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Neglect Subtypes, Race, and Poverty: Individual, Family, and Service Characteristics

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Abstract

Recent child maltreatment research has highlighted the very different context of poverty for Black and White children. Neglect is the most common form of maltreatment and strongly associated with poverty. Neglect is, however, not a unitary construct. We lack an understanding of whether reporting of and responding to different types of neglect may vary by poverty, race, or the intersection of the two. Administrative census, child welfare, welfare, health, and education data were used to examine how family and community poverty factors associate with various subtypes of neglect and subsequent case dispositions for Black and White children. Black children reported to child welfare reside in far poorer communities than Whites, even after taking into account family income (Aid to Families with Dependent Children [AFDC]/Temporary Aid to Needy Families [TANF]). Black children were more commonly reported and substantiated for severe and basic needs neglect. Community poverty indicators had a different relationship to report disposition for Black as compared to White children after controlling for neglect subtypes, child and family characteristics. Implications for practice and policy are discussed.

Keywords

neglect; child welfare; communities; ethnic minority populations

About 6 million children were reported for abuse or neglect in the United States in 2008, with the majority (71.1%) of victims being reported for neglect (U.S. Department of Health and Human Services [USDHHS], 2010). Compared to children reported for abuse, children initially reported for neglect have equal or higher risk of numerous other negative outcomes across various domains of functioning, including, for example, teen pregnancy, delinquency, substance abuse, and subsequent child maltreatment perpetration (DeBellis, 2009; Hildyard & Wolfe, 2002; Gilbert et al., 2009; Jonson-Reid, Drake, Kim, Porterfield, & Han, 2004; Jonson-Reid, Drake, & Kohl, 2009 Knutson, Taber, Murray, Valles, & Koeppl, 2010; Kotch et al., 2008; Widom, White, Czaja, & Marmorstein, 2007; Widom, 1996).

Poverty is among the most important predictors of child maltreatment (Pelton 1978; Sedlak et al., 2010), especially neglect (Drake & Pandey, 1996; Slack, Holl, McDaniel, Yoo, & Bolger, 2004). Recently, increasing attention has been paid to how different aspects of poverty may differentially impact certain subpopulations of children. For example, although Black families experience poverty about 3 times as often as White families, they are about

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12 times more likely to live in areas of concentrated poverty (Drake & Rank, 2009). But, as yet, little research has examined whether such differentials may impact the reporting of and response to maltreatment. Further, there is a broad range of behaviors and conditions that are subsumed under the category of neglect. It is not clear that poverty is equally associated with all forms of this type of maltreatment.

Background

Recent years have brought recognition of the importance of child neglect as an area both understudied and critically important (Dubowitz, 2007). Neglect places a substantial burden on child welfare systems and can result in numerous untoward outcomes (Herrenkohl & Herrenkohl, 2007). It is important, therefore to build knowledge that can support the prevention and early intervention policies and practices most likely to improve outcomes for such children. Given the dependence of the child welfare system on other community resources, we need to understand how family and community context may vary by subtype and may be associated with initial Child Protective Service (CPS) decisions to substantiate and serve these cases.

The epidemiology of neglect and poverty

Despite the longstanding acceptance of ecological frameworks used to explain outcomes in child maltreatment research (Belsky, 1980), little work has been done to examine unique family and neighborhood contexts among children reported for neglect. There is general agreement that child neglect is strongly correlated with poverty (Drake & Pandey, 1996; Sedlak et al., 2010). Some studies have found higher rates of poverty, low child IQ, caregiver substance abuse and mental health problems, low parental education, domestic violence, larger families, and single parenting among neglected compared to abused children (Brown, Cohen, Johnson, & Salzinger, 1998; Connell-Carrick, 2003; DiLauro, 2004). In a study of risk of neglect reporting, caregiver self-report of a learning disability and perceived material hardship were identified as risk factors for a later report of child neglect, but not race (Slack et al., 2004). Predicting neglect, however, is different than attempting to understand how the family and community context of children reported for neglect might vary by poverty, race, and specific form of neglect. The present article attempts to extend prior work predicting neglect to help understand variations by unique types of neglect.

Subtypes of neglect

There is no clear consistency in parsing neglect. National Child Abuse and Neglect Data System (NCANDS) data reports only two types of neglect, "neglect" and "medical neglect" (USDHHS, 2010). The Fourth National Incidence Study of Child Abuse and Neglect (CAN) breaks neglect into physical neglect (includes medical neglect, supervision, disregard for physical safety, hygiene), emotional neglect, and educational neglect (Sedlak et al., 2010). Dubowitz, Pitts, and Black (2004) use physical, psychological and environmental categories. Categorizations are generally not theoretically derived or empirically generated, but have the advantage of often being at least partly consistent with agency practice and documentation. Methodologically, using many categories has the advantage of conferring face validity and possibly enhancing homogeneity within types, while having few categories provides the advantage of preserving statistical power. This study further examines means of categorizing subtypes of neglect using descriptors available from child welfare data and then seeing if other child, family, and community characteristics appear to differ among these subtypes.

