



Disproportionate Representation of Race and Ethnicity in Child Maltreatment: Investigation and Victimization

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Disproportionality of racial and ethnic representation in investigation and disposition of child maltreatment was examined using National Child Abuse and Neglect Data System (NCANDS) data for more than 700,000 children in five states. State disproportionality representation indices (DRI) and disparity indices (DI) were constructed for children who were the subject of an investigation of child abuse and neglect and for children who were found to be victims of maltreatment by child protective services agencies. In all five states and for both indices, African American children were overrepresented and White children consistently underrepresented at the stage of investigation for each of states. At the determination of victimization, results for African Americans and Whites using the DRI varied greatly from county to county, but demonstrated little disproportionality.

Questions about disproportionate numbers of minority children, particularly African American, in the child welfare system have been troubling advocates and researchers for at least two decades. Although African

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American children are disproportionately represented in foster care (U.S. Department of Health and Human Services, 2001), it has not been clear whether or not they are disproportionately represented in child protective services (CPS) investigations and dispositions. The purpose of this article is to examine whether disproportionality exists among five racial and ethnic groups—African American, Asian American, Hispanic, Native American, and White—in CPS agencies in five selected states. Data were derived from the U.S. Census (U.S. Census Bureau, 2001) and the National Child Abuse and Neglect Data System (NCANDS) (U.S. Department of Health and Human Services, 2002). Constructing a clearer demographic map or description of the phenomenon, should have important implications for service delivery, recruitment and training of staff, and funding of child welfare.

Background

During the past 20 years, child abuse and neglect has been periodically examined at a national level through the National Incidence Study of Abuse and Neglect (NIS) and, starting in the 1990s, through the National Child Abuse and Neglect Data System (NCANDS). In addition, many researchers have examined child abuse and neglect through clinical and administrative data studies. However, the issue of disproportionality in reporting and victimization has been addressed only by a handful of researchers and has usually been limited to comparisons between African Americans and Whites.

Disproportionality in the General Population

Funded by the federal government, the NIS has been conducted three times since the early 1980s. Based on a sample of selected counties, the NIS collected data from such community sentinels as police officers, teachers, hospital workers and CPS agencies in order to estimate the point prevalence of children harmed or endangered by abuse or neglect in the United States. NIS-1 provided data for 1980 (National Center for Child Abuse and Neglect, 1981), NIS-2 for 1986 (Sedlak, 1991), and NIS-3 for 1993 (Sedlak & Broadhurst, 1996). The NIS has consistently found no significant main effects between race and overall incidences of child abuse and neglect.

In a more recent analysis, Sedlak and Schultz (2001a) created a synthetic database containing 8,751 child-level records of both maltreated and nonmaltreated children, representing a weighted total of more than 68 million children nationwide, derived from the NIS-3 data and the U.S. Census. Maltreated and nonmaltreated children were then compared by race and such other demographic characteristics as family income and parental employment. They found that African American children had a significantly lower risk of child maltreatment than White children in a number of circumstances. African American children had a lower risk of sexual abuse and physical neglect and slightly lower risk of physical abuse. Among families with incomes below \$15,000 per year, African American children had a significantly lower risk of physical neglect and a slightly lower risk of emotional maltreatment and any maltreatment overall. When parents were not in the labor force, the risk of physical abuse for African American children was even lower. White children were more at risk of physical neglect in families with four or more children.

Ards, Chung, & Myers (1998) have argued that the NIS findings may result from sample selection bias. They point out that community professionals may report suspected cases of child abuse and neglect to the NIS investigators, but not necessarily to CPS. For example, in their analysis of NIS-1, the majority of cases were not known to CPS. This may be due in large part because NIS only counts incidences of child maltreatment recognized by neighbors, family members, friends, victims, or perpetrators that are themselves known to CPS. Several relationships were found between race and report source. For example, medical personnel were more likely to recognize both maltreated African American and White children than school and public assistance personnel, while law enforcement personnel were more likely to recognize maltreated White children.

