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# Physical Child Abuse and Cultural Differences in Reporting

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PHYSICAL CHILD ABUSE AND CULTURAL DIFFERENCES  
IN REPORTING

By

Emily Frances Reed

Bachelor of Arts  
California State University, Sacramento  
2009

A thesis submitted in partial fulfillment  
of the requirements for the

Master of Arts - Criminal Justice

Department of Criminal Justice  
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ABSTRACT

**Physical Child Abuse and Cultural Differences  
in Reporting**

by

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Previous research using both National Child Abuse and Neglect Data System (NCANDS) data and other sources has found that biases do exist with regard to racial differences. The current study will build on past research of biases in the Child Protective Services (CPS) involvement and reporting. This study uses a secondary data set, the 2009 NCANDS dataset; which consists of child specific data of all investigated reports of maltreatment to state CPS agencies. This research seeks to determine if there are disparities in cases reported to and substantiated by CPS as reflected by race (Black, White, & Hispanic children) and the roles of family stressors on the substantiation outcomes of the cases. This study looks at Nevada and the comparison states of Kentucky and New Mexico.

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## CHAPTER 1

### INTRODUCTION

Silence is killing our children, both physically and mentally. Our culture's habit of keeping the dark shadow of child abuse hidden allows the cycle to continue. Child abuse is present at every level of our society and within every culture. This paper is an attempt to raise the voices of those in need.

One form of child abuse that is not discussed as much as it should be is physical abuse. Physical child abuse can be defined as:

non-accidental physical injury (ranging from minor bruises to severe fractures or death) as a result of punching, beating, kicking, biting, shaking, throwing, stabbing, choking, hitting (with a hand, stick, strap, or other object), burning, or otherwise harming a child, that is inflicted by a parent, caregiver, or other person who has responsibility for the child. Such injury is considered abuse regardless of whether the caregiver intended to hurt the child. Physical discipline, such as spanking or paddling, is not considered abuse as long as it is reasonable and causes no bodily injury to the child (Child Welfare Information Gateway, 2008, p. 2).

Given this general definition of physical child abuse it is important to recognize that each state's definition varies slightly to exclude or include certain behaviors.

The question of racial bias in our society is one as old as our society itself and needs to be considered in an assessment of child abuse. The question of racial bias in child abuse is generally a question of whether one race is more prone to abuse than another or whether differences represent bias in how cases are reported and substantiated. The National Incidence Studies of Child Abuse and Neglect (NIS) routinely reports no significant racial

differences in overall substantiated instances of child abuse and neglect (Fluke, Yuan, Hedderson, & Curtis, 2003). However, Black children and other minorities are reported to authorities and removed from their homes at much higher rates than Whites (Hill, 2004). According to the Children's Data Bank (2012), in 2010 Black children made up about 14 percent of all children; however they accounted for about 29 percent of all children in foster care. Black children are four times more likely to be in foster care than White children (Children's Defense Fund, 2011). The questions raised by these facts are: Are we handling cases differently? Are all races and ethnicities being treated the same? By these standards, it is possible White children being abused and not receiving the help they need. Conversely there may be minority children who are being separated from families for matters that could be handled in home with help of social services.

Minorities, more specifically Blacks, make up a disproportionate share of physical child abuse cases that are reported to child protective services across the country (Lu, Landsverk, Ellis-Macleod, Newton, Ganger, & Johnson, 2004). Black children are also more likely to be placed in out of home care and less likely to be reunited with their family of origin than all other racial and ethnic groups (Lu et. al., 2004). Many studies have shown that families living in stressful conditions, such as: low socioeconomic conditions (Dietz, 2000; Drake & Zuravin, 1998; Euser, Ijzendoorn, Prinzie, & Bakermans-Kranenburg, 2010; Fontes, 2002; Miller, Fox, & Garcia-Beckwith, 1999; Whipple & Richey, 1997; Whipple & Webster-Stratton, 1991), single parent households (Dietz, 2000; Euser et. al., 2010; Lindholm & Willey, 1986; Overpeck, Brenner, Trumble, Trifiletti, & Berendes, 1998; Whipple & Richey, 1997; Whipple & Webster-Stratton, 1991), those who have multiple children (Dietz, 2000; Euser et. al., 2010; Miller et. al., 1999; Whipple & Richey, 1997), those with a lower level of education (Dietz, 2000; Euser et. al., 2010; Overpeck et.al., 1998; Whipple & Richey, 1997; Whipple & Webster-Stratton, 1991), or parents who were abused

