

Investigating Racial Disparity in Minnesota's Child Welfare System

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Sonja Clark
Matt Donald
Erik Johnson
Rachel Pedersen
Katie Pichotta

Table of Contents

Introduction: The Context	4
Literature Review	4
An Introduction to Our Analysis	6
Minnesota Demographics	9
Decision Point 1: Report to Child Protection Services	10
Decision Point 2: Acceptance for Assessment	10
Decision Point 3: Maltreatment Determination	21
Analysis of Maltreatment Determination	24
Decision Point 4: Referral to Child Protective Services	25
Analysis of Referral to Child Protective Services	27
Decision Point 5: Recommendation for Out-of-Home Placement	28
Analysis of Recommendation for Out-of-Home Placement	30
Decision Point 6: Permanency Plan	31
Analysis of Reunification with Primary Caretaker	32
Decision Point 1: Report to Child Protection Services, Revisited	34
Limitations and Suggestions	36
Conclusions	36
Appendix A: Under Age 18 Population Breakdown	37
Appendix B: Point Estimates and Standard Errors	40
Appendix C: Calculating Probabilities	44
Appendix D: Variable Definitions	45
Works Consulted	47

List of Charts and Tables

Diagram 1: Nested Model	8
Chart 1: Minnesota's Under Age 18 Population by Race and Ethnicity	9
Chart 2: Percent of Minnesota Child Population Assessed for Maltreatment	10
Chart 3: Observed and Hypothetical Counts of Alleged Victims	11
Chart 4: Race and Ethnicity of Unique Alleged Victims	12
Chart 5: Race and Ethnicity of Unique Offenders	13
Chart 6: Reporter Classification for Alleged Victims	14
Chart 7: Presenting Problem by Race and Ethnicity	15
Chart 8: Prevalence of Six Family Conditions	16
Chart 9: Family Conditions by Victim Race	17
Chart 10: Statewide Metro and Non-Metro Child Population	18

List of Charts and Tables (continued)

Chart 11: Unique Alleged Victims by Metro and Non-Metro County	19
Chart 12: Family Conditions by Metro and Non-Metro County	20
Chart 13: Percent of Unique Alleged Victims who were Determined	21
Chart 14: Race and Ethnicity of Unique Determined Victims	22
Table 1: Breakdown of Unique Alleged and Determined Victims by Race and Ethnicity	23
Chart 15: Percent of Determined Victims Referred to Child Protective Services	25
Chart 16: Race and Ethnicity of Unique Victims Referred to Child Protective Services	26
Chart 17: Percent of Victims Referred to Child Protective Services Recommended for Out-of-Home Placement	28
Chart 18: Race and Ethnicity Breakdown for the Population at Each Decision Point	29
Chart 19: Proportions of Children Awaiting Reunification	31
Chart 20: Percent of Each Race and Ethnicity at Each Decision Point	33
Chart 21: Extrapolation from Hennepin County	34

The Context

In the following report, we seek to examine sources of racial disparity in the Minnesota child welfare system. Though none of us are trained social workers, several of us have some experience with social policy and direct service to minority populations and maltreated children. Along with our collective mathematics and statistical backgrounds, we also represent fields of study including psychology, religion, economics, and women's studies.

We approached our investigation of the 2001 Minnesota Child Protection data with a fresh perspective. We examined the analyses that had been done in the past and used that information to develop our own method of analysis. In order to familiarize ourselves with the issues surrounding racial and ethnic disparities and overrepresentation within the child welfare system, we examined reports done by various experts within the field. These reports gave us a foundation for our study, providing us with background information such as poverty rates and family structures, as well as data and conclusions about disparities in child welfare systems on both the state and national levels.

We then employed a nested model of decision points to identify and clarify some of the problems that may be influencing racial disparity within Minnesota's child welfare system. We identified factors contained in the 2001 Social Service Information System data such as type of maltreatment, family condition, and location that could influence a child's likelihood of progressing to the next decision point. We adjusted for these factors to determine whether racial disparity may be attributed to characteristics other than race.

Literature Review

The issues of alleged racial or ethnic disparities within child protection must be considered in the larger framework of society. Poverty rates and information about family structure indicate nationwide disparities that directly contribute to the overrepresentation of minorities in the child protection system. The National Survey of American Families (NSAF) from 1997 indicated that minority families were almost twice as likely as White families to be living below the federal poverty level. Children born into African American, American Indian, and Hispanic families were almost three times as likely to be poor as children born into White and Asian families (Staveteig, 2000).

Furthermore, poverty tends to affect certain family structures at a higher rate than others. According to NSAF, poverty in one-parent families was four times as high as poverty in two-parent families. Poverty rates of one-parent families were similar among American Indians, Hispanics, and African Americans. However, among two-parent American Indian and Hispanic families, poverty is twice as prevalent as it is among African American two-parent households. The U.S. Office of Juvenile Justice and Delinquency Prevention (OJJDP) reported that fewer than 50 percent of African American children lived in two-parent homes in 2000, whereas 83 percent of White and 75 percent of Hispanic youths lived in two-parent homes. Clearly, minority families experience challenging financial and family situations more frequently than White or Asian families (Green, 2002).

These same kinds of racial or ethnic disparities and overrepresentations are often points of concern within the discussion of child protection and out-of-home placement. The history of the child welfare system shows that for many years African American children were underrepresented in the system or not represented at all. However, trends have changed over the last half of the twentieth century. In 1999, 17 percent of children under 18 in the United States

were African American, yet they made up 42 percent of the children in out-of-home placement (McRoy, 2002).

The third National Incidence Study (NIS-3) conducted by the Department of Health and Human Services in 1996 reported that the incidence of maltreatment was the same across all races, and concluded that racial disparities in child welfare system are due to factors such as family structure, poverty, and drug use more so than race. Children from single-parent families were found to have a 77 percent greater risk of being harmed by physical abuse, an 87 percent greater risk of being harmed by physical neglect, and an 80 percent greater risk of suffering serious injury or harm from abuse or neglect than children living with both parents. In addition, children from families with annual incomes below \$15,000 were found to be over 22 times more likely to experience some form of maltreatment as children from families with annual incomes above \$30,000. Since minority families are more likely to have one or more of these disadvantaging conditions (as mentioned above in references to the NSAF and OJJDP studies), the NIS found that minority children were more likely to enter the child welfare system (NIS-3, 1996).

However, other studies, both within individual states and nationwide, have concluded that the disparities among races cannot be simply explained by these social factors. Differences in income do not always fully explain the disparity in well being between different racial and ethnic groups. The 1997 NSAF found that even at higher incomes, Whites and Asians tend to fare better than African Americans, Hispanics, and American Indians (Staveteig, 2000).

In his June 2000 study, *State Proportionality of Substantiated Child Abuse and Neglect Reports by Race*, Thomas D. Morton of the Child Welfare Institute found that minority children were overrepresented as the subjects of confirmed reports. He calculated a ratio of the percentage of children of each race and ethnicity who were subjects of founded child maltreatment allegations to the percentage of children of that race or ethnicity in the state population. Morton found that the ratio for African American children exceeded 1.0 in 39 of the 41 reporting states. Minnesota's ratio for African American children was 6.01, the largest for any reporting state. The ratios for American Indian and Hispanic children were greater than 1.0 in 15 and 11 of the 41 states, respectively. In contrast, the ratio for White children exceeded 1.0 in only two states and the ratio for Asian/Pacific Islander children was not above 1.0 in any of the reporting states. Morton noted that small states with racially diverse populations have intrinsic limits on overrepresentation. For example, since 45 percent of Mississippi's children are African American, even if *all* substantiated reports involved African American children, the ratio would only be 2.20. Conversely, in states with small minority populations, a numerically small overrepresentation could produce a large ratio. A 10 percent overrepresentation in Mississippi may impact far more children than a 600 percent overrepresentation in Minnesota.

There are theories that attempt to take into account both race and social conditions in explaining the disparities in child protection. Ted Thompson noted how communities define neglect differently. In a suburban, predominately White community, a child home alone after school is a latchkey kid. In an urban, predominately African American neighborhood, a child home alone after school is often considered a neglected or abandoned child (Breaking the Silence, 2000).

According to Leroy Pelton, author of *For Reasons of Poverty: A Critical Analysis of the Public Child Welfare System in the United States*, while lower income is the best predictor of child protection disparities, the disproportionate poverty levels among minorities is a key factor in explaining the racial and ethnic disparities seen in the child welfare system. Middle- and

upper-income families have the resources to keep their children out of the system. Factors such as labeling bias (the likelihood that a physician would attribute injury to abuse), frequency of neglect (due to the inability to provide outside child care), substance abuse, and homelessness are linked to a family's resources and can have compounded effects on the likelihood of a child's entrance into the child welfare system.

In general, these studies and reports demonstrate that there is no single factor that adequately explains the prevalence of racial disparity in the child welfare system. Race and social conditions such as poverty status and family structure are persistently intertwined. Any solution to the problem of racial disparity must consider these complexities.

Introduction to Our Analysis

Our analysis used data from the Minnesota Department of Human Services that recorded all cases accepted for assessment in 2001, including data specific to children in out-of-home placement. Instead of looking at the representation of each racial or ethnic group in the system and comparing it to their representation in the state population, we considered a nested model to consider a child's progression through the system. This method allowed us to pinpoint where racial disparities are most and least apparent in the child welfare system. Using statistical analysis, we were able to adjust for factors that may put a child at greater risk of entering the system and/or proceeding through it. In other words, we were able to compare children with similar risk factors such as financial problems, parental alcohol/substance abuse, and family history of domestic violence and then ascertain if difference in race or ethnicity makes one child more likely than another to enter the child welfare system or move on to the next step. We also gathered descriptive statistics on the children who entered the Minnesota child welfare system, including a breakdown of victims by factors such as race, family condition, and county characteristics. We analyzed the data using Chi-Square tests to determine whether the proportions of victims passing through each decision point were related to the victims' race or ethnicity. We focused on six decision points, as outlined in the Minnesota Department of Human Services' report to the 2002 Minnesota legislature, *Study of Outcomes for African American Children in Minnesota's Child Protection System*:

- Report to Child Protection
- Accepted for Assessment
- Maltreatment Determination
- Referred to Child Protective Services
- Out-of-Home Placement
- Permanency

Using binary logistic regression we modeled a child's journey through Minnesota's child protection system. The first regression model ascertained which factors influence a child's likelihood of being determined a victim of maltreatment once he/she has been accepted for assessment. The second model focused on the children for whom a determination of maltreatment was made to identify which factors affect their probability of being referred to Child Protective Services (CPS). A third model determined what factors influence a child's likelihood of being recommended for out-of-home placement given that he/she was referred to CPS. Each of the response variables (determination of maltreatment, referral to CPS, and recommendation for out-of-home placement) was binary, meaning a yes or no response. We

attempted to identify factors other than race that could help explain racial disparities in the child welfare system and to find out whether racial inequality changed between the decision points.

A fourth, and final model examined factors influencing reunification for children in out-of-home placement in 2001. We used survival analysis to determine the probability that a child would be reunited with his/her parents. This probability was determined using a binary variable to specify reunification and a variable to represent the time that the child was in out-of-home placement. Thus, to obtain a child's probability of reunification we must know the number of days he/she has already been in out-of-home placement.

We employed the term *unique* to reference the number of distinct victims, offenders, or cases entering the child protection system in 2001. The unique numbers differ from the number of maltreatment incidents that occurred in 2001. For example, we had 19,422 unique victims, but 21,411 unique incidents of alleged maltreatment (if a child is assessed twice for maltreatment within the year, this counts for two unique incidents, but only one unique victim). The only case in which a victim could be counted twice is if they were assessed for maltreatment in two different counties, for which case he/she would be given a new victim ID number. When compiling demographic information for victims, we calculated all counts and percentages using the total number of unique victims. All of the 19,422 children in our data set were *alleged* victims, meaning an incident of maltreatment was reported and Child Protective Services accepted the case for assessment. We considered a victim to be *determined* if maltreatment was determined to have occurred in his/her case.

Due to the relatively small number of child maltreatment cases originating from facilities, we chose not to include the location of the maltreatment (facility vs. in-home) as a factor in our analyses. However, we did not exclude any victims from our analyses unless missing data from one or more victim characteristics prevented their inclusion. For example, any members of the data set with an age over 21 were not included in the regression analyses when age was used as an explanatory variable. Also, of the 19,422 unique alleged victims in the data set, 110 had no race recorded and 931 had an "unknown" race recorded. These 1,041 entries will not be found in the charts that follow, but all proportions are calculated using the original 19,422 unique alleged victims.

Hispanic ethnicity was recorded separate from a child's race, so in charts that include Hispanic as a category, note that a Hispanic child may be represented twice if the child's race was known. For example, a White Hispanic child will be represented twice on many of our charts.

Because we considered the context of a child's surrounding community to be a potentially important influencing factor in both the incidence and determination of maltreatment, we decided to include county demographics as a factor in our analyses. We designated counties as being either metro or non-metro. Those counties classified as *metro* are Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington and together comprise the seven county Twin Cities metro area. The remaining 80 counties are considered *non-metro*.

We organized our analysis by breaking down the child welfare population into a nested model of the six decision points. At each of these points we analyzed the total number of unique victims broken down by race, the percent of each racial and ethnic group that proceeded from the previous decision point, and a regression analysis comparing children in similar situations. We begin by including demographics of Minnesota's child population and then describing the population of unique alleged victims in terms of type of alleged maltreatment, family condition, and county.