Disproportionality in CPS Reporting and Investigations

In an early look at disproportionality in the NIS-1 dataset, Hampton (1987) reported that, according to the 1980 census, African American children accounted for approximately 15 percent of all children in the United States and 15.8 percent of the (unweighted) cases reported to CPS for investigation in NIS-1. He compared percentages of African American, White, and Hispanic children according to various risk factors and concluded that African American children exhibited higher rates of poverty and child neglect.

Sedlak and Schultz (2001b) analyzed the NIS-3 in an attempt to identify differences between African American and White children in the investigation of child abuse and neglect. The analysis was limited to cases recognized by NIS sentinels—those referred to CPS and accepted for investigation and those not referred to CPS—and excluded all cases recognized by family, friends, and neighbors. They found that the child's race was not predictive of an investigation by CPS. However, African Americans were more likely to be investigated than Whites under the following conditions: emotional maltreatment, neglect, fatalities, serious injury, and perpetrator use of alcohol or other drugs. African Americans were also more likely to be investigated when reported by mental health or social service agencies. Whites were more likely to be investigated when parents were out of the work force or in cases where the alleged perpetrator was not a parent.

Disproportionality in Victimization

Citing data derived from states reporting NCANDS data for 1995, Yegidis and Morton (1999) reported higher substantiation rates for African American children in all but one state. By dividing the percentage of African American victims in each state by the percentage of African American children in each state, it was determined that only one state had a ratio below 1. The others ranged from 1.22 to 6.94 meaning, that in at least one state, the percentage of African American children substantiated for child abuse and neglect was almost seven times greater than the percentage of African American children in that state's population.

Using data from the 1993, 1994, and 1995 NCANDS datasets, Ards, Chung, and Myers (1999) also investigated the relationship between the number of African Americans in state populations and maltreatment substantiation rates, and concluded that African American children were not found to be disproportionately the victims of maltreatment. By plotting the state substantiation rates against the racial composition of the victim population, linear regression revealed a coefficient statistically indistinguishable from zero.

The next article in this journal (Ards, Myers, Malkis, Sugrue, & Zhou, 2002) generally supports the findings that disproportionality is greater in the reporting of child abuse and neglect than in substantiation. The authors also raise caution about potential distortion resulting from aggregated state data derived from the county level. Aggregated data can be distorted by

results derived from unusual counties. The blending of county data may also mask disproportionality in individual counties.

The existing research provides a varied basis for discussion of the influence of race and ethnicity within CPS systems. However, two critical questions highlight the differences in the findings and suggest future research directions. First, what is the most useful definition of disproportionality and how can it be operationalized so that results can be compared across studies? Second, what is the most useful unit of analysis for both research and for practice? Drawing upon two powerful resources—the 2000 U.S. Census and case-level data from NCANDS—this article addresses these two issues. This article discusses disproportionality as a strictly descriptive feature of CPS data with respect to the decision to investigate or assess referrals made to the agency, and the classification of the referral after this process. At this stage, the examination of what underlies any observed disproportionality is not of central concern. The key question is whether or not patterns of disproportionality by race and ethnicity exist and whether or not they differ from state to state and across counties within a state. The identification of these differences is coupled with an assessment of the consistency of these patterns across states and across county-level jurisdictions.

Method

The NCANDS is a federally funded annual collection of data on child abuse and neglect from state CPS agencies (U.S. Department of Health and Human Services, 2002). Data submitted to NCANDS are based on state-level administrative data systems. The case-level component of NCANDS collects data on all children who were the subject of an investigation or assessment and received a disposition or determination within the reporting period. Data on children are collected as “report-child pairs”—a child is counted each time he or she is the subject of an investigation. The findings in this paper are based on calendar year 2000. Of the approximately 862,000 victims identified by race, 50.6 percent were White, 24.7 percent African American, 14.2 percent Hispanic, 1.6 percent Native American, and 1.4 percent Asian/Pacific Islander.