as children (Miller et. al., 1999; Straus & Donnelly, 2009; Whipple & Richey, 1997) have a higher likelihood of becoming perpetrators of physical child abuse. Minorities are more likely to live under these risk factors or conditions than Whites. Corporal punishment, a common practice in the United States, has also been found to be a major pathway to physical child abuse (Straus & Donnelly, 2009; Whipple & Webster-Stratton, 1991) although it has been largely unacknowledged by research on physical child abuse.

Previous studies using data from the National Child Abuse and Neglect Data System (NCANDS) have shed some light onto the prevalence of child abuse in the United States as it pertains to officially reported Child Protective Services (CPS) data. This study looks to extend that research by determining if Black, White, and Hispanic CPS cases are being treated similarly by considering both the number of cases reported to CPS and the percentage of cases substantiated.

## CHAPTER 2

### REVIEW OF RELATED LITERATURE

Studying physical child abuse to better understand the how and why, will allow us to grasp the complete context so that we can fully understand and hopefully one day solve the problem. The relevant context extends beyond just the initial abuse and becomes larger than just the individual children or families involved; research must consider the interaction of social status and access to social services for different families. Also relevant in examining abuse are the differences of various cultures in child rearing practices and how easily traditional methods of one culture can be viewed as abuse in another. It is also important to look at the impact of child abuse on an international scale and understand the Unites States' place in the global fight against child abuse. A review of these topics below provides the framework for the current exploration of physical child abuse.

#### Consequences of Physical Child Abuse

The need for study of physical child abuse is spurred by the information on serious lifelong effects experienced by victims of abuse. A 1991 report by Salzinger, Feldman, Hammer, and Rosario compiled previous findings on the personal consequences of victims of physical child abuse. They were able to group these consequences into five behavioral domains, "neurological functioning, intellectual functioning, affective or socio-emotional behavior, social behavior, and social cognition" (p. 70). Neurological functioning refers to the "neurological or physical impairment and is the most immediate and direct effect of physical abuse" (p. 70). Intellectual functioning refers to learning problems. These problems have been found at a higher rate among physically abused children than in those who were not. In addition, multiple studies show developmental status and intellectual capabilities to be delayed in abused children. Salzinger et. al. (1991) further state that, affective or socio-

emotional behavior is the quality of child-parent attachment, abused children are less likely to have the ability to form and maintain positive affective ties with other people. The relationship of insecure attachment that result from abuse leads to later socio-emotional problems including but not limited to impulsivity, lower self-esteem frustration, lack of self-control, and depression. Social behavior refers to the child's understanding of social relationships. Abused children are more hostile, aggressive, and more likely to exhibit delinquent behavior. The final domain is social cognition; this domain is the least studied of the five and has the least direct evidence. Social cognition suggests that due to the child's social history as a result of being physically abused there may be distortions in the way they evaluate others' behavior. Abused children may evaluate moral and social transgressions differently than non-abused children.

#### Minorities Social Status and Use of Social Services

Due to the more stressful conditions in which many minorities often live than those of higher socioeconomic status, minorities may be at a higher risk to be perpetrators of child abuse. The living conditions of minorities, more specifically Blacks, are more often than not much harsher than those of White families or even Asian families. Black children are three times more likely to live in poverty than White children (Costello et. al., 2001). In addition, American Indian/Alaska Native, Hispanic, Pacific Islander, and Native Hawaiian families are more likely than White and Asian families to live in poverty (Costello et. al., 2001). Although Asian families are less likely to live in poverty, this is often because they have four to five family members working and contributing to the family (Le, 2008). According to the U.S. Census Bureau (2010), of those families receiving public assistance in 2010, 54% were White (compared to being 65% of the total population), 32% Black (16%),

2% Asian (4.5%), and 11% all other races and all race combinations (15%). Blacks are clearly over represented among those receiving public assistance and those living in poverty.