Diagram 1 – Nested Model

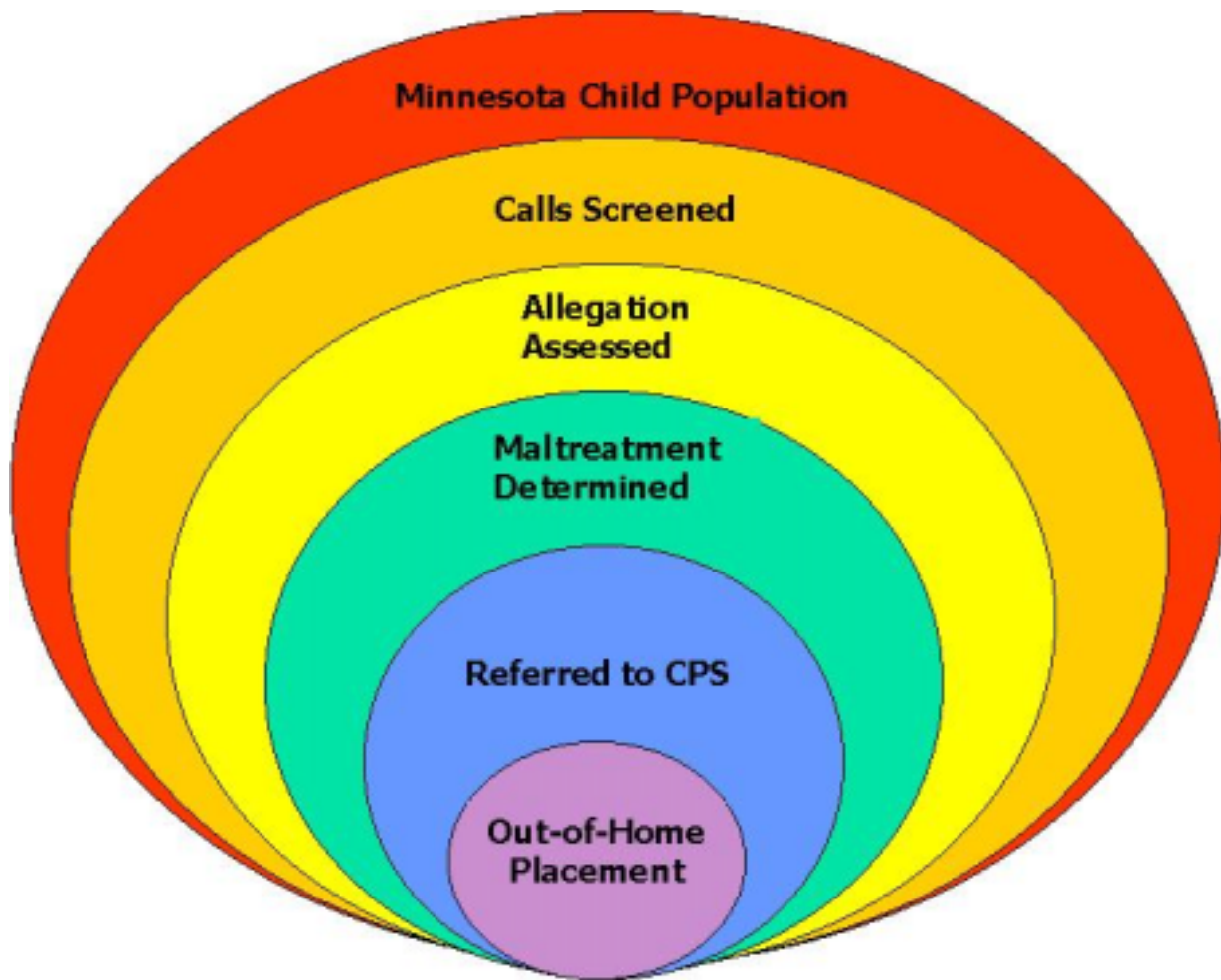


Diagram 1

This diagram illustrates the nested approach of our analysis. Instead of comparing the population at each decision point back to the Minnesota child population as other studies have done, we compared the population at each decision point to the population at the previous decision point.

Minnesota Demographics

Since we are dealing exclusively with children, it is important to understand the racial make-up of Minnesota for people less than 18 years of age. This population's racial and ethnic mix is significantly different than that of the entire population of Minnesota.

Chart 1 – Minnesota's Under Age 18 Population by Race and Ethnicity

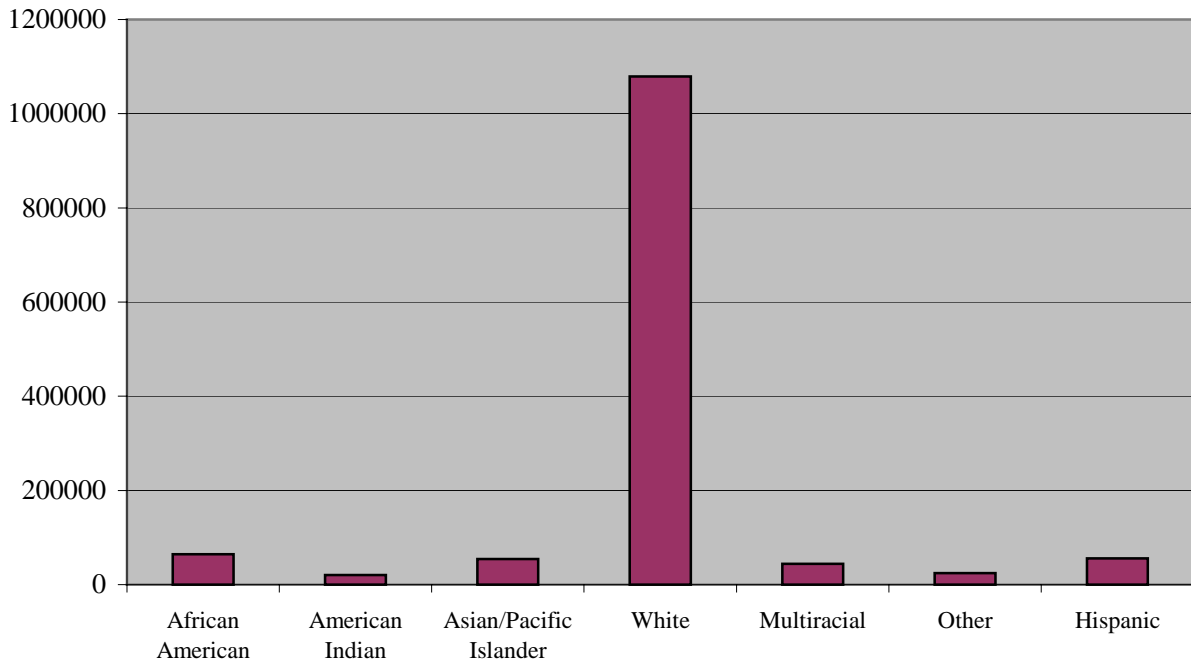


Chart 1

Using data for the year 2000 from the U.S. Census Bureau, the population of Minnesota is broken down by age, race, and ethnicity. The total population for all ages is about 4.9 million, of which 3.6 million are over 18 and 1.3 million under 18. In Minnesota's under age 18 population, American Indians make up 1.6% of the population while African American and Asian/Pacific Islanders are the largest minority groups with 5% and 4.2% respectively.

Decision Point 1: Report to Child Protection Services

This decision point occurs when a member of the community reports suspected maltreatment. The reporter may be mandated or voluntary. A mandated reporter is required by law to make a report if he/she believes maltreatment to be occurring. Teachers, doctors, school nurses, social workers, and clergy are all considered mandated reporters. This decision point is difficult to quantify because it relies upon collection of data on the actual incidence of maltreatment in the community and what factors caused an individual to make a report.

Decision Point 2: Acceptance for Assessment

A county child protection screener considers a report and decides if it fits the statutory criteria for assessment by child protection. Children who have been accepted for assessment are referred to as alleged victims if no determination of maltreatment has been made. Our data set contained only those who were assessed for maltreatment, which totaled 19,422 unique alleged victims.

Chart 2 – Percent of Minnesota Child Population Assessed for Maltreatment

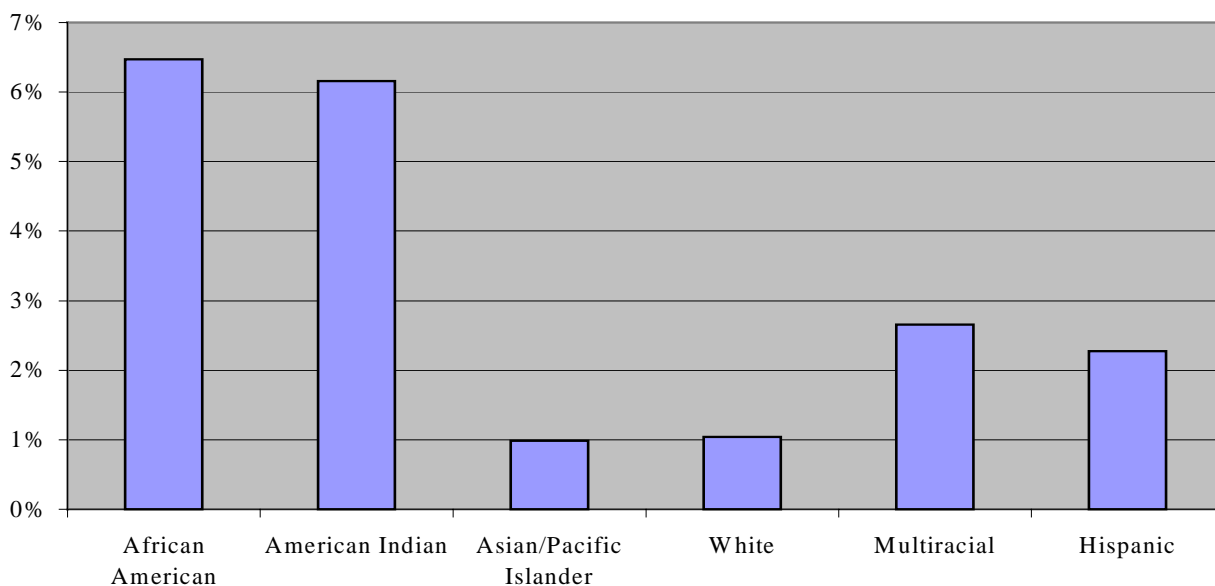


Chart 2

To find the percent of Minnesota population under age 18 that is assessed for maltreatment, we divided the number of children of each racial and ethnic group that are alleged victims by the child population of that same group. For example, of 64,308 African Americans under age 18 in Minnesota, 4,162 were assessed for maltreatment in 2001, resulting in the 6.4% shown in the above graph. A statistical test concluded that each of these six proportions is significantly different from each other. Essentially, the differences in the proportions of children accepted for maltreatment assessment are not solely due to natural variability in each racial and ethnic group.

Chart 3 – Observed and Hypothetical Counts of Alleged Victims

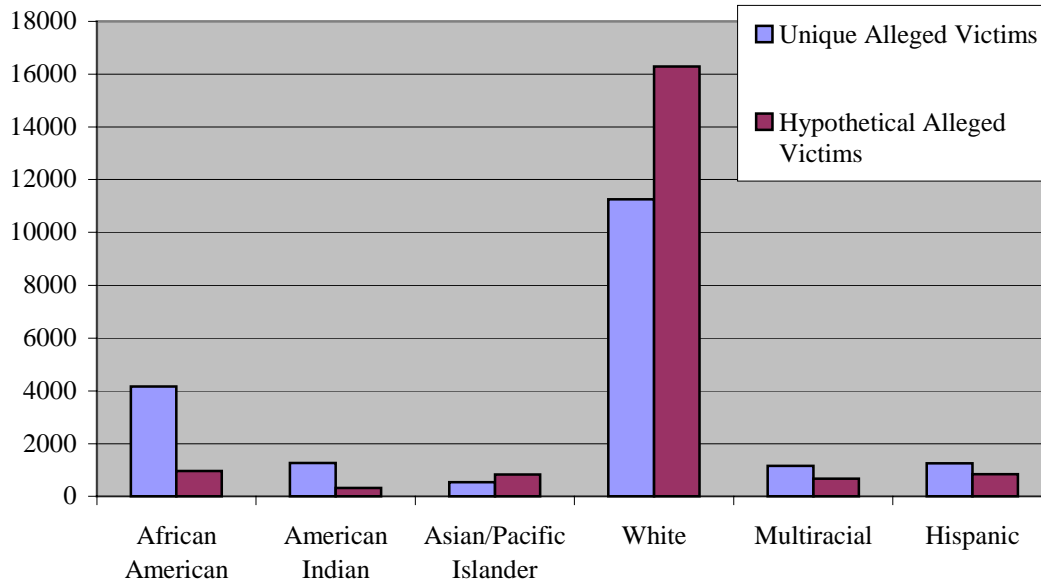


Chart 3

This chart compares the actual racial and ethnic breakdown of our 19,422 unique alleged victims to the distribution of race and ethnicity we would expect the alleged victims to have if they mirrored each race and ethnicity’s representation in Minnesota’s child population.