Data for more than 700,000 children from five states were analyzed in this paper. They included one state from the mid-Atlantic region, one from the Midwest, two from the South, and one from the Southwest.

The five states combined represent 25 percent of the approximately 3 million children accepted by CPS agencies for investigation or assessment of alleged child abuse and neglect in the United States. The population of children younger than 18 years of age in the five states ranged from 1.75 million to 5.9 million. The states were chosen because they had relatively large overall populations, diverse racially mixed populations, a large number of counties consistent with the objective of this paper to explore county level variation, and NCANDS case-level data. Racial affiliation was determined by examining both the race and ethnicity data fields. If a child was reported as being of Hispanic ethnicity, he or she was counted as being of Hispanic race/ethnicity. Children who had a multiple racial background (0.52%), an unknown racial background (3.30%), or were older than 17 years of age (1.69%) were excluded from the analyses. Census data were obtained by age and race for each of the states and counties (U.S. Census Bureau, 2001).

For each state, two variations of a disproportionality representation index (DRI) were constructed (Dean, 1997). The DRI is an event-based measure. In this study, two measures are defined— Investigation DRI and Victim DRI. The Investigation DRI is defined as the ratio derived from dividing the percentage of children in a specific racial group who were the subject of an investigation by the percentage of children of the same racial group in the younger-than-18 years population in the state.¹

The Victim DRI is defined as the ratio derived from dividing the percentage of children of a specific racial group who were found to be victims of maltreatment by the percentage of children of the same racial group who were subject of an investigation.² The percentage of children of the same racial group who were the subject of an investigation rather than of the population, is used as the base because it reflects the event of an investigation prior to the determination of victimization.

Similarly, two disparity indexes (DI) were calculated for each state; an Investigation DI and a Victim DI. The populations for each DI measure, investigation and victim, are the same as their DRI counterpart, but the DI is measured as the odds of a child from a non-reference group being inves-

¹ Throughout the paper, investigation is used to include those investigations that reach a determination of whether the allegation is substantiated or indicated and assessments that may or may not reach a conclusion on the specific allegation.

² Throughout the paper, the term victim is used to classify children for whom the maltreatment allegation has been substantiated, indicated, or it has otherwise been determined that the child has been maltreated according to the state definition.

tigated or victimized who is not a member of a reference group (Whites in this analysis) in comparison to the respective proportion of the members of the reference group.³

For both the DRI and DI, values close to 1 are defined as consistent with the assumption of no disproportionality or disparity. Values greater than 1 indicate that the race/ethnicity category is disproportionately greater than the norm for all groups for the DRI or than Whites for the DI. Values of less than 1 are interpreted as the opposite. Because the DI is an odds ratio, it is also possible to interpret these indices in the normal way in relation to the reference group.

Race/ethnicity comparisons frequently use such rates as the number of victims per 1,000 children in the population per year. The advantage of transforming such rates into a DRI or DI is that they standardize the measures on the value of 1, which enables the proportionate deviation from the norm of the reference group for all groups to be readily seen. In interpreting the DRI and DI, however, one needs to recognize that national norms have not been established.

Furthermore, it is important to note that a county with a low investigation rate per 1,000 children of a certain race could nevertheless show a disproportional Investigation DRI if the percentage of children of that race who were subject of an investigation was larger than the percentage of children of that race in the population.

The use of report-child pair in the calculation of the DRI and DI reflects the fact that some children are reported and victimized more than once during the calendar year. Because reported children and victimized children are duplicated, the calculation method of both indices for victims in relation to reports is consistent, even though population counts do not include duplication. This calculation method was necessary some states were not able to provide a unique child identifier for unsubstantiated reports. However, should it prove feasible in the future, an examination of unduplicated children reported may be useful.