There may be factors that are experienced at a higher rate for some culturally specific groups that lead to the family stressors that often precede child abuse. The Children's Defense Fund (CDF) has launched a campaign designed to attack the "Cradle to Prison Pipeline"; this is the pathway of poverty, hunger, homelessness, and despair that increases the likelihood of incarceration. The CDF's report "Portrait of Inequality 2011" confirms that the minority living conditions listed above are most often the greatest for Blacks. The CDF reports that Black children are four times as likely as White children to be in foster care and seven times as likely to have a parent in prison. Black babies are more than twice as likely as White babies to be born to a teen mother. In 2008 Black males age 18 and over comprised 5 percent of the total college student population, and 36 percent of the total prison population. Furthermore for those few who obtain a master's degree, the income gap between Blacks and Whites with this level of education is \$20,000 (Children's Defense Fund, 2011). In short minorities are far more likely to live in areas and find themselves in situations that would cause high levels of stress. High levels of parental stress have been found to be associated with child abuse, especially when combined with "difficult" child behavior or temperament (Whipple & Webster-Stratton, 1991).

Blacks are disproportionately more likely to come into contact with mental health agencies (Chow, Jaffee, & Snowden, 2003). Regardless of being in a high poverty or low poverty area, Blacks are at a higher risk for involuntary psychiatric commitment. Chow and colleagues also report that even in low poverty areas Blacks were four times more likely than Whites to be referred for commitment by the criminal justice system. In 2005,

Asian/Pacific Islander and White children ages 6 to 18 were more likely to have parents with higher levels of educational attainment than were Black, Hispanic, and American Indian/Alaska Native children. In 2005, the percentages of 16 to 24 year olds who were high school status dropouts were highest among Hispanics and Blacks compared to Whites and Asian/Pacific Islanders. In addition Black and Hispanic students were also the most likely to attend high-poverty schools, while Asian/Pacific Islander students were the most likely to attend low-poverty schools. Education is important because for all racial and ethnic groups the median income increased as the education attainment increased. However there is still disparity among the educated once attained. Asian/Pacific Islanders and White males and females had higher median incomes than those of other racial/ethnic groups. (National Center for Education Statistics, 2007).

The living conditions of minorities are often vastly different than the majority. It may be possible that these living conditions place them in situations that make it more difficult to hide child abuse. For example, it may be that close living conditions in many urban areas may make it more likely for neighbors to hear or see the abuse. Due to low socioeconomic status they may be more likely to check into social service agencies that have reporting requirements. Lack of funds may cause parents to take a child to the emergency room for care rather than a private family doctor where it may be easier to cover-up abuse. These compounding factors may cause higher rates of referrals from social service agencies for minorities.

### From Corporal Punishment to Child Abuse

A number of leading researchers argue that legal forms of corporal punishment are some of the major causes of physical abuse today (Straus & Donnelly, 2009). The use of corporal punishment as a means of discipline in the United States is a sensitive subject.



Although the use of corporal punishment is very common in the U.S., 90 percent of all Americans hit toddlers (Straus & Donnelly, 2009), it is a practice that is largely undiscussed. Corporal punishment can be defined as, “the use of physical force with the intention of causing a child to experience pain, but not injury, for the purpose of correction or control of the child’s behavior” (Straus & Donnelly, 2009, p. 4). Often corporal punishment begins in infancy, reaches its peak around ages three to four, and then declines. However, for at least one out of five, hitting begins in infancy and does not end until they leave home (Straus & Donnelly, 2009).

For those who use corporal punishment, the line between discipline and abuse may begin to blur the closer one gets to abuse. In trying to explore how a disciplinary tactic used by 90% of the U.S. population becomes a risk factor, research has highlighted some differences in its application. From an analysis of previous studies on physical discipline and physical child abuse, Whipple & Richey (1997), conclude that part of the distinction between corporal punishment and child abuse is the frequency of spanking within 24 hours. They found the average amount of spanking done by non-abusive parents is 2.5 times within a 24 hour period; those who crossed over to abuse spanked six or more times per day. They go on further to say that when looking at the numbers, the parent-child interaction is also a marker when acquainted with other risk factors for known abuse such as “willful intent to harm the child, routine use of harsh discipline that is inappropriate to the child’s age or transgression, or a strong parental belief in authoritarian means of control” (p. 439). Straus and Donnelly (2009) give a more encompassing view of how corporal punishment may lead to physical child abuse. The most direct level is the initial incident. This is the sequence of events: the parent spanks the child, the child rebels rather than complies; finally the parent gets angrier and escalates the violence directed at the child and crosses the line from legal punishment into abuse. At the developmental level, the more