Race and poverty

Black children have higher official report rates for neglect than White or Hispanic children (USDHHS, 2010) and they are also highly likely to be poor. Drake and Rank (2009) found

that by looking at poverty from a larger community context, the differences in poverty levels between Black and White children grew exponentially. In the United States, only 13.7% of *poor* White children live in areas of same-race concentrated poverty. In contrast, among poor Black children, 61.9% of *poor* Black children live in areas of same-race concentrated poverty. Put simply, poor White children (at least in metropolitan areas) are generally embedded in nonpoor communities, but poor Black children generally live in economically devastated neighborhoods; very different community contexts. This difference in environment between poor White children and poor Black children has obvious implications for community support, opportunities, educational quality, and availability of other resources, such as positive role models. While there has been increasing attention to the relationship of the geographical context and maltreatment in the evaluation and so-called "gray" literature (Freisthler, 2009), this literature is just emerging. Given the strong relationship between poverty and neglect, however, it is possible that differences in community-level poverty characteristics are less pronounced within the neglect population.

Child neglect and services

Relatively little work has been done on understanding how maltreatment type is associated with decisions following a report. In two California studies, children reported for neglect were more likely to have a case opened for services controlling for race, gender, and age (Berrick, Needell, Barth, & Jonson-Reid, 1998; Jonson-Reid. 2002). It may be that comorbid factors like poverty lead to higher rates of services for neglected children. However, other studies call this into question. One study found that neglect cases with comorbid domestic violence were less likely to be referred for services after investigation than neglect only cases (Antle et al., 2007). To our knowledge, there are no published studies of how subtypes of neglect are associated with initial child welfare decision making following a report.

The current study

While it seems clear that poverty is associated with neglect, much remains unknown about how family as compared to community-level poverty may relate to various forms of neglect. Because of the dramatic variations in the context of poverty by race, it seems plausible that such variation extends to neglect. However, it could also be the case that there is so little variation in income among families reported for neglect that such differences are minimal. From an applied perspective, it is vital to understand whether different characterizations of neglect used in child welfare practice have any consistent relationship to risk or services. This area has been largely underresearched to date.

The aim of this article is to begin to describe the complex relationships between the primary constructs and variation in types of and response to child neglect. We explore race, family poverty and community poverty, residential mobility, and child, caregiver, and perpetrator characteristics. We also look at the immediate child welfare decisions that follow an initial report (substantiation and early service provision) to see if there are differences in system response for different subtypes of neglect after controlling for these characteristics. It is our hope that, for the first time, a broader understanding of the intersections between these constructs can be offered.

Key questions in this study include the following:

- Do family and community poverty contexts differ among children by race and type of maltreatment?
- Are there unique combinations of individual, family, and contextual poverty factors associated with neglect subtypes?

 Controlling the family and community context of poverty do neglect subtypes remain predictive of the case disposition?

We have chosen to do this by presenting data for White and Black populations separately because research indicates that community context is so different for these groups (Drake & Rank, 2009) and so that within-group challenges and experiences can be better understood rather than just focusing on between-group differences (Williams, VanDorn, Bright, Jonson-Reid, & Nebbit, 2010).

Method

Data are drawn from a larger longitudinal study of longitudinal service and outcome trajectories for low-income children compared to children with allegations of maltreatment based in a Midwestern metropolitan area. We compare case characteristics and initial child welfare response for two groups in this article: poor children with investigated child abuse/neglect reports (CAN/Aid to Families with Dependent Children [AFDC]) and nonpoor children with investigated child abuse/neglect reports (CAN Only). Using administrative records from multiple agencies linked to census data, we compare the groups according to: child, family, and community characteristics; child-level behavioral and health indicators (indicated developmental delay [child] and mental health services [child and caregiver separately] at time of report). We further compare poor and nonpoor children reported for various forms of neglect according to initial child welfare system response (the decision to substantiate or provide in-home services).

Sampling

The data were limited to children whose first report occurred prior to age 12 (born 1982–1994) to be comparable with the sample frame for the only other similar longitudinal study of maltreated children with a comparison group that existed at the start of the parent study (Widom, 1989). The cases reported for maltreatment were limited to children in families that came to the attention of child welfare for the first time during 1993–1994. CAN reports and AFDC) records were linked to identify children and families with a known income maintenance history as a proxy for family-level poverty. These cases formed the CAN/AFDC group. Those cases with CAN involvement but without AFDC involvement formed the CAN Only group. Children who were reported due to fatality or died within 7 days of the first report and those reported for reasons other than physical abuse, sexual abuse, or neglect were excluded from the original study.

Due to the desire to compare on community characteristics, those children residing in census tracts with less than 100 total children were deleted (n = 7 children); one additional case was dropped due to the inability to code the geographic data. To ensure independence of observations, one child per family was randomly selected (n = 7,305). In order to more accurately compare groups according to family-level poverty, those children who began in the CANONLY group and later had AFDC (or Temporary Aid to Needy Families [TANF]) during the study period were dropped for the present analyses (n = 383 excluded). Due to the demographics of the region, there were too few children in other racial groups to form coherent subgroups and so analyses were restricted to children categorized as Black or White (n = 92 children excluded). Finally, because of the interest in family-level factors, cases for which there was no information about the relationship to perpetrator were excluded (n = 12). This left a sample of 6,818 children. Because initial decision to substantiate or determine need for services occurs within 45 days of the report, all cases were followed for 45 days for this analysis.

Data preparation—All data for the present study were extracted from electronic information systems from state and regional agencies. Variables for the present analyses are drawn from regional special education records, state-level child abuse reporting data (including information from the investigation and disposition), state-level Aid to Families with Dependent Children (now known as Temporary Aid to Needy Families), state-level corrections, arrest data archived by the highway patrol, state-level Medicaid billing for mental health treatment and department of mental health billing records, and vital statistics (birth records). Linkage between many state-level data sets was accomplished by the presence of a common identifier across agencies. Other data such as birth records and arrest records were matched according to a combination of individual identifiers. Data used in present analyses include variables that were known prior to or at the time of the first report because of the emphasis on understanding neglect at the point at which a first report is made. While data are collected retrospectively, dates of system contact and other events allow for prospective analyses. Address data at time of report were geocoded allowing for controls for residence in the metropolitan city area proper (the city and county have separate child welfare directors and service units) as well as linkage to census information. Following linkage, identifying information was stripped from the data and very small cells are left unreported in the analysis to avoid accidental identification of individuals. The study was approved by the Washington University Institutional Review Board Human Subjects Committee.