The calculation of both of the indices used in describing state patterns by race/ethnicity included the entire state population. However, only the

³ The DRI and DI measures are both measures for comparing the representation of a distribution of racial categories to the distribution of these categories in some base representation such as the general population. Despite a considerable history of utilization in the juvenile justice field, there is a developing discussion regarding the appropriateness of the DRI as a standard measure of disproportionality under certain conditions in favor of some other measure such as the DI (Feyerherm, 2002). However, in the analysis presented here the results for the DRI and DI measures are in accord.

DRI was calculated at a county level and only for those counties that had at least 2,000 children younger than 18 years of age for the particular race/ethnicity group. Altogether, the county analysis included 76.8 percent of the states' counties, and these counties included 98.6 percent of the states' child population.

County-level population and child maltreatment data were also examined. In order to compare the Investigation DRI to the Victim DRI by race and by county, a new statistic—DRI minus 1—was calculated. Asian/Pacific Islanders were not included in the county-level analyses because the younger-than-18-years population was consistently too small.

Analysis of Variance Tests (ANOVA) were also performed at the county level to explore the extent to which differences in the DRI, if any, were associated with the race/ethnicity categories, or were due to differences in the child welfare operations, or both. In order to have sufficient sample sizes to calculate reliable rates for inter-group comparisons, the county analyses compared only African Americans, Hispanics, and Whites. In addition, the county population had to have at least 2,000 children younger than 18 years in all three race/ethnicity categories. A total of eighty-four counties in the five states were included in these analyses. The county-level ANOVA analyses retained 68.7 percent of the states' child populations and 13.2 percent of the states' counties. These counties were generally larger and more heterogeneous in terms of race/ethnicity than the excluded counties. The DRI variable was transformed for the Investigation DRI analysis in order to minimize the likelihood of violating the assumption of nonhomogeneous variance across groups.

Similar analyses were conducted for a sub-group of children age 0 to 3. The results of the analyses were substantially similar to those for all children age 0 to 17 and are not reported in this paper.

Results

State-Level Findings

In all five states, the overall Investigation DRI for African American children who were subjects of an investigation is greater than 1 (see Table 1).

Table 1
Investigation DRI and Victim DRI by Race and State

Race/ Ethnicity	State	A	B	C	D	E	Avg
African American	DRI of Investiga- tion/Pop. Ratio	2.04	1.69	1.33	1.47	1.43	1.59
	DRI of Victim Investi- gation Ratios	1.02	1.08	1.05	1.12	1.11	1.07
	Difference	1.01	.61	.29	.36	.32	.52
Asian/ Pacific Islander	DRI of Investiga- tion/Pop. Ratio	1.12	.16	.47	.09	.36	.44
	DRI of Victim Investi- gation Ratios	1.07	1.07	.93	1.03	1.13	1.05
	Difference	.05	-.92	-.46	-.94	-.77	-.61
White	DRI of Investiga- tion/Pop. Ratio	.81	.82	.86	.95	.83	.85
	DRI of Victim Investi- gation Ratios	1.00	.93	.96	.95	.94	.96
	Difference	-.19	-.11	-.09	-.01	-.11	-.10
Hispanic	DRI of Investiga- tion/Pop. Ratio	.59	.90	1.20	.90	1.02	.92
	DRI of Victim Investi- gation Ratios	.93	1.06	1.11	1.00	1.06	1.03
	Difference	-.33	-.16	.09	-.10	-.05	-.11
Native American	DRI of Investiga- tion/Pop. Ratio	.15	.81	1.48	.61	.14	.64
	DRI of Victim Investi- gation Ratios	2.25	.89	.88	1.20	1.17	1.28
	Difference	-2.09	-.08	.60	-.59	-1.04	-.64

This contrasts with the Investigation DRI for White children, which is consistently less than 1 in all states.

Similarly, the Investigation DI value for African American children is greater than 1 (see Table 2).

The other race/ethnicity groups showed greater variation—0.09 and 1.12 for Asian/Pacific Islander children, 0.59 and 1.20 for Hispanic children, and 0.14 and 1.48 for Native American children.