Chart 4 – Race and Ethnicity of Unique Alleged Victims

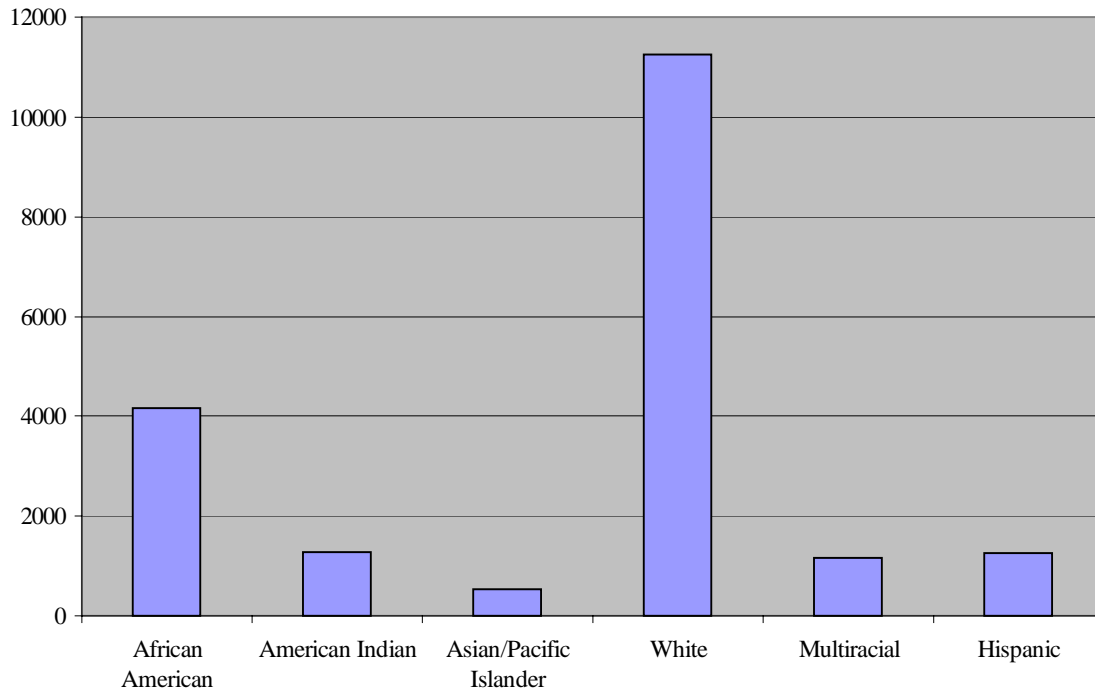


Chart 4

This chart is a comparison of the number of unique alleged victims from each racial and ethnic group out of 19,422 total unique alleged victims. White children make up the largest group overall with 11,250 unique alleged victims. With 4,162, African American children constitute the largest minority group.

Chart 5 – Race and Ethnicity of Unique Offenders

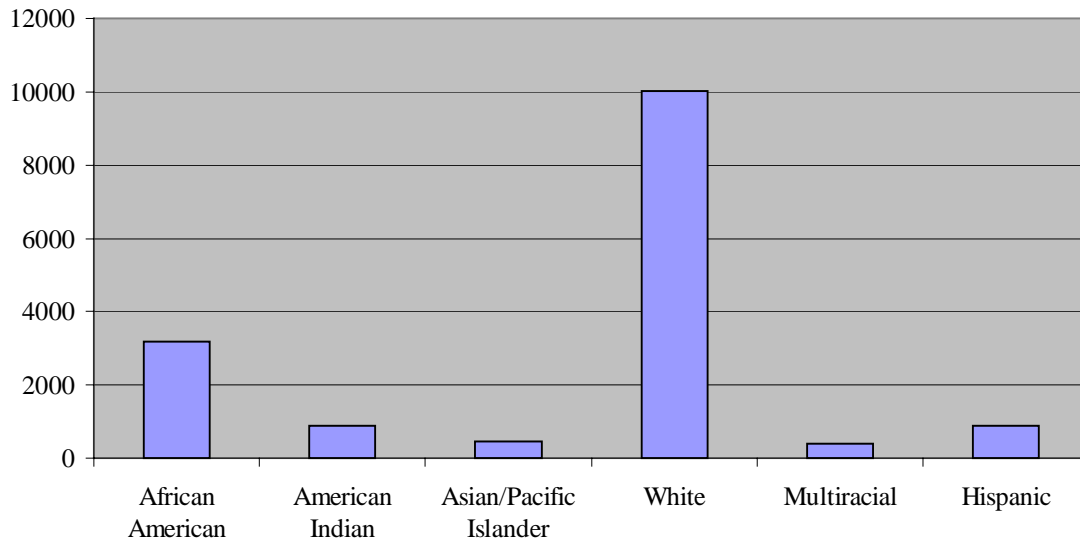


Chart 5

This chart shows the breakdown of unique offenders by race. As in the case of unique victims, each offender was counted only once. For example, if a parent is alleged to have neglected more than one child, that parent is counted only once in this chart. The proportions are similar to that of the unique alleged victims with White offenders constituting the largest group, followed by African American offenders. Also, it should be noted that the offenders in this chart are “alleged” as well, since maltreatment has not been determined at this point.

Chart 6 – Reporter Classification for Alleged Victims

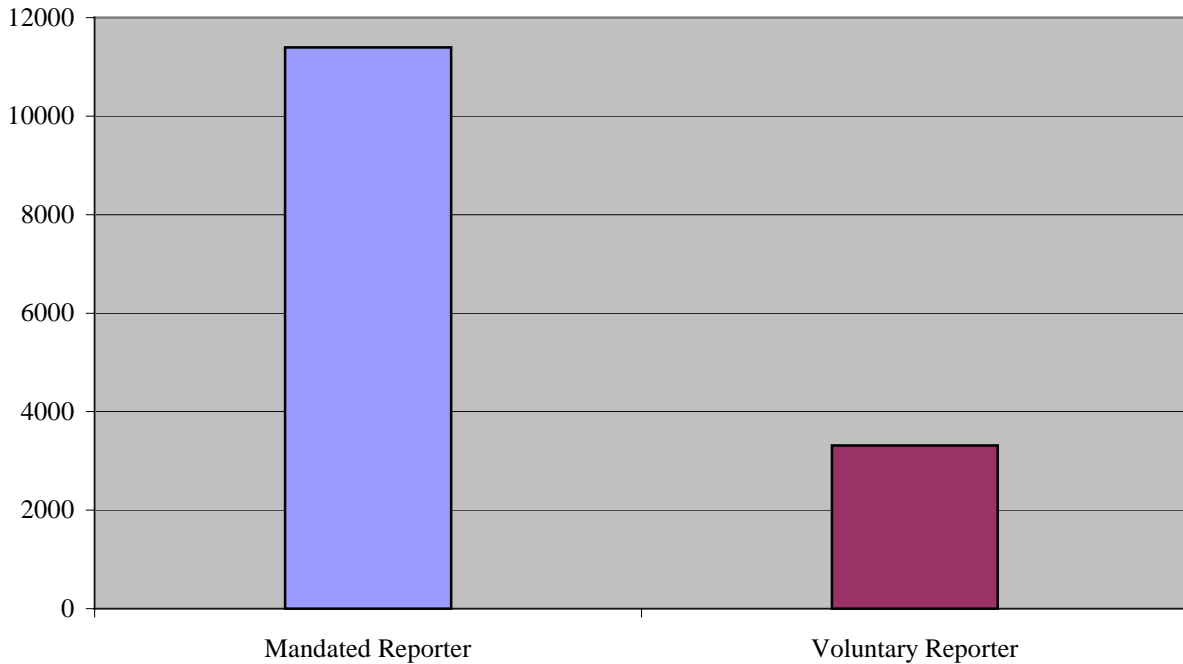


Chart 6

This chart shows the number of assessed maltreatment incidents broken down into those called in by mandated reporters and those called in by voluntary reporters. Since more than one person can report an incident, it is possible that an incident is counted more than once if it was reported by multiple people. It should also be noted that the calls are not necessarily made about individual children. An individual may have reported the maltreatment of siblings, which could have been grouped into one incident. However, the chart still reflects the fact that 75% of the calls about maltreatment incidents were by mandated reporters (e.g., doctors, school personal, law enforcement) in 2001.

Chart 7 – Presenting Problem by Race and Ethnicity

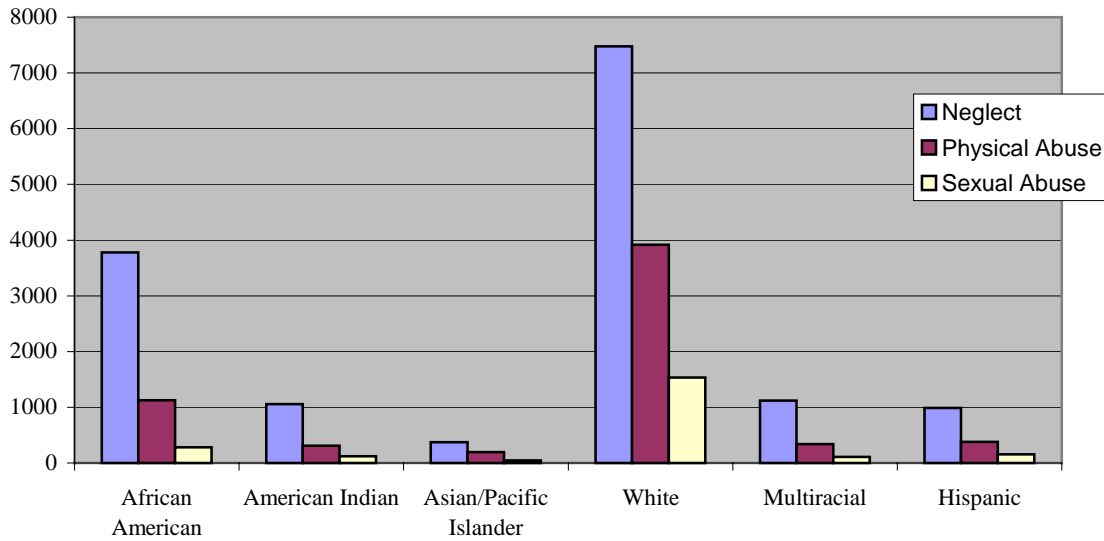


Chart 7

This chart looks at the distribution by race and ethnicity of the presenting problem (type of maltreatment) recorded for unique alleged victims. Clearly neglect is the most frequent form of maltreatment in those cases assessed in 2001 across all racial and ethnic groups, followed by physical abuse, and sexual abuse.

Chart 8 – Prevalence of Six Family Conditions

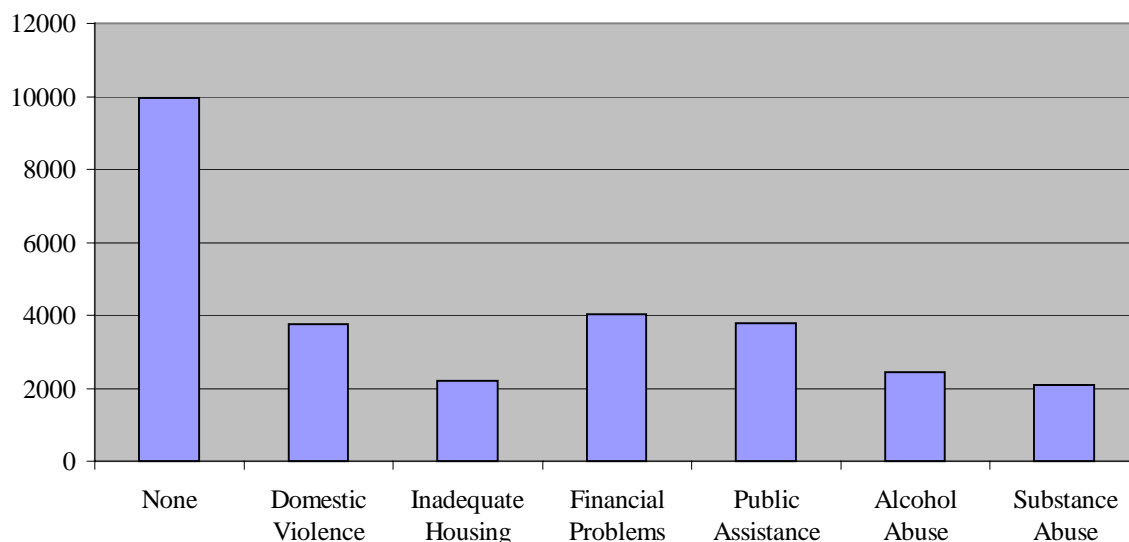


Chart 8

This chart shows the prevalence of the six family conditions that are reported for each alleged victim. There can be anywhere between zero (in which case the victim is counted in the “None” category) and six (in which case the victim is counted in all six categories) family conditions linked to the same victim. Therefore, the total number of family conditions reported was higher than the number of unique alleged victims, due to those victims who had more than one family condition. This chart represents the number of times a condition such as Alcohol Abuse was reported for all victims.

Chart 9 – Family Conditions by Victim Race

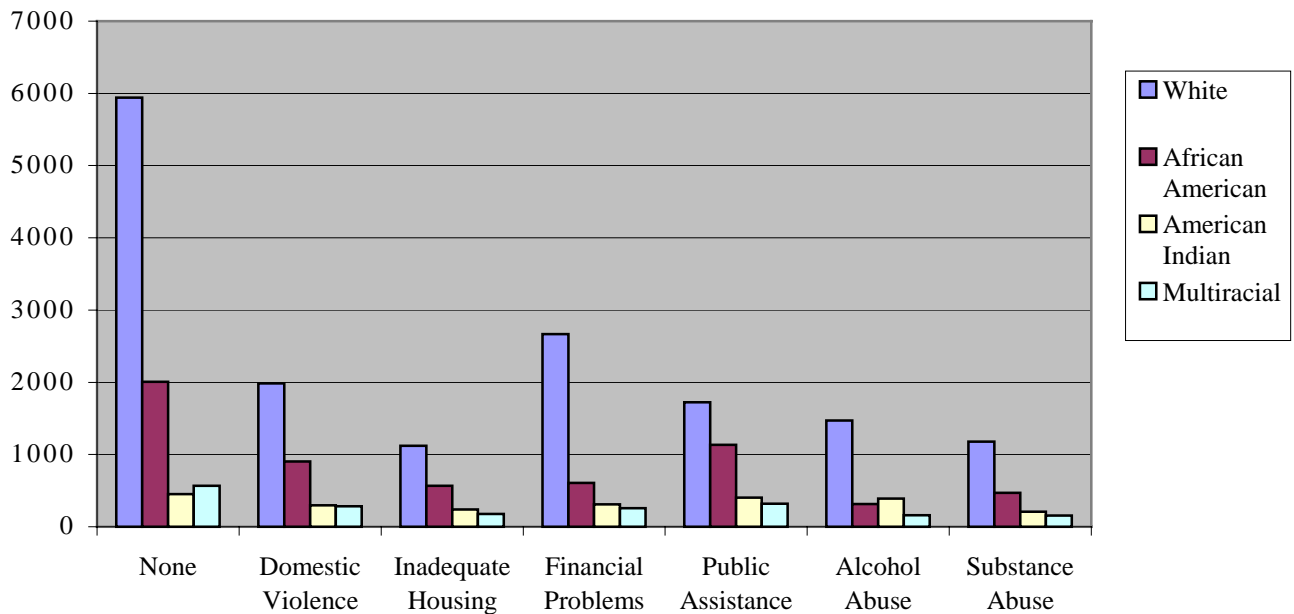


Chart 9

This chart breaks down each of the family conditions by race. For example, of the reports of domestic abuse as a family condition, nearly 2000 of the incidents were linked to White victims. African American, American Indian, White, and Multiracial are shown, because their numbers were significantly higher than those for Asian/Pacific Islander or Hispanic ethnicity. Financial Problems are the most prevalent family condition for Whites, while Public Assistance is the most prevalent condition for African Americans, American Indians, and Multiracial children.