often that corporal punishment is used, the risk becomes greater that it will escalate to child abuse because corporal punishment does not help the child to develop an internalized conscience and leads to more physically aggressive behavior by the child. The macro-level creates a social climate, like the United States, that approves of violence to correct wrongdoing making both the parent and the public more tolerant of physical abuse. Lastly at the inter-generational level, corporal punishment increases the chances that as an adult he or she will approve of interpersonal violence, be in a violent marriage, and be depressed; all of which influence physical child abuse (Straus & Donnelly, 2009).

A common justification for the use of corporal punishment is the Bible. The Book of Proverbs, 13:24 states “He who spares the rod hates his son, but he who loves him is careful to discipline him.” Huber (1981, as cited in Deley, 1988) argues that the rod most likely refers to a shepherd’s staff, which was used to guide rather than hit. Carey (1994) further interprets this, implying that carefully disciplined children are loved and those who do not discipline are not properly caring for their children. The proverb itself, if interpreted in this manner, makes for a poor justification for physical punishment. The overall biblical argument for corporal punishment is perhaps a better argument for diligence in the care for your child. While the most basic corporal punishment, spanking or the slapping of a hand, has a low level of physical harm, and it is again as Straus and Donnelly (2009) suggest that it is the mounting stress and “difficult children” provide an easy pathway to more harmful child abuse.

### Fatal Child Abuse

The study of physical child abuse aids our understanding of fatal child abuse; as suggested by Korbin (1989) fatalities are the result of a recurring pattern that failed to be deterred earlier by intervention. Korbin identifies a framework in which mothers are

engaged in a recurring abusive pattern affected by environmental factors in addition to the parent child interactions. In this framework the fatal incident is not a solitary incident. The women in this study did not intend to kill the child, just to punish the child; they were unable to distinguish between the degree of force used in the fatal incident and previous incidents. In their 1993 study using data from the National Center for Health Statistics and the FBI's Uniform Crime Reports, McClain et. al. found that about 85% of child abuse or neglect deaths are not recorded as child abuse or neglect deaths. Another study by Overpeck et. al. (1998) reviewed records from multiple systems after the cause of death was determined by the medical examiner found that substantiated abuse could have been involved in 7 to 27 percent of the deaths that had initially been filed as unintentional. Further, they found that between 1988 and 1991 the average number of homicides per year (within the first year after birth) was 356, with the true rate being most likely double that on the basis of studies of underascertainment (Overpeck et. al., 1998). In a 1999 study, Herman-Giddens et. al. (1999) found that biological parents were the perpetrators in 63% of fatal child abuse cases; male caregivers, biological parents, and caregivers of children younger than 1 year are the most common perpetrators. The problem with studying and predicting fatal child abuse is that the actual number of confirmed cases is so small that accuracy is a problem. Creighton (1995) states that the "difficulty of predicting anything where the actual probability of occurrence is so low is the very large number of false positives it produces" (p. 324).

Filicide is the term applied to children who are killed by their parents; the term is specific to this perpetrator victim relationship (Korbin, 1989). Due to the low number of reported child abuse deaths, information beyond the number of deaths per state cannot be released by the federal government. The actual amount of child abuse deaths is difficult to determine because they can easily be miscoded as "deaths due to natural causes, accidents,

or injuries of undetermined intentionality” (McClain, Sacks, Froehlke, & Ewigman, 1993, p. 338). Due to the fact that definitions of child abuse vary in each county and state, what may or may not fall under the veil of child abuse changes, leading to miscoded deaths and statistics that cannot be compared across jurisdictions. Creighton (1995) notes that fatal child abuse is often underestimated due to “the legal difficulty of proof, where an abused child dies of ‘natural causes’ including accidents, misdiagnosed ‘sudden infant death syndrome’ and the lack of identification of a child’s body” (p. 319). Other problems in reporting include: restrictions in the coding, incomplete or inaccurate information in police reporting, lack of perpetrator information, and the lack of a national system of reviewing child homicide cases (Herman-Giddens et. al., 1999).