Data entry processes and data field descriptions were requested from contributing agencies and reviewed by the research team prior to cleaning and recoding. Questions regarding variables were reviewed with agency staff to ensure proper interpretation. Because the original study sampled children based on reports for major forms of maltreatment (i.e., neglect, physical abuse, or sexual abuse) there were no missing data for type of report. It is not possible to assess the level of missing data for variables that are obtained by matching to other data systems because data on the true participation levels do not exist. However, this is minimized by focusing on variables in systems that are required to trigger funding, services or mandated forms of tracking clients.

Variables—Subtypes of neglect and child welfare disposition (substantiation, service need indicated) are gleaned from child welfare agency databases. These variables are all associated with the initial report. In the child maltreatment report data, workers may indicate up to five specific subtypes of maltreatment to characterize each report. For example, physical abuse subtypes include specific forms of injury such as bruises, fractures, or lacerations; neglect includes conditions such as unsanitary living conditions, untreated illness/injury, and lack of supervision. To allow for analysis of meaningfully large and conceptually distinct groups, we collapsed existing neglect subcategories into seven categories based on conceptual similarity and agency feedback on the use of codes. The collapsed categories are as follows: "Neglect Basic" combines allegations of lack of food, lack of heat, inadequate shelter or clothing, and things conceptually closely related to poverty. "Neglect Supervision" combines lack of supervision and educational neglect because among older children educational neglect was closely related to issues of appropriate supervision and guidance. "Neglect Severe" combines issues likely to have immediate health impact related to caregiving (e.g., failure to thrive, medical/dental neglect, malnutrition, exposure). "Neglect Substance" includes issues related to failure to give medication, poisoning (as intent was not clear and could be accidental), inappropriate giving of drugs, and repeated ingestions. "Neglect Left" includes abandonment. "Neglect Hygiene" included health threatening poor hygiene and unsanitary living conditions. "Neglect Mixed" included any type of neglect that was accompanied by physical and/or sexual abuse. Case determination codes entered by workers following an investigation of a report included substantiation status, and need for services.

All independent child- and family-level variables were present at the time of the initial report or preceded the report. Demographic variables were present in the child welfare, birth records, and AFDC data and included the gender, race, age of the child, caregiver age at birth of the child, and city residence as of the first report. Given the scant literature focusing on specific neglect subtypes, other child and case characteristics were selected based on correspondence between variables available in the data and prior work examining risk factors associated with maltreatment generally as well as neglect (Brown, Cohen, Johnson, & Salzinger, 1998; Connell-Carrick, 2003; DiLauro, 2004; Jonson-Reid, Drake, & Kohl, 2009; Slack et al., 2004; Sullivan & Knutson, 2000).

Birth record indication of very low birthweight and special education service data informed our child developmental delay variable. Caregiver criminal history was based on a statewide record of arrest or incarceration (state-level corrections facilities). Caregiver mental health treatment status was based on the presence of mental health or substance abuse records in Medicaid and Department of Mental Health service databases. Indicators of mental health problems without treatment records was created if the child welfare worker noted mental health or substance abuse issues in the initial investigation, but no service records were present from Medicaid or the Department of Mental Health. The child welfare worker report also identified parenting risk factors (e.g., "unrealistic expectations of child," "social isolation," "loss of control during discipline," "history of violence"). These had to be collapsed into a "Parenting risk" (yes or no) category due to subsample sizes. Finally, although administrative data typically capture risk factors rather than strengths, this region includes a limited number of noted strengths at the time of investigation in the electronic data. Indication that the family was cooperative with the investigation was included as well as whether a family had any one of the following strengths (adequate parenting skills, adequate living arrangements, and stable relationships). Substantiation and services needed are official markers taken from the child welfare disposition reports.

We examined poverty at the family level in two ways. Children could be noted as low income at birth (indicated as AFDC or receipt of Women, Infants and Children [WIC] at birth) or low income at the time of the first allegation of maltreatment. We coded "no AFDC or case indicators" if there was no family record of any AFDC/TANF use at or immediately prior to the first report, and no record of the child welfare investigator noting homelessness, lack of income, or lack of utilities in the electronic file.

Census data are often used to operationalize the neighborhood constructs. Both median income and percentage below poverty level are commonly used as metrics of economic well-being. We include both, as percentage below poverty level is the most direct measure quantifying the degree of poverty in the community, while median income is helpful in understanding the overall wealth of the community, as it captures variability beyond the official poverty line. We chose to use the percentage of child poverty following analyses done by Drake and Rank (2009) as this captures the experience specific to families with children. Residential mobility was also included as it is frequently used along with poverty as a key construct of community structure predictive of maltreatment, as well as related outcomes (Coulton, Korbin, Su, & Chow, 1995; Lery, 2009; Nikulina, Widom, & Czaja, 2011).