Chart 10 – Statewide Metro and Non-Metro Child Population

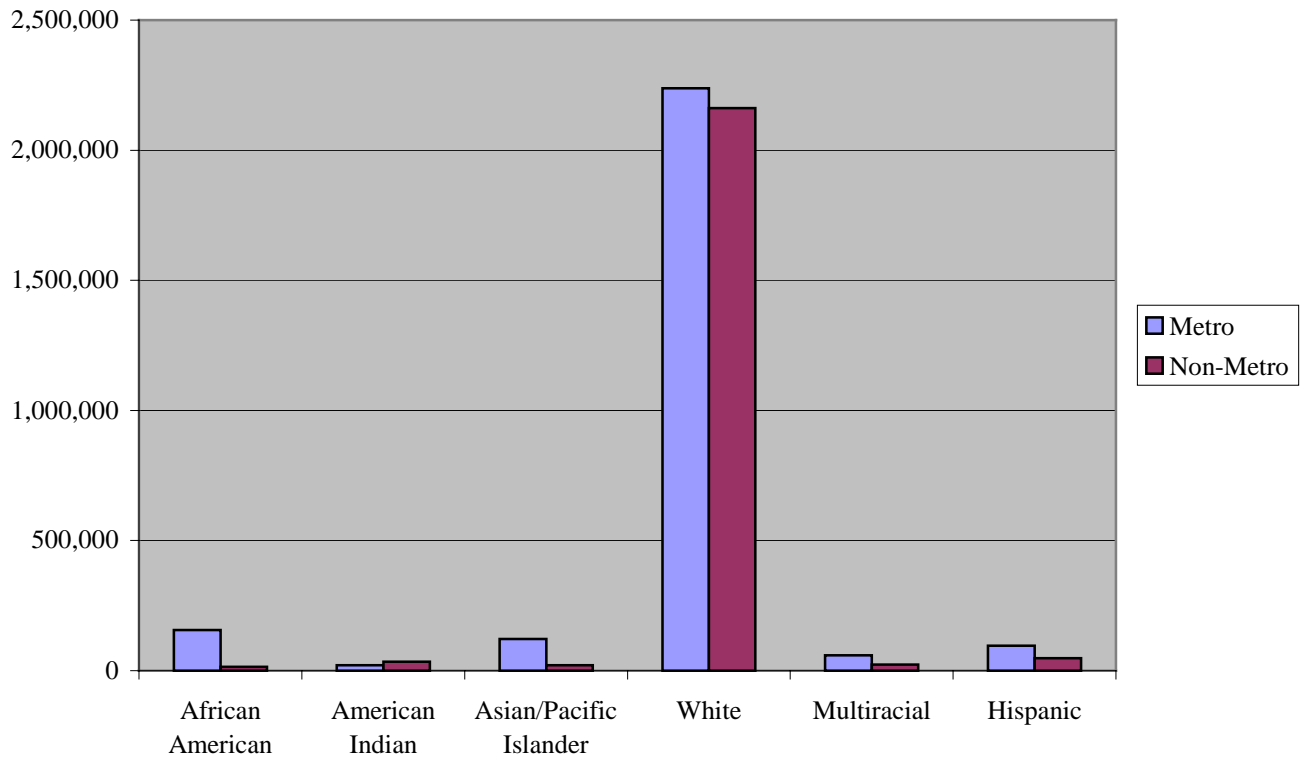


Chart 10

One of the factors we were interested in looking at was the breakdown of the state population by county. This chart looks at how the population of each racial and ethnic group is separated between Metro and Non-Metro counties (using the designations mentioned previously). Clearly, White children are the majority in all areas, with African Americans being the largest minority group in Metro counties. In Non-Metro counties the largest minority group is Hispanic with 47,480, followed by American Indian with 34,550.

Chart 11 – Unique Alleged Victims by Metro and Non-Metro County

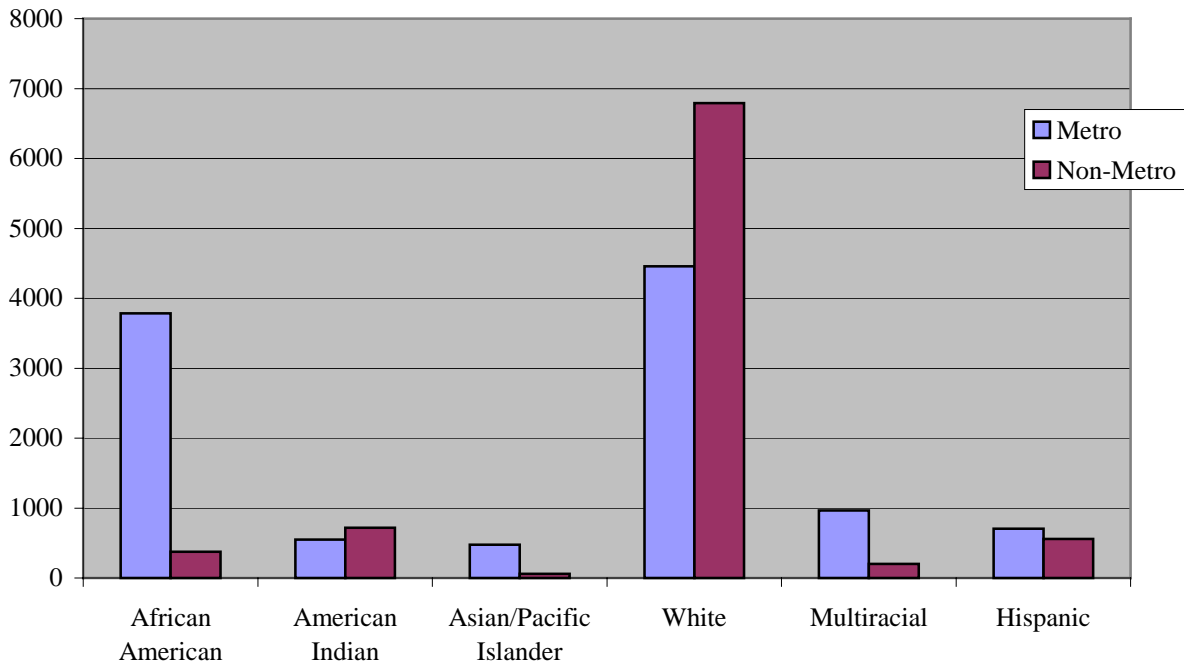


Chart 11

This chart breaks down the total number of unique alleged victims by racial and ethnic group and county designation. For example, the number of African American unique alleged victims in Minnesota is divided into those from Metro or Non-Metro counties. American Indian children and Hispanic children have similar numbers of alleged victims between Metro and Non-Metro. The distribution of Metro and Non-Metro residency is similar for the unique alleged victim population and the Minnesota child population.

Chart 12 – Family Conditions by Metro and Non-Metro County

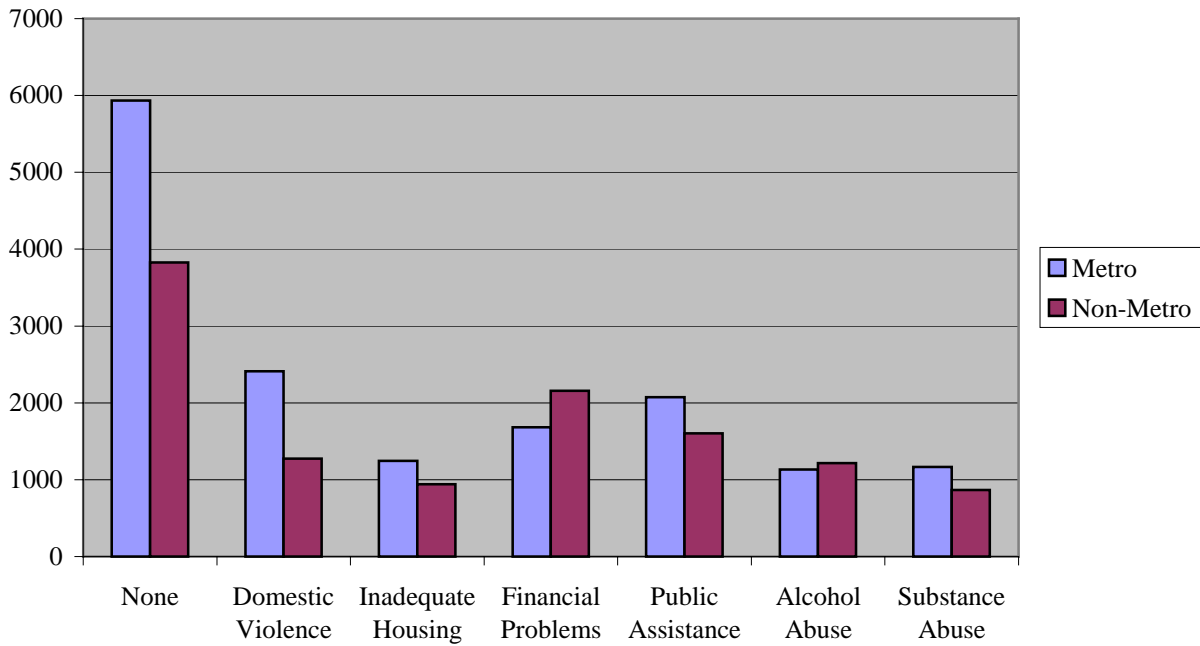


Chart 12

This chart contains a breakdown of family condition by Metro and Non-Metro county designation. Among victims living in Metro counties, Domestic Violence is the most prevalent family condition while Financial Problems are the most prevalent condition among victims from Non-Metro counties.

Decision Point 3: Maltreatment Determination

Once a victim has been accepted for assessment the case worker determines if maltreatment has indeed occurred. If the allegation is substantiated the child is said to be a determined victim of maltreatment.

Chart 13 – Percent of Unique Alleged Victims who were Determined

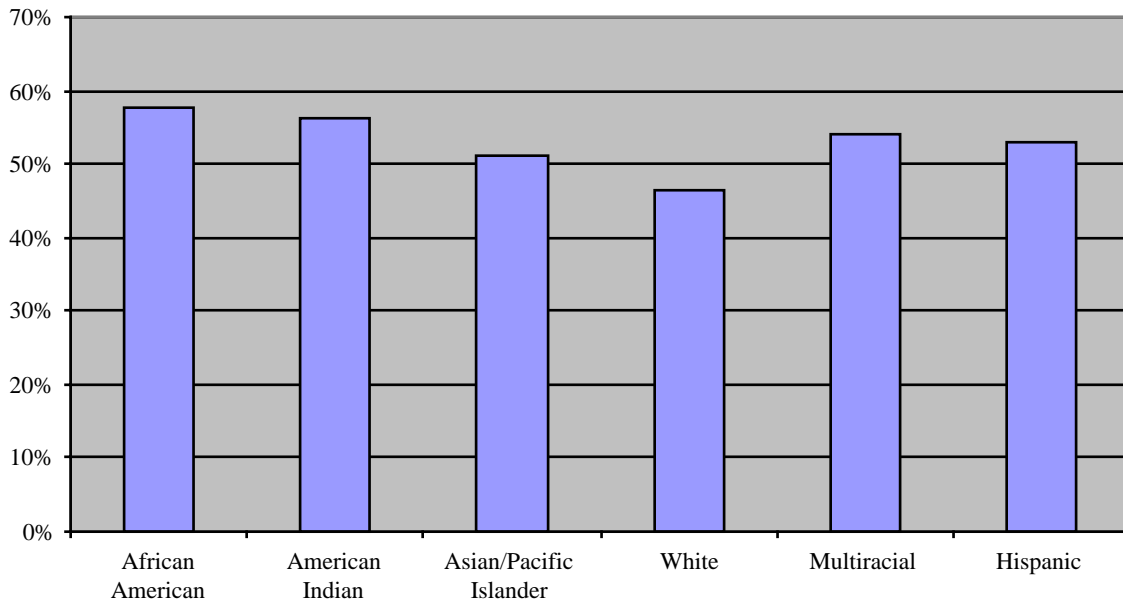


Chart 13

This chart shows the percentage of the alleged victims of each racial group who were determined to be victims of maltreatment. Of the 4,162 African Americans who were alleged victims, 2,397 had a determination of maltreatment, resulting in the 58% shown on the graph. The determination rates are fairly consistent at about 50%, although the determination rate for White children is a bit lower than the other five. A statistical analysis of this data showed that the percents for each racial and ethnic group are significantly different.