#### Cultural Differences in Child Abuse

In a melting pot society such as the United States, people from every part of the world are represented. Individuals from each of those geographical locations bring with them a set of cultural beliefs that affect how they raise their children. Our families of origin, in addition to legal parameters, shape our judgments about appropriate parenting and abusive behavior. Deviance from a cultural norm makes intervention more likely but diversity between groups may blur what constitutes abusive practices (Finkelhor & Korbin, 1988) Appropriate childhood behavior also varies culturally further complicating judgments of discipline and parenting strategies. In addition to the cultural population mix, it is important to take into account that we have a generational immigrant mix as well. The rearing practices of a third generational Hispanic family and one that has just immigrated are going to differ somewhat even though they share the same cultural background.

The United Nations in the Conventions on the Rights of the Child notes the importance of the traditions and cultural values necessary for the protection and

harmonious development of the child (U.N. General Assembly, 1989, p. 3). Cultural values play a major role in the shaping the way a child is raised. A 2002 study by Ferrari looked at the role of culture in child rearing and definitions of maltreatment. This study found differences in the way different cultures nurture; Black and European American parents, who were found to have equal levels of nurturing, were found to be considerably more nurturing than Hispanics. Additionally Black parents were more likely to use physical punishment than European American or Hispanic parents. An interesting finding in this study is the interaction of nurturing behaviors and physical punishment. Black parents were high in both. Consequently it was found that it is the pairing of nurturance and physical punishment that is clearly expressed in Black families that helps to protect children from negative consequences (Ferrari, 2002).

Fontes (2002) examined Latino families, who reported finding it especially important that their children be well behaved and represent the family well in public. When a Latino child acts out in public it would not be uncommon to respond immediately and physically, placing them at a greater risk of being of being reported to CPS. Latino parents also tend to be stricter and more authoritative than non- Latino White or Black parents. Part of the authoritative nature of the Latino family may be due in part to their recent histories in slavery and colonization (Fontes, 2002; Payne, 1989). Researchers argue that the community works as a parenting partner in Latino families. Extended family, friends, and neighbors all contribute through resource sharing and freely correcting bad behavior. It would also be common to dismiss a professional who seems to be criticizing the way that their parents raised them due to strong family loyalties (Fontes, 2002). An earlier study on the corporal punishment practices of Latino's, by Payne (1989), looked at Caribbean parents. Historically the Caribbean region is known for "the excessive use of corporal punishment from an early age" (p. 390). They found that slightly more than 70 percent of

respondents generally approved of parental use of corporal punishment; showing a widespread support in Barbados. Previously used methods of burning/scalding and lashing out with anything at hand are now practices that are widely disapproved of. Currently socially approved methods of corporal punishment are commonly restricted to the use of a leather belt or strap, commonly kept exclusively for punishing, which was seen as less likely to cause serious injury or leave permanent marks. The use of the belt or the strap is seen as a ritual element that helps to hinder overemotional reaction by the parent (Payne, 1989).

The Black culture, like the Latino, is also deeply rooted in slavery. Straus and Donnelly (2009) states that:

many, if not most, African-Americans, both lay persons and social scientists, also argue that 'strong discipline' in the form of corporal punishment is necessary to keep children out of trouble in an environment where trouble lurks on every block. Some also argue that corporal punishment is part of black culture (p.117).

The Black experience, whether the past history of slavery or the modern urban jungles, can be a violent experience. Teaching a child what not to do swiftly, through corporal punishment, minding elders and following rules historically could save that child's life in a real life situation.

Asian Americans also tend to interpret the lasting effects of abuse differently than child victims of other racial and ethnic groups. Asian victims are more apt to internalize the negative effects of maltreatment experiences. They are also less likely to develop inappropriate sexual behaviors, anger, or to report the abuse; however they are more likely to attempt suicide and internalize their feelings (Zhai & Gao, 2009).

## International Child Abuse Law

Finkelhor and Korbin (1988) seek to define child abuse on an international level, defining child abuse as, “the portion of harm to the children that results from human action that is proscribed, proximate, and preventable” (p.4). The action is proscribed if the human action is negatively valued at the same time that it causes harm. In terms of proximity the actions, which result in child abuse, have rather direct harmful consequences. Finally the preventability implies that there is an alternative to the actions that could have avoided the harm. From this same international perspective, Finkelhor and Korbin (1988) break physical child abuse down into five different categories: parental child battering, institutional child battering, child homicide, children caught in intergroup hostilities, and children permanently impaired by culturally prescribed rituals and child rearing practices.