Such data can be used as individual variables or can be summed to create a composite index. Both approaches are commonly used (see Sastry, 2012) and both can be valid. Indexes offer the advantage of including a range of subsidiary constructs, potentially explaining more variance. For example, Nikulina, Widom, and Czaja (2011) report a composite census-derived neighborhood poverty measure using percentage of families on public assistance, below the poverty line, in single parent homes, in same residence for at least 5 years, owning

their own homes, and with a college degree. Such indexes may also offer disadvantages. Poverty per se becomes mixed with other constructs (e.g., family structure). Choices must be made regarding which components to include and how, if at all, to weigh them. Direct comparison to other studies and federal reports using single measures (e.g., percentage below the poverty level or median income) becomes impossible. We have explored the degree to which creation of indexes or inclusion of other variables (e.g., owner-occupancy) improve our predictive ability and have determined that the practical and interpretive advantages of using three separate commonly used measures (median family income, percentage below poverty level, and percentage moved in past 5 years) outweigh the value of creating a combined index measure for our purposes.

Families were also coded as living within the city limits (generally more urban) or within the county (including more suburban areas). In the study region, these two regions were served by different child welfare administrative units and generally the city region has higher levels of problematic community issues like violent crime.

Analyses—All analyses were conducted using SAS 9.2. Analyses included bivariate description of case characteristics and neglect subtype using chi-square, test and analysis of variance (ANOVA) techniques. Then multivariate models were used to understand the relationship of neglect subtypes, race, and poverty to initial system response. There was little variation in time between the report and initial responses such as substantiation, and perceived need for inhome services following a first report and therefore logistic regression (rather than a method accounting for the passage of time) was used for these outcomes. Because more than one subject can be in a census tract, our multivariate analyses control for clustering at the community level. For logistic regression, this is done using Proc Surverylogistic (Allison, 1995; An, 2002). While the focus is on neglect, comparison data on physical and sexual abuse were provided in the initial description of the sample. Because significant variation in family and community poverty context by race was found, investigation of subtypes of neglect and models of system response were conducted for White and Black children.

Results

Of the 6,818 children reported for abuse and neglect, about 36.9% of the children reported for maltreatment were White and 26.4% had no family poverty history. About 42% of the children reported lived in neighborhoods where over 40% of the children lived below the poverty level. Slightly over 60% were reported for various forms of neglect, 27.5% for physical abuse, 8.1% for sexual abuse, and 3.4% for mixed types of maltreatment.

Black and White Experiences of Family and Community Poverty

These data can be seen in Table 1 (significance values from Two-way ANOVA). Among children reported for child maltreatment, White children with no history of AFDC use lived in tracts with child povety rates between 9.6% and 10.6% (depending on type of maltreatment), while Black children with no history of AFDC use lived in tracts with more than twice the childhood poverty rate (25.3%–30.1%). Among children with a history of AFDC use, the neighborhood child poverty rate among Whites (16.6%–21.9%) was roughly half the Black rate (39.9%–43.3%). Among Black children, however, 90.9% (2,558 of a total of 2,811) of those reported for neglect lived in homes having AFDC histories, while only 54.6% of White children reported for neglect lived in similarly poor households. Because of the substantial differences in both the family- and community-level poverty indicators, we chose to continue to present findings stratified by race rather than conceptualize race as a factor to be controlled.

Subtypes of neglect—Table 2 describes characteristics of the child, family, and community by subtype of neglect split by race (significance values for proportions are based on chi-square or Fisher's Exact; significance values for continuous variables are based on *t*-tests). Each subtype was assigned a number (1–7). Superscript numbers indicate the subtype that had a statistically significant difference from the Column subtype for that variable.

The majority of the Black children in the sample resided within the city limits with a community child poverty rate slightly less than 2 times higher to nearly 3 times higher than White children reported for the same subtype of neglect. The vast majority of the Black children reported for maltreatment had a current or recent indicator of poverty at the time of the first report and were nearly twice more likely to have indicator of low income at birth than White children across subtypes.

Allegations of neglect related to basic needs (Basic) a much larger proportion of total Black children reported for maltreatment compared to White children (11.0% vs. 4.3%). Alleged perpetrators in reports on White children were more likely to be male across all subtypes of neglect than was true for Black children. Caregivers of Black children reported for severe types, neglect related to ingestion/drugs (Substance), and mixed type had much higher rates of parenting risks noted than caregivers of White children reported for the same reasons. Black children reported for severe forms of neglect were reported at an earlier age and had higher rates of developmental delay/learning disorders than those reported for other neglect subtypes, but this was not true for White children. Both Black and White children were more likely to have case conclusions that indicated mandated or voluntary service needs when reported as neglect with abuse (Mixed). Black children reported for severe types of neglect, however, had much higher rates of services indicated than White children reported for the same reason.

In general, there was greater variation in risk and protective factors between neglect subtypes among Black children than there was among White children. Among Black children, those reported for abandonment (Left) lived in neighborhoods with substantially lower median incomes and were more likely to include untreated caregiver mental health issues and criminal behavior risk factors compared to those reported for other reasons.

Child welfare case dispositions—After the investigation, an initial determination of substantiation was made as well as recommendations for mandated or voluntary services. Logistic regression analyses were used to see whether family and community context predicted system response while controlling for subtypes of neglect. Because there were so few White children reported for abandonment and because there were relatively few significant differences between abandonment and neglect related to medication or exposure drugs, these were combined along with mixed type cases as the reference category. Table 3 provides the odds ratios (ORs) with indicators of level of significance for models of substantiation and services indicated for Black and White children. Model fit statistics provided underneath the table indicated that the models fit the data relatively well. Predictive utility as measures by the pseudo R^2 and c-statistic indicate only modest explanatory power.