Chart 14 – Race and Ethnicity of Unique Determined Victims

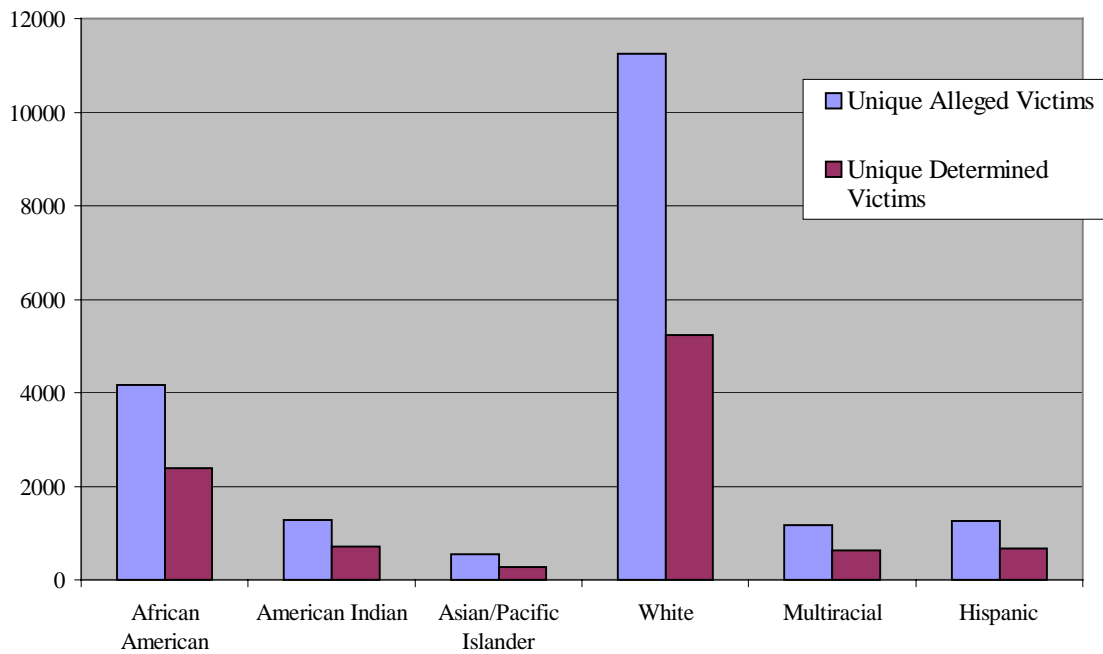


Chart 14

This chart compares the number of total unique alleged victims (19,422) to that of total unique determined victims (9,723). Clearly the number of determined victims for each racial or ethnic group is smaller than that of alleged victims. However, the decrease of White children is much greater than that of the other minority groups.

Table 1 – Breakdown of Unique Alleged and Determined Victims by Race and Ethnicity

	African American	American Indian	Asian/Pacific Islander	White	Unknown	Two or more races	All Races	Hispanic Ethnicity – any race
Unique Alleged Victims 2001	4162	1268	536	11250	931	1165	19422	1264
Unique Determined Victims 2001	2397	713	275	5239	426	629	9723	670
Determined Victims per Thousand 2001	37.3	34.6	5.1	4.9	N/A	14.3	7.6	12.0
Determined Victims per Thousand 2000	42.4	40.1	7.7	5.5	N/A	17.5	8.7	14.7

Table 1

This table gives the number breakdown for each race and ethnicity out of the total number of alleged victims of maltreatment and the total number of children in which maltreatment is determined to have occurred. Victims per 1,000 (in both 2001 and 2000) were calculated by dividing the number of determined victims for each race by the 2000 census figures in the Minnesota child population (under age 18) for that race, and then multiplying by 1,000. The figures for “All Races” include victims for whom race data was missing, although these victims are not represented in other cells of the table.

Analysis of Maltreatment Determination

We used binary logistic regression to analyze what factors affect the probability that maltreatment will be determined for a child in a specific case given that there is an allegation of maltreatment made.² We considered the following variables: family conditions, type of allegations made, type of reporter (mandated or voluntary), disabilities of the alleged victim, the percent of families under the federal poverty level by county, location in/out of the seven county Minneapolis-St. Paul metro area, and the age, gender, race, and ethnicity of the alleged victim. We also considered the possibility that some of these factors may affect the probability of progressing to the next decision point differently when both factors are present than their individual odds ratios indicate. We created interaction terms to account for this discrepancy. We calculated interaction effects between public assistance and mandated reporter, physical abuse and mandated reporter, domestic violence and physical abuse, and domestic violence and sexual abuse. The chart at right displays factors that increase/decrease the odds of an allegation determined to be true. The odds ratios indicate an increase/decrease in odds compared to that for a non-Hispanic, White alleged victim of neglect reported by a voluntary reporter in a non-metro county. A higher odds ratio means increased probability of maltreatment determination.

The odds of a maltreatment determination for an African American victim are 1.17 times the odds of a maltreatment determination for a White victim, given identical family conditions, types of allegations, type of reporter, and county. Without considering these factors, the odds for an African American victim are 1.48 times that for a White victim. Similarly, the odds of a maltreatment determination for an Asian/Pacific Islander victim and an American Indian victim are 1.28 and 0.88 times, respectively, that for a White victim after adjustments. The odds for a Multiracial alleged victim or a victim of Hispanic ethnicity did not differ significantly from those of a White victim, after adjusting for family conditions, type of allegations, type of reporter and county.

To give a concrete example, a child is reported by a mandated reporter for neglect in Ramsey County. The child comes from a family with inadequate housing. If the child were White, the probability that

Variable	Odds Ratio ¹
Domestic violence	2.861218*
Inadequate housing	2.005007*
Financial problems	1.508001*
Public assistance	0.878153
Alcohol abuse	2.586773*
Substance abuse	3.003864*
Physical abuse	0.8825408
Threatened physical abuse	0.8038931*
Sexual abuse	1.503218*
Threatened sexual abuse	0.5431193*
Prenatal exposure	3.515687*
Medical neglect (includes infant)	0.6820846*
Endangerment	1.287342*
Inadequate supervision	1.121102*
Educational neglect	1.831211*
Abandonment	1.466844*
Mandated reporter	2.324257*
Percent of families in poverty by county	1.041595*
Twin Cities metro area	1.299655*
Interaction between public assistance and mandated reporter	1.433981*
Interaction between physical abuse and mandated reporter	0.7889517*
Interaction between domestic violence and physical abuse	1.413451*
Interaction between domestic violence and sexual abuse	0.3675031*
Multiracial	0.9377896
Asian/Pacific Islander	1.275842*
African American	1.166944*
American Indian	0.8775226*
Hispanic ethnicity	0.9980457

¹ * indicates ratio is statistically different from 1 at 95% confidence level.

² Since an incident may involve more than one victim, we clustered the data by maltreatment incident.

maltreatment will be determined in this case is 58.7%. If the child were African American, the probability is 62.4%. If the child is Asian/Pacific Islander, the probability is 64.4%. If the child is American Indian, the probability is 55.5%.

Decision Point 4: Referral to Child Protective Services

Once a determination of maltreatment has been made, the child may or may not be recommended to receive continuing services from Child Protective Services (CPS). These services may include family counseling and/or financial planning. In this section, we will only consider those children who were determined to be maltreated and were referred for ongoing services.

Chart 15 – Percent of Determined Victims Referred to Child Protective Services

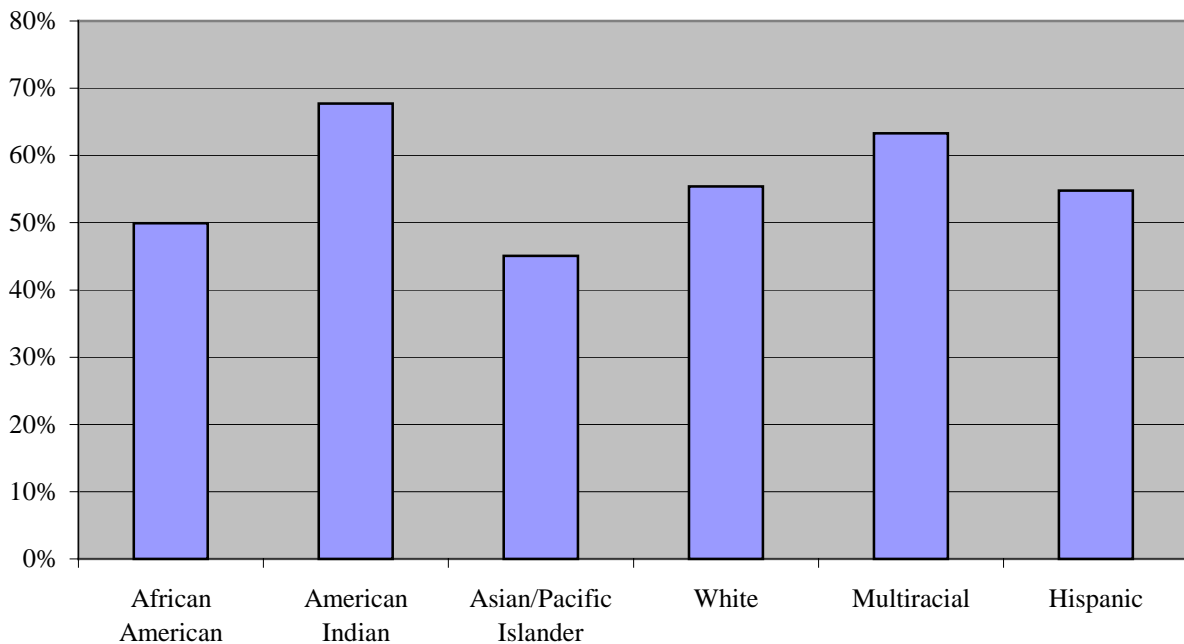


Chart 15

In this chart, the percent of determined victims referred to Child Protective Services was found for each racial and ethnic group. While there are children referred to CPS who have no determination of maltreatment, they are not represented in this count. The above rates were calculated by dividing the number of unique victims referred to CPS by the number of unique victims with determined maltreatment for each racial and ethnic group. For example, of 2,397 unique determined African American victims, 1,197 were referred to CPS, resulting in the 50% shown on the graph. A statistical analysis of this data showed that the rates for each racial and ethnic group are significantly different.

Chart 16 – Race and Ethnicity of Unique Victims Referred to Child Protective Services

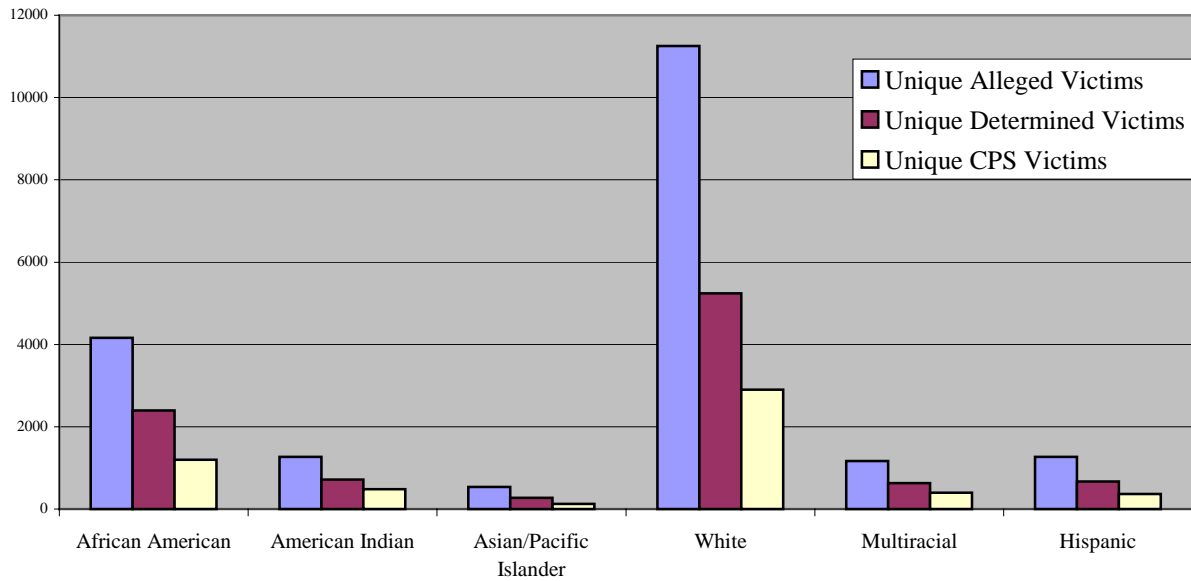


Chart 16

In this chart, the unique number of victims is broken down by race and ethnicity for each of the following populations: unique alleged victims, unique determined victims, and unique victims referred to Child Protective Services. At each decision point the number of unique victims decreases. However, the numbers go down more drastically for some racial and ethnic groups than for others.

Analysis of Referral to Child Protective Services

Binary logistic regression was used to analyze what factors affect the probability that a child will be referred to CPS given that the child is a determined victim.⁴ We considered the following variables: family conditions, type of maltreatment determined, the percent of families under the federal poverty level by county, location in/out of the Minneapolis-St. Paul metro area, the age, gender, race, and ethnicity of the determined victim. The chart at right displays factors that increase/decrease the odds of a determined victim being referred to CPS. The odds ratios indicate an increase/decrease in odds compared to that for a non-Hispanic, White victim of neglect in a non-metro county.

The odds of referral to CPS for a Multiracial determined victim are 1.57 times the odds of referral to CPS for a White victim, given identical family conditions, types of maltreatment, and county. Without taking these factors into account, the odds for a Multiracial victim are 1.28 times that for a White victim. The odds for an African American, American Indian, or Asian/Pacific Islander victim or a victim of Hispanic ethnicity did not differ significantly from those of a White victim, after adjusting for family conditions, type of maltreatment, and county.