The Convention on the Rights of the Child is a global treaty adopted in 1989 by the United Nations. 192 countries have since ratified it. This treaty is the most widely accepted, and the quickest to be ratified in history. The treaty has even been accepted by non-state entities such as the Sudan People’s Liberation Army, which is a rebel movement in southern Sudan (UNICEF, 2005). When creating the treaty the United Nations asserted that childhood is entitled to special care and assistance. In light of this they recognize that across the world there are children living in remarkably difficult conditions, and that these cases require special attention (U.N. General Assembly, 1989). Article 19 of the treaty reads:

1. States Parties shall take all appropriate legislative, administrative, social and educational measures to protect the child from all forms of physical or mental violence, injury or abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse, while in the care of parent(s), legal guardian(s) or any other person who has the care of the child.

2. Such protective measures should, as appropriate, include effective procedures for the establishment of social programmes to provide necessary support for the child and for those who have the care of the child, as well as for other forms of prevention and for identification, reporting, referral, investigation, treatment and follow-up of instances of child maltreatment described heretofore, and, as appropriate, for judicial involvement (U.N. General Assembly, 1989, p. 9).

The Committee on the Rights of the Child is an internationally elected body, in order to insure that those who ratified the treaty are following the guidelines, the committee requires them to submit regular reports on the on the status of children's rights in the country. Only the United States, Somalia, and South Sudan have yet to ratify the treaty. Somalia cannot currently ratify because it has no recognized government. The United States has signaled their intentions but have yet to ratify (UNICEF, 2005). The United States is failing our children, and without good reason. As of July 9, 2011 South Sudan was not a country. They are currently recovering from the decade's long fight to gain their independence and build the infrastructure necessary to be an independent country (Lindsey, 2013). Somalia, like the United States still has not signed the treaty, however, on the 24<sup>th</sup> anniversary of the Committee on the Rights of the Child, Somali President Hassan Sheikh Mohamud announced that they will soon be ratifying the treaty (Lindsey, 2013). The United States is seriously falling behind in child rights, with no plans to even consider signing in the near future it is clear that children are not one of our top priorities.

Important to consider in relation to this research project, the abolishment of corporal punishment has become an international movement. Currently 31 nations have abolished corporal punishment in the family and 119 countries have abolished corporal punishment in schools. The United States has yet to abolish either (Center for Effective



Discipline, 2011). If the United States cannot come forward as a nation and establish that there are boundaries to the punishments that we impose upon our children. Then we are powerless to protect our children. We are failing our children from every side when we see that we as a nation cannot come together to sign a treaty to protect a child's basic rights, but we are also failing those children we are trying to protect by ignoring our problem of disproportionate minority contact by CPS.

### Racial Differences in Abuse

#### *Previous Research Using NCANDS*

The federal government was given a more direct role in child protection in 1974 when the Federal Child Abuse Prevention and Treatment Act established uniform operating standards with respect to the identification and management of child maltreatment cases (Lewit, 1994). An overarching problem is that each state uses their own definitions of child abuse and has their own system of reporting and documenting their cases. Very little is done by uniform agencies where information can be gathered and studied on a national basis. Despite its limitations the National Child Abuse and Neglect Data System (NCANDS) is the major uniform reporting service for the United States, and the leading source of information on abuse for large scale studies. There is still great discretion within the NCANDS system as to which specific actions comprise different forms of abuse and neglect under the various state laws from which they gather their data (Lewit, 1994).

A few studies have considered possible racial bias in the NCANDS; specifically class differences in the cases reported. Ards, Myers, Chung, Malkis, and Hagerty (2003) and Drake and Zuravin (1998) both looked at the role of possible racial disparities in the child abuse cases and the over representation of Black or lower class families. These articles looked at