Table 2
Investigation DI and Victim DI by Race and State

Race/ Ethnicity	State	A	B	C	D	E	Ave
African American	DI of Investigation/Pop. Ratio	2.51	2.06	1.54	1.56	1.73	1.88
	DI of Victim Investiga- tion Ratios	1.02	1.16	1.09	1.17	1.18	1.12
	Difference	1.48	.90	.45	.39	.55	.75
	DI of Investigation/Pop. Ratio	1.38	.19	.56	.19	.44	0.58
Asian/ Pacific Islander	DI of Victim Investiga- tion Ratios	1.07	1.16	.98	1.08	1.20	1.09
	Difference	.32	-.97	-.42	-.89	-.76	-.54
	DI of Investigation/Pop. Ratio	1.00	1.00	1.00	1.00	1.00	1.00
	DI of Victim Investiga- tion Ratios	1.00	1.00	1.00	1.00	1.00	1.00
White (Reference Group)	Difference	.00	.00	.00	.00	.00	.00
	DI of Investigation/Pop. Ratio	.73	1.10	1.39	0.95	1.23	1.10
	DI of Victim Investiga- tion Ratios	.93	1.14	1.16	1.05	1.13	1.09
	Difference	-.20	-.05	.23	-.10	.10	.00
Hispanic	DI of Investigation/Pop. Ratio	.19	.98	1.71	.64	.17	0.90
	DI of Victim Investiga- tion Ratios	2.25	.96	.92	1.26	1.25	1.28
	Difference	-2.06	.03	.79	-.62	-1.08	-.59

The values for the Investigation DI were 0.19 and 1.38 for Asian/Pacific Islander children, 0.73 and 1.39 for Hispanic children, and 0.17 and 1.71 for Native American children.

In all five states, the Victim DRI and DI for African American children was greater than 1, but substantially less than the Investigation DRI and DI. The highest average Victim DRI was 1.12 for any state and for the DI was 1.18. In contrast, the Victim DRI for White children was less than 1. The lowest average Victim DRI for White children was 0.93.

For most states, the Victim DRI and DI for Asian/Pacific Islander, Hispanic, and Native American children were greater than the corresponding Investigation DRI and greater than 1. These three groups appear to

have a common pattern distinct from the pattern of African Americans or from Whites.⁴

County-Level Findings

With only a few exceptions, the Investigation DRI for African Americans was consistently above 1 ($\text{DRI-1} > 0$) in all counties in the five states. In two of the states, the Victim DRI for African Americans across all counties was consistently near 1 (DRI-1 near 0), but for the other three states, the Victim DRI varied considerably among counties. There is no statistically significant correlation between the Investigation DRI and the Victim DRI for African Americans at the county level in any of the five states.

Among the counties in all five states, with few exceptions, the Investigation DRI for Whites is consistently below or near 1 (DRI-1 below or near 0). Moreover, the Victim DRI is below or near 1 (DRI-1 below or near 0) among counties in two states, while it is much more variable among the counties in the remaining three States. In three of the five states, the correlation coefficient is significant at the 0.01 level. In other words, for these states, counties with a high Investigation DRI tended to have corresponding high Victim DRI for White children.

No consistent relationship was found between the Investigation DRI and the Victim DRI for Hispanic children.

The results of the statistical test at the county level—simultaneously accounting for race/ethnicity and state—indicated that for the Investigation DRI the race categories (African American, Hispanic, and White) are different ($p < 0.001$). (See Table 3). No differences by state were detected using transformed data; however, an interaction between race/ethnicity and state was detected ($p < 0.001$). The overall goodness of fit for the model (including the interaction term) was 0.58 as measured by eta squared. This indicates that the combined effect of race/ethnicity and state is a determinant to some degree of the Investigation DRI. Among the eighty-four counties included in the analysis, the average Investigation DRI for African American children was 1.79, for Hispanic children was 0.96, and for White children was 0.79. Post hoc (Tukey HSD and Tamhane) comparisons indicated that none of the three race/ethnicity groups appear to have the same Investigation DRI ($p < 0.001$).