Consider a child in Hennepin County who is a determined victim of physical abuse. The child's family is characterized by alcohol abuse. If the child is White, the probability that there will be a referral to CPS in this case is 46.5%. If the child is Multiracial, the probability is 57.8%.

Variable	Odds Ratio ³
Domestic violence	1.474153*
Inadequate housing	2.683089*
Financial problems	2.388807*
Public assistance	1.565775*
Alcohol abuse	1.836952*
Substance abuse	3.809042*
Physical abuse	1.225164*
Prenatal exposure	2.270758*
Medical neglect (includes infant)	3.41129*
Educational neglect	0.5657884*
Abandonment	3.497621*
Percent of families in poverty by county	1.076982*
Twin Cities metro area	0.606372*
Multiracial	1.57237*
Asian/Pacific Islander	1.265775
African American	1.142144
American Indian	1.29811
Hispanic ethnicity	0.9119497

³ * indicates ratio is statistically different from 1 at 95% confidence level.

⁴ Since an incident may involve more than one victim, we clustered the data by maltreatment incident.

Decision Point 5: Recommendation for Out-of-Home Placement

One of the possible services that can be recommended for a child is out-of-home placement. In the following section, we will consider only children who were determined maltreated, referred to Child Protective Services, and recommended for out-of-home placement in this section. It is important to note that a recommendation for out-of-home placement does not necessarily imply that the child is in fact placed out of home.

Chart 17 – Percent of Victims Referred to Child Protective Services Recommended for Out-of-Home Placement

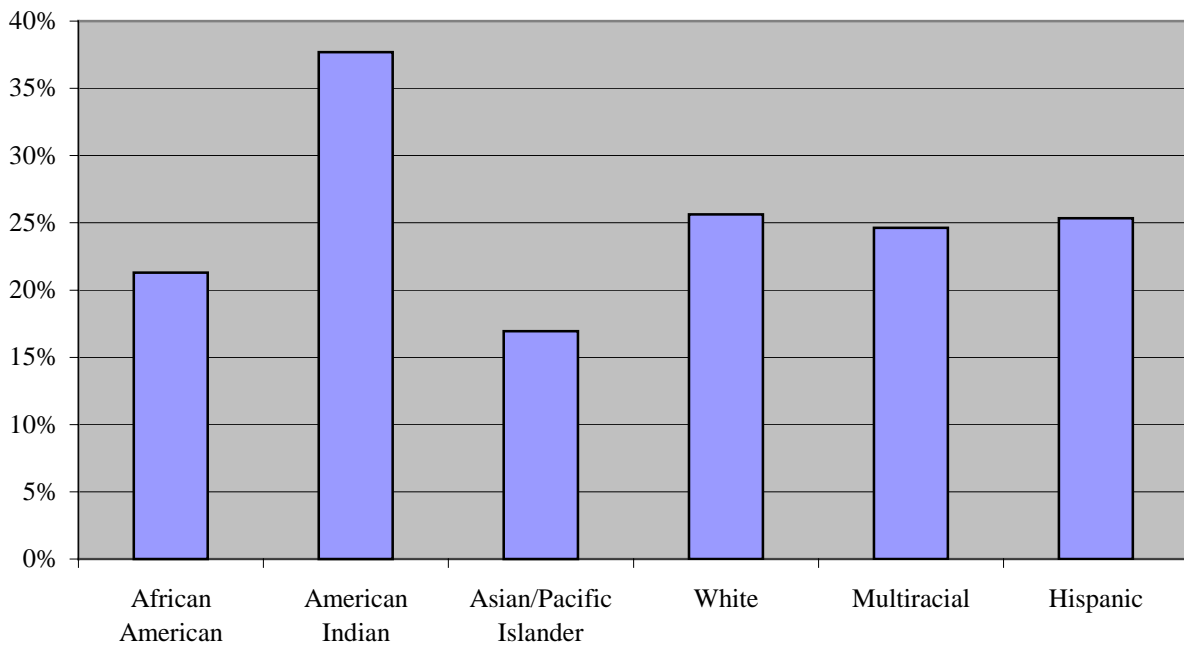


Chart 17

This chart looks at the percent of those victims referred to CPS who are then recommended for out-of-home placement. For each racial and ethnic group, the percent of victims recommended for out-of-home placement was taken out of the number of children for whom maltreatment was determined who were then also referred to CPS. So, of 1,197 unique African American victims referred to CPS, 255 were recommended for out-of-home placement, resulting in the 21% shown in the above graph. A statistical analysis of these percentages found that the differences were significantly different from each other.

Chart 18 – Race and Ethnicity Breakdown for the Population at Each Decision Point

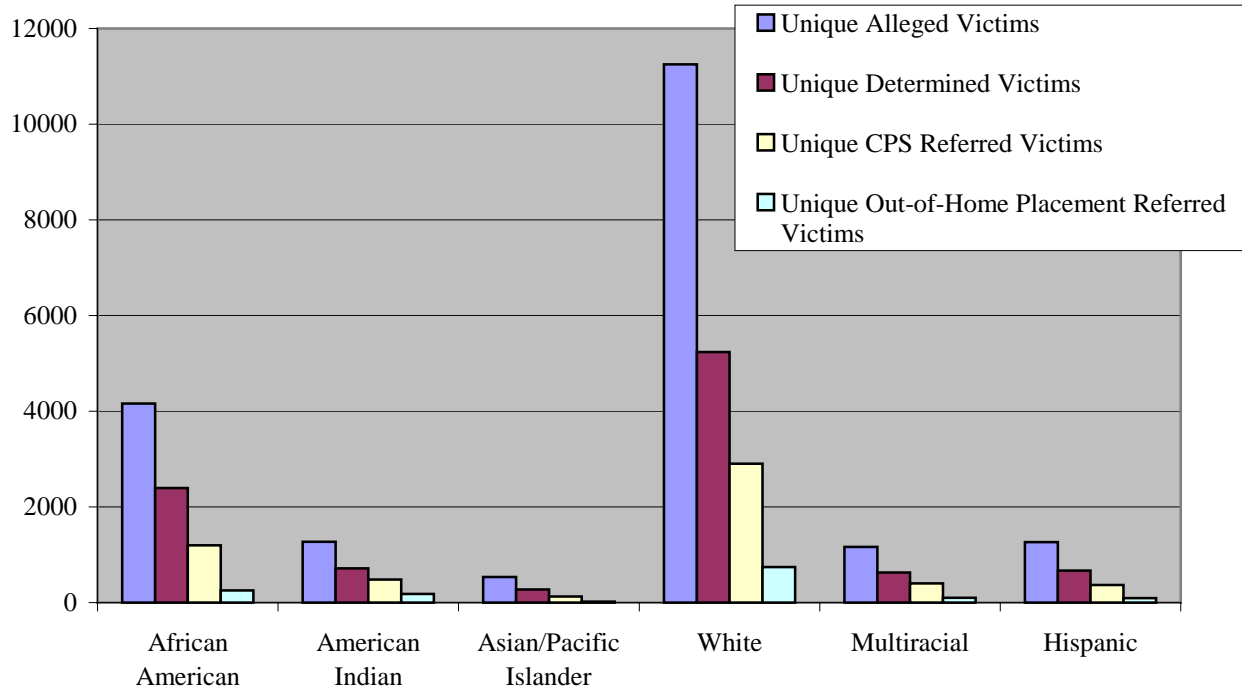


Chart 18

In this chart, the unique number of children passing through each decision point is broken down by race and ethnicity. Therefore, for a child to be included in the unique number of victims referred for out-of-home placement, they must have been accepted for assessment, had maltreatment determined, and referred to Child Protective Services.

Analysis of Recommendation for Out-of-Home Placement

We used binary logistic regression to analyze what factors affect the probability that a child will be recommended for out-of-home placement given that the child is a determined victim referred to CPS.⁶ We considered the same variables as in the analysis for the previous decision point. The chart at right displays factors that increase/decrease the odds of a determined victim referred to CPS being recommended for out-of-home placement. The odds ratios indicate an increase/decrease in odds compared to that for a non-Hispanic, White victim of neglect in a non-metro county.

The odds of recommendation for out-of-home placement for an American Indian determined victim referred to CPS are 1.73 times the odds of recommendation for out-of-home placement for a White victim, given identical family conditions, types of maltreatment, and county. The odds for an African American victim are 0.72 times that for a White victim.

The odds for an Asian/Pacific Islander or Multiracial victim or a victim of Hispanic ethnicity did not differ significantly from those of a White victim, after adjusting for family conditions and types of maltreatment

For instance, consider a child who is a determined victim of educational neglect and has been referred to CPS. The child's family is characterized by substance abuse. If the child is White, the probability that there will be a recommendation for out-of-home placement is 16.5%. If the child is African American, the probability is 12.5%. If the child is American Indian, the probability is 25.6%.

Variable	Odds Ratio ⁵
Inadequate housing	1.690937*
Financial problems	1.254835*
Substance abuse	2.057809*
Educational neglect	0.4222717*
Chronic or severe use of alcohol or controlled substance	0.3773273*
Abandonment	2.385727*
Multiracial	0.7912183
Asian/Pacific Islander	0.7874173
African American	0.7182297*
American Indian	1.734044*
Hispanic ethnicity	0.8807183

⁵ * indicates ratio is statistically different from 1 at 95% confidence level.

⁶ Since an incident may involve more than one victim, we clustered the data by maltreatment incident.

Decision Point 6: Permanency Plan

Once a child is placed in out-of-home care, a court has 12 months to determine a permanent place for the child to live. In this part of our analysis we considered all children who were in out-of-home placement in 2001. This includes children who were not recommended for out-of-home placement, children who were not receiving continuing Child Protective Services, as well as those children who were recommended or mandated by a Child in Need of Protection or Services (CHIPS) petition to receive out-of-home placement.

Chart 19 – Proportions of Children Awaiting Reunification

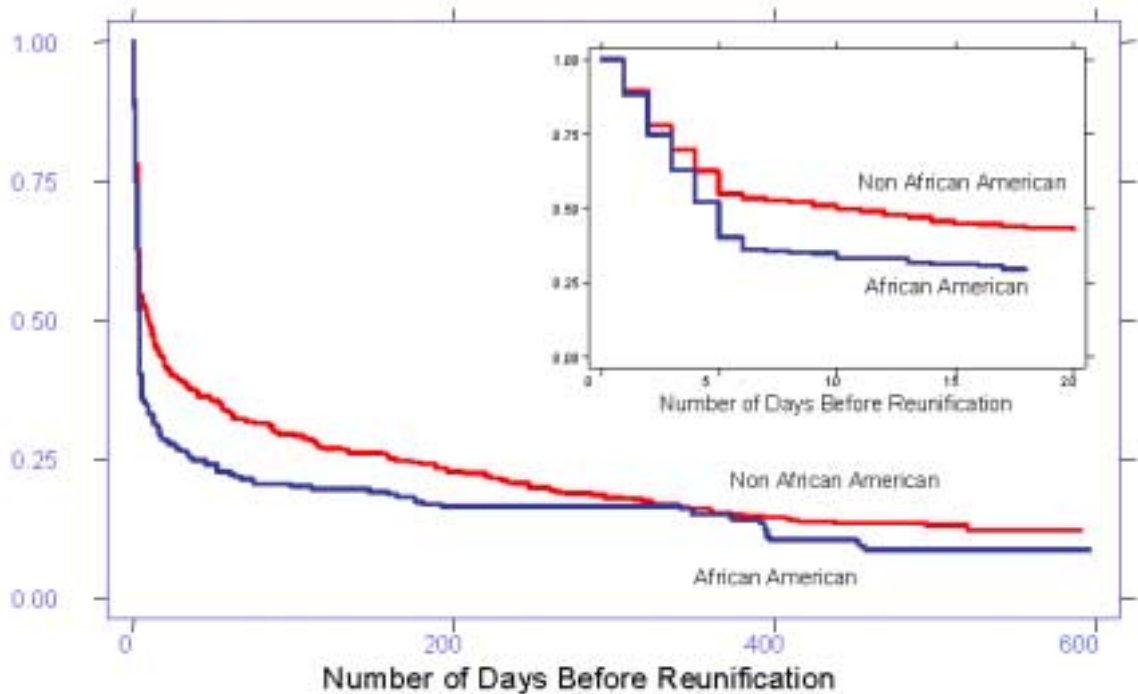


Chart 19

This chart shows the number of days that a child will have to wait until they are reunified with their primary caretakers. As can be seen, the proportion of African American children awaiting reunification decreases significantly faster than that for non African American children, meaning African American children in out-of-home placement have a better chance of reunification. After 5 days in out-of-home care the probability of being reunited with the child's primary caretaker decreases to below 50%.

Analysis of Reunification with Primary Caretaker

Using a Cox Proportional Hazard model, we investigated which factors affect the probability of a child’s reunification with his/her primary caretaker(s) given that the child was in out-of-home care in 2001.⁸ This model conditions a child’s probability of reunification on the number of days in out-of-home care. We considered the following other factors: reasons cited for placement, location in/out of the Minneapolis-St. Paul metro area, the age, gender, race, and ethnicity of the child. The chart above displays factors that increase/decrease the odds of a child being reunited with his/her parent(s)/primary caretaker(s). The hazard ratios indicate an increase/decrease in odds compared to that for a non-Hispanic, White child in a non-metro county who was placed because of neglect.

Variable	Hazard Ratio⁷
Parent drug abuse	0.8175861*
Caretaker inability	0.7600726*
Multiracial	0.8235897
Asian/Pacific Islander	1.17725
African American	1.193461*
American Indian	0.8271902
Hispanic ethnicity	0.9541369

The odds of reunification for an African American child are 1.19 times the odds of reunification for a White child, given identical reasons cited for placement. The odds for an Asian/Pacific Islander, American Indian or Multiracial child or a child of Hispanic ethnicity did not differ significantly from those of a White child, after adjusting for reason cited.