four types of potential bias: visibility, labeling, reporting and substantiation bias. Visibility bias implies that families who are of lower socioeconomic status are more visible to potential reporters (such as welfare or other social service agencies) due to a higher use of public services. Labeling bias refers to the propensity of potential reporters to look for and therefore find abuse among specific groups (Drake & Zuravin, 1998). Reporting bias is identically situated abused children from different races that are reported to Child Protective Services (CPS) at different rates. Substantiation bias implies that identical cases are not substantiated at the same rates (Ards, Myers, Chung et. al., 2003). Ultimately both studies reached the same results in which racial bias in the reporting system does not account for the racial disparities in observed maltreatment. However Ards, Myers, Chung et. al. (2003) found when looking at exposure bias in the National Incidence Study of Child Abuse and Neglect (NIS) as compared to NCANDS, that welfare recipients that were White had an alleged child abuse rate is 3 per 1,000, while the Black rate is 1.4 per 1,000. This finding is important because it may suggest that Whites' underexposure to the welfare system shields them from the scrutiny that comes from high reporting and substantiations leaving their rates below those of Blacks in the official statistics. Another interpretation of this is that the system may care more about White children that are abused, and if identified, are more likely to intervene.

Another 2003 study by Ards, Myers, Malkis, Sugrue, and Zhou, looked at the role of systematic bias in racial disproportionality in reported and substantiated child abuse and neglect. This study focused on Minnesota because they lead the nation in disproportionality in child maltreatment. Data was analyzed from the Social Service Information System, Minnesota's mandatory system for sharing data, in combination with the NCANDS data. Disproportionality was measured at two points in the process; it was found there was greater disproportionality in the pre-assessment stage than later in the process. Due to the

fact that the minorities reside primarily in three of the eighty-seven counties in Minnesota, aggregation bias was also looked at. When the measure of aggregation was controlled in substantiation rates the measure of discrimination was not eliminated, it could at best bias the size of discrimination but not explain it away. The bulk of the disproportionality between minorities and the total population in reported and substantiated cases appears to arise in the steps prior to the assessment of maltreatment. The authors' come to the following conclusion, "Disparities exist. Disproportionalities exist. Children of color in the child welfare system are treated differently than white children . . . We find discrimination; somebody is discriminating" (Ards, Myers, Malkis et. al., 2003, p. 390-391).

The investigation and victimization stages were analyzed by Fluke, Yuan, Hedderson, & Curtis (2003) using the NCANDS data set, focusing on more than 700,000 children in five states. A disproportionality representation index (DRI) was used to measure both investigation and victimization, a score with a value close to 1 were defined as consistent with no disproportionality and a score of greater than 1 indicate that disproportionality other than the norm. Almost all counties showed the DRI for Black children of above 1, whereas the same measure for white children was rarely observed above 1. Even though it is not possible to determine how many referrals were screened out, it could still be indicated that regardless of how many were screened out the community of professionals and non-professionals are referring a disproportionate number of Black children to CPS. Conversely it could not be argued that large amounts of White children were being screened out due to the fact that they are being referred in a proportionate number or slightly under their distribution in the population. The authors were able to conclude, "the observed disproportionality of Blacks in child welfare may be most influenced at the entry of children into the system when they are accepted for investigation or assessment" (Fluke et. at., 2003, p. 372).

In an analysis of the 2005 NCANDS data set, Knott and Donovan (2010) studied the disproportionate representation of Black children placed in foster care. This study looked at the interrelationship of child, caregiver, household, abuse and race factors with the removal CPS investigated child from parents and guardians. It was found that the data supports evidence that CPS foster care placement is associated with race of the investigated child. More specifically Black racial status is linked with foster care placement. Black children experienced 44% higher odds of foster care placement than White children.

In a more recent study by Mumpower (2010), using NCANDS 2006 data along with data from the NIS-4 and the State of California, disproportionality at the “front end” of the welfare system was analyzed. The “front end” of the welfare system refers to the child maltreatment reporting and substantiation phases of the process. Breakdown of the datasets found that just over 30% of all child abuse and neglect cases were identified and substantiated by CPS agencies. Although the rate of referrals is higher for blacks than all other groups, the rate that cases were substantiated was roughly the same between all groups. This implies that the primary cause of disproportionality falls at the earliest stage when mandated reporters and other sources make referrals. Cases may be substantiated at roughly the same rate; however, Blacks are still disproportionately represented in term of substantiated referrals. Overall they found that the reporting and substantiation phases work differently for Blacks than they do Whites or Hispanics in terms of diagnosing and detecting child maltreatment. Specifically the system proves to be less accurate for Blacks, the rate of correct errors is lower and false positive errors are higher (Mumpower, 2010).

