children than other areas, indicating that the neighborhood environment may be more detrimental to these children, resulting in more abuse and neglect; neighborhood areas with certain characteristics shown here may be more prone to report maltreatment for children of minority groups (for example, more off-premise outlets in the area, more reports for black children); or caseworkers are more likely to substantiate reports in areas with particular neighborhood characteristics. Sampson and Raudenbush (2004) showed that such disparities can be explained, in part, by perceptions of risk of harm in minority areas. As implied by Needell, Brookhart, et al. (2003), it is time to determine the extent to which this is a consequence of structural or institutional racism or biased decision making on the part of reporters

and caseworkers so that these longstanding issues can be addressed.

Limitations

With an ecological study, we are limited to making inferences at the aggregate level only. Therefore, we are unable to determine exactly how neighborhood processes interact with individual behavior to create situations in which children are abused and neglected. More research needs to be conducted that begins to explain and understand these neighborhood processes and how they relate to children's well-being. In the current study, there were not enough Asian and Native American children in the child welfare system to conduct separate analyses for those groups. Future research needs to examine how neighborhoods affect maltreatment among these children. Finally, this study examined the relationship between rates of maltreatment by the race and ethnicity of the child and neighborhood characteristics for census tracts in only three counties in California. Studies in solely rural areas and areas of the country with a differing demographic composition need to be conducted to determine the overall generalizability of these findings for racial and ethnic groups in rural communities. It is possible that the neighborhood processes at work in one community differ from those in another community. More studies that examine this relationship among different groups in different geographic areas will enhance our knowledge of how these processes work.

Practice Implications

These three California counties are diverse in their racial and ethnic breakdown in that more than half the population of children, ages 0 to 17, is not white (California Department of Finance, 2004); however, ethnic and racial diversity in other counties across the nation may be significantly less profound. Consequently, the geospatial methodological approach to examining the association between child abuse and race and ethnicity may produce results that are very informative in outlining not only effective approaches to resolving issues of child abuse and neglect, but also effective approaches to facilitating community integration.

Literature focusing on services to minority children and families has strongly suggested that child welfare services not be provided using a cookie-cutter or template approach to service delivery (Billingsley & Giovannoni, 1972; Gould, 1991), but rather

that service delivery be designed to the specific needs of individual children and their families (Lum, 2003). Although this research takes a dramatically different approach to exploring the relationship between child abuse and race and ethnicity, we nonetheless come to conclusions similar to those who have focused on evaluating and assessing services to ethnic and racial minorities. Particularly, we find that there may be approaches to addressing individuals' personal efficacy that may be more effective in the context of one group's specific experience.

In the aggregate, this research also suggests not only that practitioners look for opportunities to tailor services directly to the respective needs of the children and families, but that social service agencies also focus on mitigating neighborhood factors that facilitate higher rates of maltreatment in specific racial and ethnic minority neighborhoods. A focus on economic growth in poor neighborhoods (for example, encouragement of home ownership, use of economic development loans, and pursuit of local jurisdictions' investment in community revitalization) can only be a positive factor. The development of institutional community supports (for example, employment opportunities for single, female heads of households; child care networks; use of natural helping networks), and particularly limiting the approval of off-premise alcohol permits to a specific number within census tracts would also appear to provide a positive foundation for enhancing community integration.

According to the findings of this study, it appears that a variety of strategies need to be developed and implemented, taking into consideration the racial or ethnic background of the children living in those neighborhood areas. Efforts that focus on mitigating neighborhood poverty will be beneficial to all children, regardless of race or ethnicity. Creating new job opportunities in areas with greater numbers of Hispanic children may help to reduce maltreatment in those areas, but would certainly be welcome in other areas as well. Creating opportunities for the development of informal support networks (Sampson, Morenoff, & Earls, 1999) in all areas may facilitate the decline in maltreatment rates, but according to these findings may be more successful in areas with higher population of white children. Furthermore, policies and programs that decrease the number of off-premise alcohol outlets in neighborhoods may be effective at reducing rates of maltreatment for black children. The results

presented here suggest that if a child welfare system wanted to reduce rates of maltreatment for a specific racial or ethnic group, then certain interventions are likely to be more successful than others. Thus, these findings present new ways to think about reducing the overrepresentation of minority children in the child welfare system.

These efforts are not exclusively the purview of child welfare practitioners. Rather, these approaches to service delivery stem from the most fundamental and historical traditions in social work practice, specifically addressing the needs of the community to enhance the lives of children and families (Addams, 1909). Furthermore, these approaches to service delivery would not only have beneficial outcomes in terms of decreasing the rates of child abuse and neglect, but they would also have an overall benefit to the successful functioning of a community.

CONCLUSION

Although in general neighborhood processes that may be related to child maltreatment are becoming better understood, they are less well researched and clear for specific ethnic and racial groups. It appears that poverty affects all children, regardless of race or ethnicity, the same: more poverty, more maltreatment. Yet the other neighborhood characteristics are differentially related to rates of maltreatment for black, Hispanic, and white children, suggesting that tailoring neighborhood-level prevention efforts to local neighborhood conditions may most effectively reduce maltreatment. Continuing to develop a better understanding of the relationships between race and ethnicity and maltreatment at the neighborhood level can assist practitioners in the development of more effective strategies to reduce child abuse and neglect. SW

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