For instance, a child is placed in out-of-home care because of caretaker inability. The child has been in care for 5 days. If the child is White, the probability that he/she will be reunited with his/her parent(s)/primary caretaker(s) in this case is 37.1%. If the child is African American, the probability is 44.3%.

⁷ * indicates ratio is statistically different from 1 at 95% confidence level.

⁸ Since a child may enter out-of-home placement more than once, we clustered the data by child.

Chart 20 – Percent of Each Race and Ethnicity at Each Decision Point

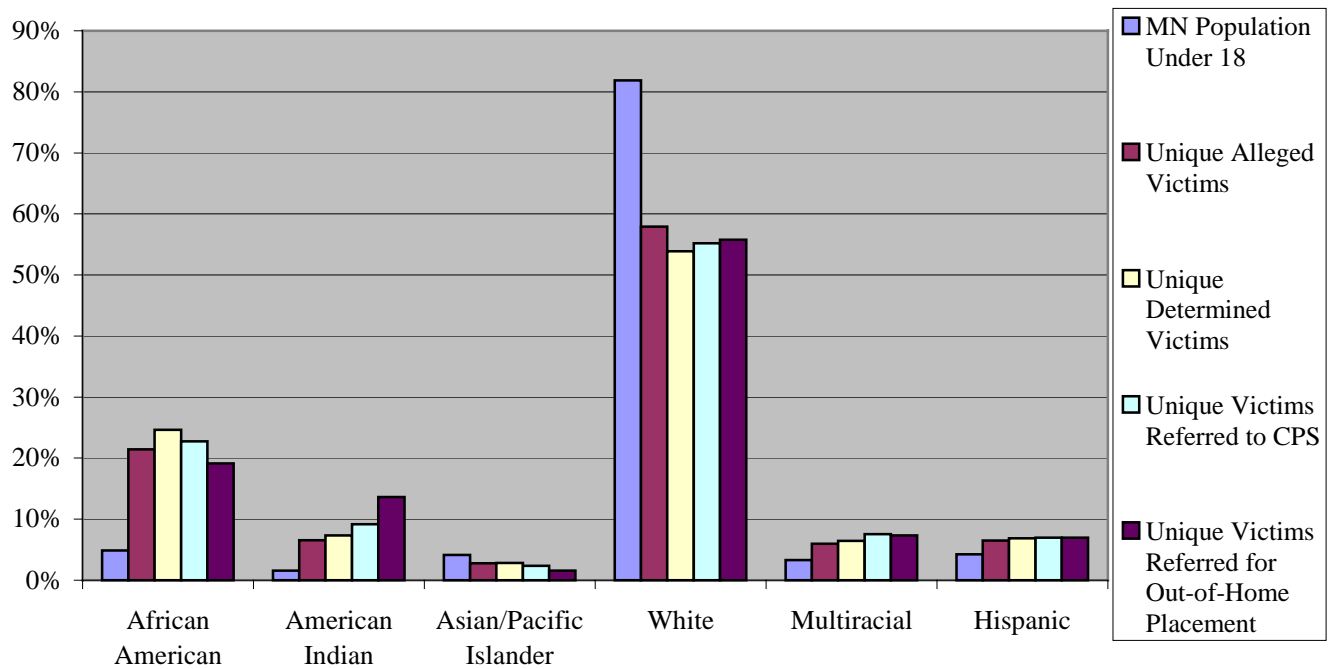


Chart 20

This chart compares the racial and ethnic breakdowns of children at each decision point. For a child to be included in the unique population of a particular decision point they had to have progressed through all previous decision points. In other words, a child must have been assessed for maltreatment, had maltreatment determined, been referred to CPS, and referred for out-of-home placement to be counted in the unique victims referred for out-of-home placement. The above percentages are calculated by taking the population of a given racial or ethnic group and dividing it by the total population of unique victims at each decision point. Note that the bars of a single color will not add to 100% since Hispanics are double counted and the denominator we divided by includes victims for whom race data was missing or unknown.

Decision Point 1: Report to Child Protection Services, Revisited

We were able to obtain data that Hennepin County collected in the first week of 2002 about all reports to Child Protection Services. This data included the race breakdown of all of the children reported to CPS. Hennepin County reported that 48% of calls received were about African American children even though only 15% of Hennepin County's child population is African American. This means that 3.3 times as many calls were received about African Americans than we would expect. If every county in Minnesota receive 3.3 times as many calls about African Americans, 16.5% of statewide calls would concern African American children. This fact may be able to account for some of the disparity in the child welfare system for African American children, however it is not possible to determine this since we cannot assume that statewide calling ratios are comparable to that of Hennepin County.

Chart 21 – Extrapolation from Hennepin County

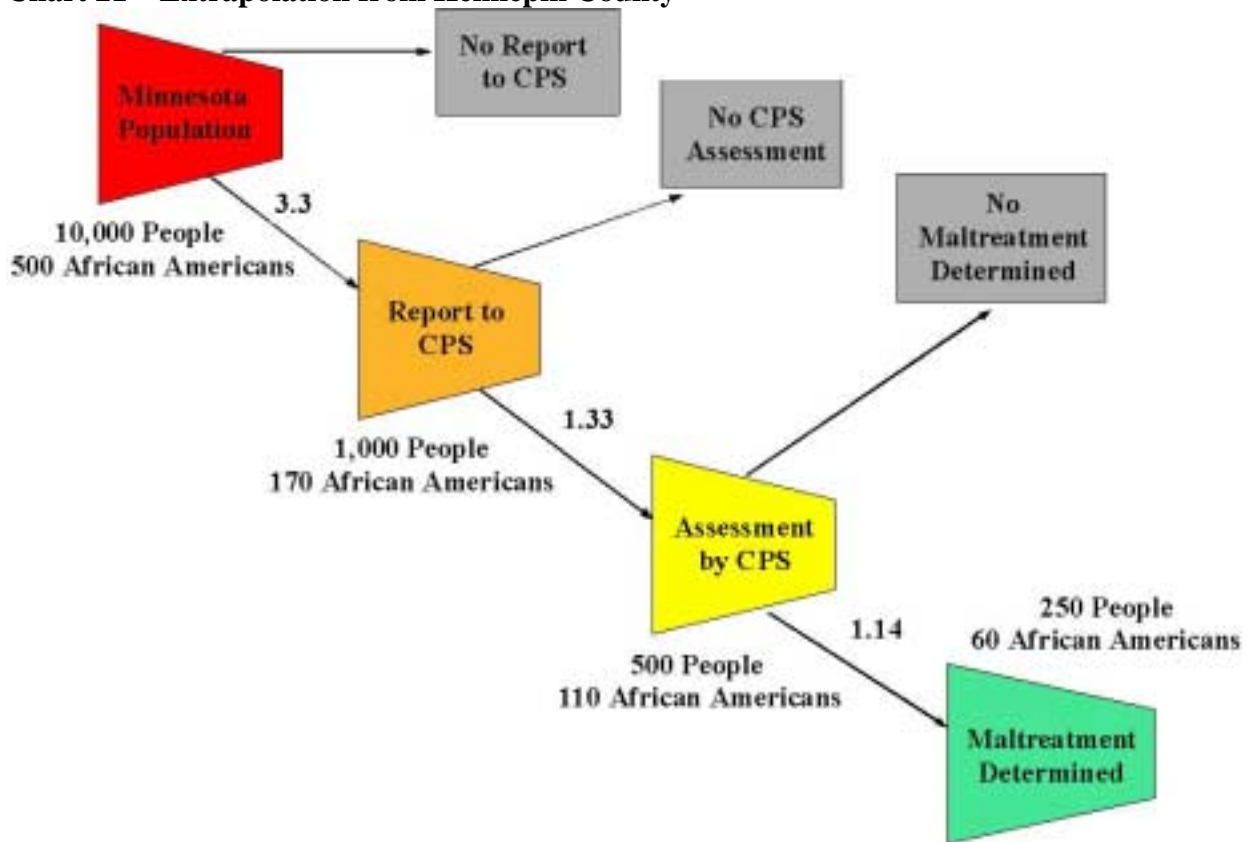


Chart 21

This chart illustrates how a disproportionate number of reports to child protection services about African American children could affect the number of African Americans at later stages in the child welfare system. Our calculations are based on data collected in Hennepin County on reports during one week in January 2002, and therefore should be only cautiously generalized to another area.

Let's assume that there are 10,000 children in the state of Minnesota, 500 (5%) of whom are African American. Given only that information, we would expect 5% of reports to child

protective services to involve African American children. However, Hennepin County received 3.3 times as many calls about African American children as the percentage of African Americans in the county child population. Therefore, we would have 165 of 1,000 reports (rather than 50 of 1,000) to child protective services about African American children. (This is assuming for simplicity that 10% of the child population is reported to child protective services.)

Assuming that half of the total reports received were assessed, we would expect half of the reports regarding African American children to be accepted for assessment. This means 16.5% (83/500) of the calls accepted for assessment involve African American children. However, we know from the 2001 SSIS data that 22% of assessed cases involve African American children. That means 110 children rather than the expected 83 were assessed, and there is a 1.33 (22/16.5) times greater chance that cases involving African Americans will be assessed.

Since maltreatment is determined in approximately half of cases accepted for assessment, we would expect half of the assessed cases involving African American children to have a maltreatment determination. This means 22% (55/250) of the assessed cases that involve African American children have maltreatment determined. From the 2001 SSIS data, approximately 25% of all assessed cases with maltreatment determinations concern African American children. That means 63 children rather than the expected 55 had maltreatment determined, and there is a 1.14 (25/22) times greater chance that cases regarding African Americans will have maltreatment determined.

Limitations and Suggestions

We were limited in our analysis by our lack of data on the first decision point (i.e. report to child protection services). Without that information, it is impossible to determine whether the origin of racial disparity is associated with the child protection system, mandated reporter guidelines, or the greater social structure. Though we were able to extrapolate some information regarding child race from the data collected by Hennepin County in a single week, this data is not necessarily representative of reports received statewide year-round. Also, because other studies have suggested a connection between maltreatment and family structure, it may be worthwhile to collect data on single parenthood, marital status, and number of children in the family.

Conclusion

In conclusion, we found that in most cases adjusting for factors such as family condition, location, and type of maltreatment lowers a child's chances of progressing to the next decision point. However, even when adjusting for these conditions and characteristics, there are still disproportionate representations of certain minorities throughout Minnesota's child welfare system. It is important to realize that ours is simply one approach, focusing on the population of children who are in the system at each decision point rather than making comparisons to the statewide population. Furthermore, we were only able to investigate the data about the last five decision points. If possible, a future study should include data about initial reports, in order to explore the extent to which racial disparity outside the system affects a child's journey through Minnesota's child welfare system.

Appendix A: Under Age 18 Population Breakdowns (Metro and Non-Metro)

Metro County Under Age 18 Population Breakdown

METRO						
County	Race/Ethnicity	<18 Population	%Alleged of Pop.	Alleged Victims	Determined Victims	%Determined of Alleged
Anoka	African American	1916	4.38%	84	47	56.0%
	White	78318	0.76%	599	325	54.3%
	Asian/Pacific Islander	1747	0.52%	9	6	66.7%
	American Indian	633	3.63%	23	22	95.7%
	Multiracial	2853	1.30%	37	27	73.0%
	Hispanic	2028	0.84%	17	15	88.2%
Carver	African American	162	6.79%	11	4	36.4%
	White	20895	0.58%	122	55	45.1%
	Asian/Pacific Islander	406	0.49%	2	0	0.0%
	American Indian	41	4.88%	2	0	0.0%
	Multiracial	314	0.64%	2	1	50.0%
	Hispanic	758	2.24%	17	10	58.8%
Dakota	African American	3108	4.54%	141	84	59.6%
	White	91539	0.58%	531	239	45.0%
	Asian/Pacific Islander	3360	0.68%	23	5	21.7%
	American Indian	454	4.63%	21	5	23.8%
	Multiracial	3715	0.70%	26	4	15.4%
	Hispanic	4157	0.65%	27	15	55.6%
Hennepin	African American	37374	7.82%	2924	1605	54.9%
	White	185458	1.00%	1862	916	49.2%
	Asian/Pacific Islander	18560	1.50%	279	177	63.4%
	American Indian	3818	11.13%	425	234	55.1%
	Multiracial	14732	5.61%	826	444	53.8%
	Hispanic	15242	3.13%	477	266	55.8%
Ramsey	African American	15128	3.59%	543	425	78.3%
	White	80650	0.64%	515	357	69.3%
	Asian/Pacific Islander	20902	0.63%	132	59	44.7%
	American Indian	1480	3.78%	56	43	76.8%
	Multiracial	7978	0.70%	56	36	64.3%
	Hispanic	10472	0.99%	104	67	64.4%

METRO						
County	Race/Ethnicity	<18 Population	%Alleged of Pop.	Alleged Victims	Determined Victims	%Determined of Alleged
Scott	African American	278	5.40%	15	9	60.0%
	White	25721	1.17%	301	152	50.5%
	Asian/Pacific Islander	233	5.58%	13	0	0.0%
	American Indian	672	1.04%	7	10	142.9%
	Multiracial	630	1.75%	11	5	45.5%
	Hispanic	953	3.57%	34	20	58.8%
Washington	African American	1228	5.62%	69	34	49.3%
	White	54674	0.96%	527	219	41.6%
	Asian/Pacific Islander	1575	1.14%	18	6	33.3%
	American Indian	184	8.15%	15	11	73.3%
	Multiracial	1628	0.43%	7	2	28.6%
	Hispanic	1753	1.71%	30	12	40.0%
Metro Total	African American	59032	6.40%	3776	2204	58.4%
	White	516360	0.84%	4335	2208	50.9%
	Asian/Pacific Islander	46377	1.02%	474	253	53.4%
	American Indian	7241	7.55%	547	325	59.4%
	Multiracial	31536	3.05%	963	518	53.8%
	Hispanic	34605	1.99%	689	395	57.3%

This table includes the racial and ethnic breakdowns of the under age18 populations in the seven Metro counties. It also has data about number of alleged victims of each race and ethnicity, and the percentage of the child population of each race and ethnicity in each county who are alleged victims of maltreatment. Furthermore, it contains the number of determined victims of each race and ethnicity, and the percentage of determined victims from the alleged victims in each county.