⁴ The NCANDS data set does not systematically collect data from Indian Child Welfare Agencies on reservations, thus the DRI and DI indices for Investigation may be low for that reason.

Table 3
Investigation DRI: Comparison of Race/Ethnicity Categories and State

Source	Type III sum of squares	df	MS	F	Sig.
Tests of between-subjects effects					
Corrected model	9.044	14	.646	23.712	.000
Intercept	198.718	1	198.718	7294.328	.000
Race/ethnicity	7.066	2	3.533	129.687	.000
State	.189	4	4.737E-02	1.739	.142
Race/ethnicity * State	2.273	8	.284	10.431	.000
Error	6.457	237	2.724E-02		
Total	268.522	252			
Corrected total	15.500	251			

Note. The dependent variable is the square root of the inverse of DRI investigations.

For victims, the main effect of race/ethnicity was statistically different ($p < 0.001$), according to Table 4. However, neither the state main effect nor the interaction appeared to be contributing to the Victim DRI variance. The eta square for this model was 0.14. The average Victim DRI for African Americans, Hispanics, and Whites was 1.07, 1.05, and 0.94 respectively. Post hoc comparison indicates that differences by race/ethnicity were present ($p < 0.01$) when Whites are compared to African Americans and Hispanics. However, African Americans and Hispanics do not appear to be statistically distinct with respect to Victim DRI.

Discussion

Determining that a child should be the subject of an investigation or assessment concerning allegations of maltreatment and making the decision of whether the child has been victimized or not are two different and distinct aspects of the entry into the child welfare system. The Investigation DRI and DI reflect the level of response of the community in reporting alleged child maltreatment. A value much greater than 1 indicates that referrals concerning children of a particular race/ethnicity are being investigated in larger numbers than their representation in the population or in comparison to White children.

Table 4
Victim DRI: Comparison of Race/Ethnicity Categories and State

Source	Type III sum of squares	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
Tests of between-subjects effects					
Corrected model	1.208	14	8.627E-02	2.806	.001
Intercept	202.903	1	202.903	6599.206	.000
Race/ethnicity	.790	2	.395	12.842	.000
State	9.379E-03	4	2.345E-03	.076	.989
Race/ethnicity * State	.364	8	4.545E-02	1.478	.166
Error	7.287	237	3.075E-02		
Total	271.709	252			
Corrected total	8.495	251			

Note. The dependent variable is 10 to the power of DRI victims to the power of 20.5.

When the data were examined by county, almost all counties showed the Investigation DRI for African American children to be above 1. In contrast, the Investigation DRI for White children rarely was observed above 1.

Although the racial distribution of referrals that are screened out is not known, these results indicate that regardless of the number of referrals of African American children that are screened out, the community of professionals and nonprofessionals is referring a disproportionate number of African American children to CPS agencies. It is also likely that unless large numbers of referred White children are being systematically screened out, they are being referred proportionate to or slightly under their distribution in the population.

The analysis of Victim DRI and DI reflects a different dynamic. The Victim DRI and DI for African American children, Hispanic children, and White children hover consistently around values indicating no disproportionality and vary widely from county to county. For Whites, there is some indication that counties with a higher Investigation DRI also have a higher Victim DRI. In comparison to African Americans and Hispanics, this may mean that decision making resulting in a classification of Victims for Whites is more consistently tied to their representation among Investigations.

For African Americans, the pattern of Victim DRI and DI indicates little additional disproportionality is added at the decision point of determining that some children are victims of substantiated or indicated maltreatment. Even though statistical differences were detected across race/ethnicity categories, at the county level the model for Victim DRI is relatively weak and isolates Whites compared to the other two minorities examined. In other words, the observed disproportionality of African Americans in child welfare may be most influenced at the entry of children into the system when they are accepted for investigation or assessment.