As can be seen in Table 3, a greater percentage of reports involving Black children was substantiated (23.3%) than White children (13.1%), but there was no difference of note in the percentage of cases indicating a need for services by race. Some predictors were similar for models of response for Black and White children. Generally, children reported for basic needs, supervision, severer neglect, or hygiene/sanitation issues were less likely to be substantiated than children reported for all other types of neglect. Directions of the effect were similar for Black and White children. Among Black children, a report of severe neglect

was associated with a greater likelihood of indication the case needed intervention. The lack of significance for White children may be related to the smaller numbers of children reported for severe neglect. Observed parenting risk was strongly associated with higher likelihood of both substantiation and service need indicated and noted family strengths resulted in a significant decrease. Family poverty did not predict outcomes for either Black or White children.

Other factors varied by race. An increase in median income in the census tract was associated with a decrease in substantiation (about 1% per \$1,000) of Black children only. For both Black and White children, living in tracts with moderate levels of child poverty was associated with substantiation as compared to high poverty areas, but the direction of the association varied by race. For both Black and White children, an indication of caregiver mental health needs was associated with a higher likelihood of substantiation. Caregiver mental health need, however, only increased the likelihood of services indication for White children. A child having an indicator of developmental delay predicted higher likelihood of services indicated among Black children (particularly males as illustrated by the interaction term), but not among White children. For models of service needs, substantiation strongly predicted services although the strength of the association was much higher among White children (OR = 12.72 vs. OR = 2.96). Among Black children, however, there was an interaction between substantiation and the level of child poverty in the community indicating that among substantiated cases there was an increased likelihood of indicating service need if the child lived in a low or moderate child poverty area.

Discussion

Consistent with studies of community poverty only (Drake & Rank, 2009), we found that Black children in the child welfare system live in far poorer communities than White children, even when family income (AFDC/TANF) is taken into account. Furthermore, among children reported for neglect, the vast majority of Black children came from households with poverty history compared to slightly over half of White children. The importance of this finding is substantial. From a practice perspective, children reported for the same forms of neglect face very different challenges in their community based upon their race. Resource availability in the community is also a major issue for child welfare as they are largely dependent on services from other organizations to meet the needs of families.

Our findings suggest that both the macro context of poverty (e.g., Drake, Lee, & Jonson-Reid, 2009; Freisthler, 2009) and the family level of poverty (Slack et al, 2004) should be considered in studies of maltreatment. Further, some of these relationships may be masked in samples where one does not stratify by race. The use of individual poverty measures without corresponding community poverty measures is likely to systematically understate the poverty-related problems of poverty faced by Black children, particularly those related to the community, such as resource availability and the presence of high levels of social disorganization. This could be particularly critical for policy and program planning around issues of racial disparity and disproportionality.

Children Reported for Neglect and Poverty

Because of the strong association between neglect and poverty, one might expect relatively little variation in family and community children reported for neglect (Drake & Pandey, 1996; Slack et al, 2004), but this was not the case. Even after limiting the examination to children with neglect allegations, Black children had much higher rates of both family and community poverty across all subcategories of neglect examined. Further, perpetrators of

neglect among Black children were almost universally female (between 98% and 87%), whereas females comprised between 71% and 87% among White children reported.

Neglect subtypes—We sought to further examine the issue of defining neglect, by seeing if we could find significant variations in child, family, and community factors according to allegations of lacking basic needs, supervision, severe types, abandonment, hygiene/sanitation, drug ingestion/medication issues, and neglect mixed with abuse. Among both Black and White children, supervisory neglect allegations appear to be associated with somewhat lower rates of family and community poverty. Among Black children, those reported for severe or mixed types were more likely to be categorized as needing services, but did not live in the most disadvantaged areas. Some of the most interesting variations occurred within the same subtype of neglect by race. For example, among White children, those reported for drug ingestion/medication issues had the highest reported rate of cooperation with child welfare while this subtype had the lowest rate of noted cooperation among cases involving Black children. More work needs to be done to understand whether such differences exist across regions, for other racial and ethnic groups, and how more qualitative aspects of the cases may vary within type.

Neglect, poverty, and response—Finally, we sought to understand whether neglect subtypes and contextual poverty variables could be used to predict initial system response. Others (e.g., Friesthler, 2009) have posited that community resources may have a substantial impact on the likelihood of success of child welfare intervention. It is also possible that such contexts may influence decision making. Among neglect cases, family poverty was not significant in models where other family and perpetrator factors were controlled. Community measures of poverty were only significant for White children reported for maltreatment. The variability in poverty levels for Black children was much smaller than for Whites. The strongest drivers of the decision to substantiate and provide services appears to be the investigative worker's perception of family strengths and risks for poor parenting observed in the alleged perpetrator.

On one hand, this may be seen as positive in that the system does not appear biased toward overintervening due to poverty. On the other hand, families residing in low resource communities may face extra barriers due to other risks to healthy functioning. For example, the Black children reported for neglect also had higher rates of other risks at the time of the first report including having an indicator of developmental delay or a caregiver with known mental health or substance abuse treatment history. Services to meet these potential needs lie outside the child welfare system but may be less available in very low-income communities (Friesthler, 2009). So while such problems may pose barriers to parent functioning in all families, those that also live in less resourced neighborhoods are likely to face additional disadvantage (Fluke, Chabot, Fallon, McLaurin, & Blackstock, 2009; Russell, Harris, & Gockel, 2008).