Non-Metro County Under Age 18 Population Breakdown

NON-METRO						
County	Race	<18 Population	% Alleged of Pop.	Alleged Victims	Determined Victims	% Determined of Alleged
All Non-Metro Counties	African American	5114	7.33%	375	189	50.4%
	White	542023	1.25%	6793	2976	43.8%
	Asian/Pacific Islander	7614	0.79%	60	22	36.7%
	American Indian	13325	5.40%	719	388	54.0%
	Multiracial	12001	1.67%	200	110	55.0%
	Hispanic	20277	2.75%	558	265	47.5%

This table includes the same data as Table 2, but for the non-metro counties. For the sake of sample size (i.e., the small minority population in most non-metro counties), all non-metro counties were grouped together.

Appendix B: Point Estimates and Standard Errors*

Assessment

Dependent Variable: Maltreatment Determination

Variable	Odds Ratio (Standard Error)	Coefficient (Standard Error)	P-Value
Domestic violence	2.861218 (0.1568788)	1.051247 (0.0548294)	0.000
Inadequate housing	2.005007 (0.1126735)	0.6956476 (0.056196)	0.000
Financial problems	1.508001 (0.0661567)	0.4107852 (0.0438705)	0.000
Public assistance	0.8878153 (0.0728551)	-0.1189915 (0.0820611)	0.147
Alcohol abuse	2.586773 (0.1410363)	0.9504112 (0.0545221)	0.000
Substance abuse	3.003864 (0.1861684)	1.0999 (0.0619763)	0.000
Physical abuse	0.8825408 (0.0692431)	-0.1249503 (0.0784589)	0.111
Threatened physical abuse	0.8038931 (0.071704)	-0.218289 (0.0891959)	0.014
Sexual abuse	1.503218 (0.078903)	0.407608 (0.0524894)	0.000
Threatened sexual abuse	0.5431193 (0.0844064)	-0.6104263 (0.1554104)	0.000
Prenatal exposure	3.515687 (0.7790776)	1.257235 (0.2216004)	0.000
Medical neglect (includes infant)	0.6820846 (0.0782679)	-0.3826016 (0.1147481)	0.001
Endangerment	1.287342 (0.0540317)	0.2525798 (0.0419715)	0.000
Inadequate supervision	1.121102 (0.0488783)	0.1143119 (0.0435984)	0.009
Educational neglect	1.831211 (0.1054488)	0.6049774 (0.0575842)	0.000
Abandonment	1.466844 (0.185301)	0.3831129 (0.1263264)	0.002
Mandated reporter	2.324257 (0.1132429)	0.8434002 (0.0487222)	0.000
Percent of families in poverty by county	1.041595 (0.0092134)	0.0407529 (0.0088455)	0.000
Twin Cities metro area	1.299655 (0.050306)	0.2620989 (0.0387072)	0.000
Interaction between public assistance and mandated reporter	1.433981 (0.1340935)	0.3604544 (0.0935114)	0.000
Interaction between physical abuse and mandated reporter	0.7889517 (0.0668225)	-0.2370502 (0.0846978)	0.005
Interaction between domestic violence and physical abuse	1.413451 (0.1274188)	0.3460342 (0.0935114)	0.000
Interaction between domestic violence and sexual abuse	0.3675031 (0.0604076)	-1.001023 (0.1643731)	0.000

Variable	Odds Ratio (Standard Error)	Coefficient (Standard Error)	P-Value
Multiracial	0.9377896 (0.061484)	-0.0642296 (0.0655626)	0.327
Asian/Pacific Islander	1.275842 (0.1188138)	0.243606 (0.0931258)	0.009
African American	1.166944 (0.0496275)	0.154388 (0.042577)	0.000
American Indian	0.8775226 (0.0578901)	-0.1306525 (0.0659699)	0.048
Hispanic ethnicity	0.9980457 (0.0629311)	-0.0019562 (0.0630544)	0.975
Constant	---	-1.751832 (0.0731569)	0.000

*=Variables listed are those that were found statistically significant or that are of special interest in this study. For a complete list of variables considered in the regression models, see Appendix D.

Referred to Child Protective Services

Dependent Variable: Child Protective Services Needed

Variable	Odds Ratio (Standard Error)	Coefficient (Standard Error)	P-Value
Domestic violence	1.474153 (0.1117904)	0.3880833 (0.0758337)	0.000
Inadequate housing	2.683089 (0.3190224)	0.9867686 (0.1189012)	0.000
Financial problems	2.388807 (0.2082535)	0.8707941 (0.0871789)	0.000
Public assistance	1.565775 (0.137347)	0.4483807 (0.0877182)	0.000
Alcohol abuse	1.836952 (0.1702275)	0.6081075 (0.0926684)	0.000
Substance abuse	3.809042 (0.4264038)	1.337378 (0.1119452)	0.000
Physical abuse	1.225164 (0.0827205)	0.2030747 (0.0675179)	0.003
Prenatal exposure	2.270758 (0.5612153)	0.8201137 (0.2471489)	0.001
Medical neglect (includes infant)	3.41129 (0.9619154)	1.22709 (0.28198)	0.000
Educational neglect	0.5657884 (0.0611072)	-0.5695351 (0.1080037)	0.000
Abandonment	3.497621 (1.109666)	1.252083 (0.3172631)	0.000
Percent of families in poverty by county	1.076982 (0.0202363)	0.0741626 (0.0187899)	0.000
Twin Cities metro area	0.606372 (0.0466145)	-0.5002616 (0.0768744)	0.000
Multiracial	1.57237 (0.194065)	0.4525841 (0.1234219)	0.000
Asian/Pacific Islander	1.265775 (0.2793445)	0.2356844 (0.2206905)	0.286
African American	1.142144 (0.0942425)	0.132907 (0.0825137)	0.107
American Indian	1.29811 (0.1987827)	0.2609092 (0.1531324)	0.088
Hispanic ethnicity	0.9119497 (0.1146962)	-0.0921705 (0.1257703)	0.464
Constant	---	-0.8216277 (0.1277637)	0.000

Recommended Out-of-Home Placement

Dependent Variable: Recommended for Out-of-Home Placement

Variable	Odds Ratio (Standard Error)	Coefficient (Standard Error)	P-Value
Educational neglect	0.4222717 (0.1009857)	-0.8621063 (0.2391487)	0.000
Severe use of alcohol or other controlled substance	0.3773273 (0.1638769)	-0.9746423 (0.4343097)	0.025
Abandonment	2.385727 (.6257383)	0.8695038 (0.2622841)	0.001
Inadequate housing	1.690937 (0.1999873)	0.5252827 (0.1182701)	0.000
Financial problems	1.254835 (0.1307128)	0.2270042 (0.1041673)	0.029
Substance abuse	2.057809 (0.2181473)	0.7216416 (0.1060095)	0.000
Multiracial	0.7912183 (0.1392983)	-0.2341813 (0.1760554)	0.183
Asian/Pacific Islander	0.7874173 (0.2901602)	-0.2389969 (0.3684961)	0.517
African American	0.7182297 (0.0942229)	-0.3309658 (0.1311877)	0.012
American Indian	1.734044 (0.2742158)	0.5504565 (0.1581366)	0.000
Hispanic ethnicity	0.8807183 (0.1556416)	-0.1270175 (0.1767212)	0.472
Constant	---	-1.478051 (0.784395)	0.000

Permanency Plan – Reunification with Parents

Success Determination Variable: Reunification

Analysis Time Variable: Days in Out-of-Home Care

Variable	Hazard Ratio (Standard Error)	Coefficient (Standard Error)	P-Value
Parent drug abuse	0.8175861 (0.076478)	-0.2013991 (0.0935412)	0.031
Caretaker inability	0.7600726 (0.0858377)	-0.2743414 (0.1129335)	0.015
Multiracial	0.8235897 (0.1085866)	-0.1940828 (0.1318455)	0.141
Asian/Pacific Islander	1.17725 (0.3996846)	0.163181 (0.3395071)	0.631
African American	1.193461 (0.0993401)	0.1768575 (0.083237)	0.034
American Indian	0.8271902 (0.1198274)	-0.1897206 (0.1448608)	0.190
Hispanic ethnicity	0.9541369 (0.1171569)	-0.0469482 (0.1227883)	0.702

Appendix C: Calculating Probabilities

In order to calculate probabilities of an event from logistic regression we use the logit link function

$$p = \frac{e^{x\beta}}{1 + e^{x\beta}}$$

where x represents an explanatory variable and β represents a coefficient, such as those listed in Appendix B. Therefore to determine the probability of a particular event with a particular set of conditions we would merely enter the responses into our link function.

The probability of a African American child in Ramsey County who is reported to CPS by a mandated reporter for being educationally neglected who is determined to have inadequate housing has the probability of maltreatment being found equal to:

$$p = \frac{e^{-1.751832 + 0.154388*1 + 0.0407529*7.4 + 0.2620989*1 + 0.8434002*1 + 0.6049774*1 + 0.6956476*1}}{1 + e^{-1.751832 + 0.154388*1 + 0.0407529*7.4 + 0.2620989*1 + 0.8434002*1 + 0.6049774*1 + 0.6956476*1}}$$

$$p = 0.752$$

Thus, this child has a .752 chance of having maltreatment determined. Calculations can be performed similarly for each of the models, with the exception of the permanency model.

The permanency regression used a Cox proportional hazard model. This regression conditions the probability of reunification on the number of days a child has spent in out-of-home placement. Thus, the baseline hazard changes as the number of days in out-of-home care changes.

For a child in out-of-home placement for 5 days the baseline hazard is 0.489. If this child is African American, but has no other risk factors that are in our model the child's probability of being reunited with their parents is:

$$p = 0.489 * e^{0.1768575 * 1} = 0.584$$

Appendix D: Variable Definitions*

Family Conditions: risks present in the family of the child being assessed

Domestic violence	1=Yes 0=No
Inadequate housing	1=Yes 0=No
Financial problems	1=Yes 0=No
Public assistance	1=Yes 0=No
Alcohol abuse	1=Yes 0=No
Substance abuse	1=Yes 0=No
None	1=Yes 0=No

Presenting Problems: types of maltreatment, alleged or confirmed

Neglect (food, shelter, clothing)	1=Yes 0=No
Physical abuse	1=Yes 0=No
Threatened physical abuse	1=Yes 0=No
Sexual abuse	1=Yes 0=No
Threatened sexual abuse	1=Yes 0=No
Mental injury	1=Yes 0=No
Prenatal exposure	1=Yes 0=No
Medical neglect (includes infant medical neglect)	1=Yes 0=No
Endangerment	1=Yes 0=No
Inadequate supervision	1=Yes 0=No
Educational neglect	1=Yes 0=No
Emotional neglect	1=Yes 0=No
Chronic and severe use of alcohol or controlled substance	1=Yes 0=No
Abandonment	1=Yes 0=No

Reason Cited: reason given for a child's placement in out-of-home care

Physical abuse	1=Yes 0=No
Sexual abuse	1=Yes 0=No
Neglect	1=Yes 0=No
Parent alcohol abuse	1=Yes 0=No
Parent drug abuse	1=Yes 0=No
Parent incarceration	1=Yes 0=No
Child reasons: child alcohol abuse, drug abuse, disability, and behavior	1=Yes 0=No
Caretaker inability	1=Yes 0=No
Abandonment/Relinquishment	1=Yes 0=No
Inadequate housing	1=Yes 0=No

Days in care: number of days that a child spends in out-of-home care during an episode

Percent of families in poverty by county: percent of families living below the federal poverty line by county
Data taken from Census 2000

Twin Cities metro area

Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington counties =1

Otherwise=0

Victim Disabilities

No known disability	1=Yes 0=No
Chemical dependency (substance abuse) – alcohol	1=Yes 0=No
Chemical dependency (substance abuse) – drugs	1=Yes 0=No
Developmentally disabled, mental retardation only	1=Yes 0=No
Developmentally disabled, mental retardation with other developmental disability	1=Yes 0=No
Developmentally disabled, without mental retardation	1=Yes 0=No
Emotional disturbance, child less than age 18, not severe	1=Yes 0=No
Emotional disturbance, child less than age 18, severe	1=Yes 0=No
Hearing impairment	1=Yes 0=No
Speech impairment	1=Yes 0=No
Visual impairment	1=Yes 0=No
Specific learning disability	1=Yes 0=No
Physical disability, ambulation limited	1=Yes 0=No
Physical disability, ambulation not limited	1=Yes 0=No
Adult mental illness, serious and persistent (SPMI)	1=Yes 0=No
Adult mental illness, acute	1=Yes 0=No
Adult mental illness, other	1=Yes 0=No
HIV/AIDS	1=Yes 0=No
Traumatic Brain Injury (TBI)	1=Yes 0=No
Other clinically diagnosed condition	1=Yes 0=No
Fetal alcohol syndrome	1=Yes 0=No
Other	1=Yes 0=No
Unknown	1=Yes 0=No

Age -1 to 18 years of age****Gender** 1=Female 0=Male**Race**

African American	1=Yes 0=No
American Indian	1=Yes 0=No
Asian/Pacific Islander	1=Yes 0=No
Multiracial	1=Yes 0=No
White	1=Yes 0=No

Ethnicity 1=Hispanic 0=Non-Hispanic

* All definitions are consistent with those used by the Minnesota Department of Human Services

** Age -1 is associated with cases of prenatal exposure

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