The Victim DRI or DI for a specific county may be an important management tool for CPS agencies. In localities where the indices are much higher or much lower than 1, the CPS decision-making is less consistent with the community reporting than when they approach 1. The CPS agency may be finding a greater or lesser proportion of children of a specific race to be victims than they are represented in the pool of children who have received an investigation concerning allegations of maltreatment. This dissonance might contribute to a lack of acceptance of the CPS role by the community. If the measures of disproportionality that are proposed in this paper were to be used by local CPS agencies, administrators could have another indicator of whether staff decision making should be reviewed.

Following up on the current research, two additional avenues of inquiry will be undertaken using the NCANDS data. The results reported in this article will be examined in terms of type of maltreatment and type of reporter of the alleged maltreatment. For example, reports of child abuse and neglect by law enforcement agencies and by the medical profession are more likely to be substantiated than reports from other professionals or from the public. Whether or not this is true for all races—and detectable by the use of the DRI or DI—remains to be determined.

References

- Ards, S., Chung, C., & Myers, S.L. (1998). The effects of sample selection bias on racial differences in child abuse reporting. *Child Abuse and Neglect*, 22(2), 103–115.
- Ards, S., Chung, C., & Myers, S.L. (1999). Letter to the editor. *Child Abuse and Neglect*, 23 (12).
- Ards, S., Myers, S.L., Malkis, A., Sugrue, E., & Zhou, L. (2002, September). *Discrimination when nobody discriminates: The case of child maltreatment in*

Minnesota. Paper presented at the Research Roundtable on Children of Color in Child Welfare, Washington, DC.

Dean, B. C. (1997). *Juvenile Justice & Disproportionality: Patterns of Minority Over-Representation in Washington's Juvenile Justice System*. Olympia, WA: State of Washington Sentencing Guidelines Commission.

Feyerherm, W. (2002, September). *Racial Disparities in Juvenile Justice: a Quick Overview*. Paper presented at the Research Roundtable on Children of Color in Child Welfare, Washington, DC.

Hampton, R.L. (1987). Race, class, and child maltreatment. *Journal of Comparative Family Studies*, 18 (1): 113–126.

National Center on Child Abuse and Neglect, Children's Bureau. (1981). *Study findings: National study of the incidence and severity of child abuse and neglect*. (DHHS Publication No. OHDS 81-30325). Washington, DC: U.S. Department of Health and Human Services.

Sedlak, A.J. & Schultz, D. (2001a, January). *Race differences in risk of maltreatment in the general child population*. Paper presented at the Race Matters Forum, Chevy Chase, MD.

Sedlak, A.J. & Schultz, D. (2001b, January). *Race differences in child protective services investigation of abused and neglected children*. Paper presented at the Race Matters Forum, Chevy Chase, MD.

Sedlak, A.J. (1991). *National Incidence and Prevalence of Child Abuse and Neglect: 1988 (Rev. ed.)*. Rockville, MD: Westat.

Sedlak, A.J., & Broadhurst, D.D. (1996). *Third national incidence study of child abuse and neglect: Final report*. (Prepared under contract to the National Center on Child Abuse and Neglect, U.S. Department of Health and Human Services). Rockville, MD: Westat.

U.S. Census Bureau. (2001). *Census 2000 Summary File 2 Table PCT 3*. Retrieved March 13, 2002, from http://factfinder.census.gov/servlet/DatasetMainPageServlet?_ds_name=DEC_2000_SF2_U&_program=DEC&_lang=en

U.S. Department of Health and Human Services, Administration on Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2001). *The AFCARS Report*. Retrieved June 6, 2002, from <http://www.acf.dhhs.gov/programs/cb>

U.S. Department of Health and Human Services, Administration on Children, Youth and Families. *Child Maltreatment 2000* (Washington, DC: U.S. Government Printing Office, 2002).

Yegidis, B. & Morton, T.D. (1999). *Ideas in action: Item bias and CPS assessments*. Atlanta: Child Welfare Institute.