Although other studies suggest that even unsubstantiated and single reports of maltreatment signal potential risk of later untoward outcomes (Jonson-Reid et al., 2009), less than a third of the reports resulted in mandated or recommended services. Because the emphasis in child welfare is on safety, services from this system are limited to those in which there seems significant risk of harm. While studies indicate neglected children face substantial risk of later untoward outcomes (DeBellis, 2009; Gilbert et al., 2009; Hildyard & Wolfe, 2002; Jonson-Reid et al., 2004; Knutson et al., 2010; Kotch et al., 2008; Widom, 1996; Widom et al., 2007), children with first reports of neglect may appear to lack the immediate concern for harm required to trigger services. It may be that differential response models hold promise in this area. In one state, child welfare workers were provided funds to help out with immediate basic needs among families that did not qualify for more intensive services

(Siegel & Loman, 2006). Properly implemented, these approaches may hold promise for reaching out to families reported for neglect, who are unlikely to meet the traditional threshold for services (Ortiz, Shusterman, & Fluke, 2008).

Strengths and limitations—This study used administrative data, which confer advantages and disadvantages. Most child maltreatment events are not officially reported (Sedlak et. al., 2010) and our findings cannot therefore be generalized to the population of unreported children. Our data are better used for understanding system involvement among children reported for neglect rather than for attempting to understand actual prevalence rates of issues such as developmental delay among maltreated children. On the other hand, our data have direct utility to child welfare administrators and policy makers, as our data are drawn directly from the population served. Because we were able to capture both familylevel and community-level indicators of poverty using linked data from sources outside child welfare, this study is able to inform the discussion about how such contexts relate to child neglect. This study further benefited from a child abuse reporting system that captures significant detail about the allegations thus allowing for attempts to more finely categorize neglect. Our findings would be enhanced by replication in other regions, hopefully with sufficient numbers of other ethnic/racial groups, such as Hispanics, Asians, and Native Americans. Further there is a need to have a more qualitative understanding of what comprises various forms of neglect.

Conclusion

Neglect is the most pervasive type of maltreatment reported in the United States with high rates of recidivism and untoward outcomes. To date, much of our attention has focused on how neglect differs from abuse or how the maltreatment itself impacts outcomes. This article calls attention to variations within the neglected population and the unique poverty context of neglect by race. Much of the discussion about racial disparity and disproportionality has revolved around the system response to children of color (e.g., Ards, Myers, Malkis, & Zhou, 2003). Arguably, we also need to understand the levels of disparity in income and other contextual factors among those children who come to the attention of child welfare. If we do not focus policy on ameliorating such disparities in living conditions, we must consider whether current approaches to focusing on parenting alone to reduce recurrence among neglect cases is the appropriate model for families living in our lowest income areas (Slack et al., 2004).

Finally, while increasing calls are made to move evidence-based practice into child welfare (Barth et al., 2005), the success of this will depend in part on understanding what works with whom. Our reliance on the usefulness of the type of neglect to guide intervention requires that we be able to identify aspects of such cases that align with specific programs or treatments. It seems intuitive that the approach to a family that lacks adequate housing is to secure housing, but in families where the caregiver mental health concerns are high then that may be the most useful means of categorizing the case relative to intervention. While reporters of neglect may need to rely on the conditions they see, worker findings could be informed by other factors. Future research should continue to identify both common and unique factors across typical neglect categories. These could potentially be turned into a checklist so that the worker's final determination of need for service was more closely allied with the core issues and potential intervention choices.

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Table 1

Community Context of Major Maltreatment Types by Race and Family Poverty

Proxy for family					Median household income in	
poverty status	Race	Race Maltreatment type	% Lived in city limits	% Lived in city limits $$	${ m tract}^{a,b}$	% Moved within last 5 years a,b
No history of AFDC usage	Black	Neglect $(n = 253)$	37.1	27.9	25,522	44.1
		Physical $(n = 190)$	33.2	23.8	27,242	42.5
		Sexual $(n = 45)$	40.0	25.1	26,133	43.2
		Mixed $(n=14)$	21.4	19.1	29,714	44.3
	White	Neglect $(n = 615)$	16.6	10.0	35,366	46.2
		Physical $(n = 464)$	12.3	9.6	36,914	47.1
		Sexual $(n = 188)$	16.5	8.8	35,606	47.0
		Mixed $(n=31)$	25.8	8.7	34,452	43.7
History of AFDC usage	Black	Black Neglect $(n = 2558)$	73.1	43.4	17,086	44.2
		Physical ($n = 877$)	2.99	40.9	18,580	44.3
		Sexual $(n = 222)$	64.9	39.9	19,404	43.5
		Mixed $(n = 137)$	77.4	45.7	20,004	44.8
	White	Neglect $(n=739)$	51.4	22.0	25,658	48.4
		Physical ($n = 343$)	50.1	21.4	26,548	49.1
		Sexual $(n=95)$	37.9	16.4	28,168	46.8
		Mixed $(n = 47)$	57.4	23.5	25,234	48.7

^a Factorial anlayses of variance (ANOVAs) for White children indicated significant differences between all neighborhood variables and family poverty but no differences by maltreatment type.

beatorial ANOVAs for Black children indicated no significant difference in movement within a census tract. For child poverty and median household income, these values differed by family poverty but there were also differences between mixed type and physical or sexual abuse only and between neglect and physical or sexual abuse only.

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Table 2

Descriptive Characteristics for Neglect Subtypes by Race

White children $(n = 2,522)$	1 Neglect basic ($n = 109$)	2 Neglect super $(n = 884)$	3 Neglect severe $(n = 73)$	4 Neglect left ($n = 14$)	5 Neglect hygiene $(n = 328)$	6 Neglect substance $(n = 23)$	7 Neglect mixed $(n = 51)$
% of White children reported	4.3%	35.1%	2.9%	0.5%	13.0%	1.0%	2.0%
Child characteristics							
Age at report	4.8	5.23,4,5,6,7	4.2 ²	3.52	4.2 ²	3.72	4.1 ²
%Female	50.5^{6}	44.85	41.1	57.1	52.1 ^{2,6}	26.11,5,7	54.96
%Development delay	17.4	13.7	17.8		15.2	1	13.7
Caregiver/family characteristics							
Caregiver age at birth	24.2 ²	$25.7^{1,3,5,7}$	24.3 ²	22.8	24.7 ^{2,7}	24.4	$23.0^{2.5}$
%City resident	46.8^{2}	30.71,5,7	41.1	50.0	44.5 ²	30.4	52.92
Recorded risks at time of report							
% Criminal history	8.32,5	3.31	4.1	1	2.71	I	I
%Caregiver MH Tx	10.1	5.74	3.54	2,3	7.0	l	I
%MH problem w/o Tx record	9.2	4.3	2.7		6.1	1	1
%Parenting risks	17.43,6	13.3	1,4	3,6	12.5	1,4,7	15.76
Strengths noted at time of report							
%Cooperative	53.2	50.7	49.3	35.7	57.0	65.2	54.9
%Parenting, housing, relationships	62.4	59.8	58.9	50.0	61.9	9.69	56.9
Perpetrator characteristics							
% Male	16.5	18.85	19.25	6.7	10.72,3,6,7	26.1 ^{4,5}	23.54,5
%Primary caregiver	93.6 ^{2,7}	84.31,5,7	89.07	I	94.5 ^{2,6,7}		66.71,2,3,5
Family poverty characteristics							
%No AFDC or case indicators	33.0 ^{2,4}	49.01,4,5,6,7	41.14	1,2,3	37.2^{2}	26.1^{2}	33.32
%Poverty at birth	35.85	27.3 ^{3,4,5,6,7}	38.7^{2}	57.1 ²	44.8 ^{1,2}	47.8 ²	41.2^{2}
Census tract poverty characteristics							
% Child poverty	22.0 ^{2,3}	14.71,5	13.4 ^{1,4,5}	25.33	$20.6^{2,3}$	19.5	19.1
Median income	$25,871^2$	31,864 ^{1,5,7}	28,890	26,857	$26,604^2$	29,956	$27,039^2$
% Moved in 5 years	46.9	47.1	47.0	51.9	48.1	49.5	46.7
Child welfare disposition after assessment/investigation	nent/investigation						

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White children $(n = 2,522)$	1 Neglect basic ($n = 109$)	2 Neglect super $(n = 884)$	3 Neglect severe $(n = 73)$	4 Neglect left $(n = 14)$	5 Neglect hygiene $(n = 328)$	6 Neglect substance $(n = 23)$	7 Neglect mixed ($n = 51$)
% Substantiated	11.92,7	14.71,5,7	12.37	ı	9.42,7	τ	33.31,2,3,5,6
% Services needed	15.6	15.2	16.4	I	11.9	1	19.6
Black $(n = 4,296)$	1 Neglect basic ($n = 473$)	2 Neglect super $(n = 1,670)$	3 Neglect severe $(n = 292)$	4 Neglect left $(n = 60)$	5 Neglect hygiene $(n = 504)$	6 Neglect substance $(n = 56)$	7 Neglect mixed (n) = 79)
% of Black children reported	11.0%	38.9%	6.8%	1.4%	11.7%	1.3%	1.8%
Child characteristics							
Age at report	4.2 ^{2,5,6}	4.71,3,4,5,6	2.9 ^{2,7}	3.3^{2}	$3.6^{1,2}$	$3.1^{1,2}$	4.13
% Female	52.2	48.6	45.5	43.3	49.4	44.6	55.7
%Development delay	24.7 ³	22.0^{3}	31.2 ^{1,2,4,5,7}	16.7 ³	20.8^{3}	21.4	19.0^{3}
Caregiver characteristics							
Caregiver age at birth	24.9	24.44	23.9	26.4 ^{2,5,7}	24.1^4	23.7	23.84
%City resident	78.92	67.0 ^{1,5}	72.9	80.0	73.82	6.79	70.9
Recorded risks at time of report							
% Criminal history	5.3	4.24	2.74	$11.7^{2,3,5,7}$	3.84	1	4
% Mom MH tx	17.1 ^{3,5}	12.63	8.21,2	11.7	10.7^{1}	8.9	10.1
%MH problem w/o Tx record	8.72.4	6.6 ^{1,4}	7.94	$20.0^{1,2,3,5,6,7}$	6.54	4	4
%Parenting risks	20.7	17.87	20.2	21.7	19.47	16.1	29.1 ^{2,5}
Strengths noted at time of report							
%Cooperative	55.0	54.3	55.86	45.07	56.96	41.1 ^{3,5,7}	63.34,6
%Parenting, housing, relationships	56.9	55.5 ⁵	57.5	53.3	62.52	6.79	58.2
Perpetrator characteristics							
% Male	2.5 ^{2,6,7}	5.8 ^{1,3,7}	2.7 ^{2,6,7}	5,7	4.04.7	8.91,3	12.71,2,3,4,5
%Primary caregiver	$96.0^{2,6,7}$	90.51,3,5,7	$96.2^{2,6,7}$	91.77	97.0 ^{2,6,7}	85.71,3,5	77.21,2,3,4,5
Family poverty characteristics							
%No AFDC or case indicator	4.9 ²	$11.6^{1,3,4,5}$	6.8 ²	3.32	5.0^{2}	l	I
%Poverty at Birth	61.5 ^{2,3,5}	52.31,3,4,5	73.3 ^{1,2,7}	68.32	71.0 ^{1,2,7}	62.5	58.2 ^{3,5}
Census tract poverty characteristics							
% Child poverty	44.2 ^{2,6}	40.81,3,5	44.6 ^{2,4,6}	44.6 ³	44.2 ^{2,6}	37.71,3,5	42.8
Median income	17512 ^{2,6}	197091,5	18510 ⁵	16850^{6}	18571 ^{2,3}	203391,4	18228
% Moved in 5 years	43.7	44.4	43.8	46.4	44.7	41.9	44.9

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Black $(n = 4,296)$	1 Neglect basic ($n = 473$)	2 Neglect super $(n = 1,670)$	Neglect super $(n - 3 \text{ Neglect severe } (n = 1,670)$	4 Neglect left $(n = 60)$	5 Neglect hygiene $(n = 504)$	6 Neglect substance $(n = 56)$	7 Neglect mixed $(n = 79)$
Child welfare disposition after assessment/investigation	ssessment/investigation						
% Substantiated	17.5 ^{2,3,4,7}	$26.2^{1.5.7}$	29.81,5	40.01,5	17.72,3,4,7	26.8	41.8 ^{1,2,5}
% Services needed	16.73.7	15.73,7	26.0 ^{1,2,5}	15.07	15.3 ^{3,7}	19.6	30.41,2,4,5

Note. MH = mental health; Tx = treatment. Superscript indicates statistically significant difference (p < .05) with indicated column (e.g., 2 = significant difference with "Neglect Super." Statistics for cells with n < 5 are reported as "—," but level of significance is still reported.

Definition of Neglect types: "Neglect Basic" combines allegations of lack of food, lack of heat, inadequate shelter or clothing. "Neglect Supervision" combines lack of supervision and educational neglect. poisoning, inappropriate giving of drugs, and repeated ingestions. "Neglect Left" is abandonment. "Neglect Hygiene" includes health threatening poor hygiene and unsanitary living conditions. "Neglect Mixed" includes any type of neglect that was accompanied by physical and/or sexual abuse. "Neglect Severe" means immediate health impact related to caregiving (e.g., failure to thrive, medical/dental neglect, malnutrition, exposure). "Neglect Substance" includes failure to give medication,

Table 3

Multivariate Results for Disposition of Investigation (Results Are Odds Ratios)

	В	lack	V	Vhite
Dependent variable	Model 1 Subst	Model 2 Services	Model 1 Subst	Model 2 Services
Number (% event)	2,947 (23.3)	2,947 (11.8)	1,418 (13.1)	1,418 (10.4)
Child factors				
Child age when reported (years)	1.04**	0.97	0.98	1.01
Female	1.04	1.15	0.79	1.02
Development delay	1.13	1.56**	0.94	0.79
Caregiver/family risk factors				
Family poverty indicated	1.39	0.71	0.82	0.73
Parent age at birth <21 years	0.78*	0.72 **	0.79	0.67
Caregiver MH issue	2.33 ***	0.88	3.13 **	2.29**
Other parenting risk	3.42***	1.94**	5.45 ***	3.28**
Family strengths				
Caregiver cooperative	1.03	1.27*	1.01	1.07
Family strengths noted	0.51***	0.63 **	0.54 **	0.51**
Alleged perpetrator characteristics				
Caregiver	0.61*	0.87	0.57**	1.80
Community context				
% Child poverty in tract				
40% + (reference)	1.00	1.00	1.00	1.00
20–40%	1.33 **	0.75	0.43*	1.34
<20%	1.09	0.75	0.60	1.52
% Moved within 5 years	1.00	N/A	0.99	N/A
Median income in tract (1,000s)	0.99**	N/A	1.00	N/A
Type of neglect				
Substance, Left, Mix (reference)	1.00	1.00	1.00	1.00
Basic needs	0.28 ***	1.16	0.14**	1.74
Supervision	0.62 ***	0.83	0.41 **	1.64
Severe	0.72*	2.01**	0.42	2.15
Hygiene/sanitation	0.27***	0.99	0.25 ***	1.70
Substantiated	N/A	2.96***	N/A	12.72***
Interaction terms				
Caregiver MH × Cooperate	N/A	N/A	0.35	N/A
Female × Dev Delay	N/A	0.53**	N/A	N/A
Parenting Risk × Cooperate	N/A	0.53 **	N/A	0.43
Subst × <20%	N/A	2.21 **	N/A	N/A
Subst \times 20–40%	N/A	2.22**	N/A	N/A

Note. Model Fit: Model 1B: Wald χ^2 = 296.55, df = 19, <.0001, r = .16, c = .72; Model 2B: Wald χ^2 = 454.00, df = 22, <.0001, r = 21, c = .76; Model 1W: Wald χ^2 = 145.12, df = 18, <.0001, r = .17, c = .73; Model 2W: Wald χ^2 = 291.53, df = 28, <.0001, r = 30, c = .80.

MH = mental health.

"N/A" means not available due to inappropriateness (e.g., substantiation as predictor and outcome) or omission of variable from model due to nonsignificance paired with no impact on model fit.

* <.05. ** <.01.

*** <.0001.