#### *Previous Research Outside of NCANDS*

Several studies have been conducted using data collected outside the more frequently used NCANDS research, this section explores a few of those studies. In one of the

earlier studies on reporting bias, Hampton and Newberger (1985), looked at race and class bias in reporting by hospitals. This is an important area because it has been found that physician and hospital reports are more likely to be admitted as valid than other sources. This study used data from the National Study of the Incidence and Severity of Child Abuse and Neglect (NIS). Their findings are consistent with others finding that Black and Latino families are more likely to be reported; social class and race are the most important perpetrator characteristic that was able to distinguish between substantiated and unsubstantiated cases. It was also found that though hospitals reported cases more frequently than other agencies, they failed report large numbers of cases, which should have been reported. One explanation that is offered up in relation to this is that the label of “child abuser” is more likely to be applied to those who did not have similar characteristics as they did, especially socioeconomic status when the injury was not determined serious. The authors imply that we may be unfairly condemning poor, non-white families as evil, and conversely selectively ignoring child abuse in affluent majority homes (Hampton & Newberger, 1985).

In a 2001 study, Kapp, McDonald, & Diamond, utilized the Kansas Families for Kids (KFFK) CARE database. This is a child tracking database that contains all the children referred from the Kansas Department of Social and Rehabilitation Services to the Lutheran Social Service of Kansas and Oklahoma, which is now the organization which handles adoptions in Kansas following the privatization in 1996. The goal of the study was to analyze the pathway to adoption for children of color in the public child welfare system. The cases studied were all identified as having adoption as the goal. The pathway to adoption begins with the referral followed by the adoption process, and finally the adoption outcome. This study supports previous research that the progression of the child welfare system is unique for Blacks, they are over-represented at various stages of the process and the

process tends to last longer. The authors suggest that including more minority professionals in this process may help to address these trends (Kapp et. al., 2001).

In a 2004 study by Lu, Landsverk, Ellis-Macleod, Newton, Ganger, and Johnson, which evaluated 1990-1991 data from the Foster Care Mental Health Project, came to the same conclusions as the above data analysis; finding that Blacks are over represented and there does appear to be bias in the system. Lu et. al. provided a few possible explanations for these results the first being that Black families found themselves living in conditions that placed them in a higher risk category than other families (such a low socioeconomic status, single parent households or lower levels of education). These multiple factors then increase the number of opened cases, foster care placements, and a decreased likelihood of family reunification. The second possible explanation provided is that these minority families are perceived as being more dysfunctional by child service workers than other families.

### Theoretical Explanations

There are many theoretical explanations that could be applied to explain the differences that may make minorities more likely to experience the stressors associated with CPS reports of physical child abuse, such as strain, cultural deviance, or social control theories. However, the theories that best relate to this study are critical race theory and multiple marginality theory. Both of these theories fall under the umbrella of social justice, they seek to explain how police might create a more level playing field between whites and minorities.

#### *Critical Race Theory*

Critical Race Theory (CRT) investigates the role of policy and law as they serve to privilege whites and disadvantage Blacks and other non-Whites. There are currently no

studies that apply CRT to child abuse cases, this is an area of study that merits further investigation. CRT theorists sought to reveal the widespread racism in American society and its capacity to constrain the life chances of minorities. The foundation of the problem is the emphasis that courts, policy makers and educators place on the fairness of structure versus the fairness of the outcomes or results (Rashid, 2011). This is the idea “that society is fundamentally racially stratified and unequal, where power processes systematically disenfranchise racially oppressed people” (Hylton, 2012, p. 24). The consequence of this system is the massive underachievement and failures of minorities, which is “ignored or dismissed as being due to their supposedly maladaptive culture rendering them uneducable” (Rashid, 2011, p. 589). This study proposes that bias in CPS involvement or substantiation of cases that are referred to the criminal justice system is due to policy or law which may have a more detrimental effect on blacks as opposed to whites; the framework of CRT can be used to explain the potential differences.

### *Multiple Marginality Theory*

Multiple marginality theory is an all-encompassing theory that draws from many multilayered ecological, economic, social, cultural, and psychological situations that act and react simultaneously; it is the unfolding and interpretation of these situations that suggests a developmental sequence (Vigil, 1988, p. 1). Multiple marginality allows for a “*macro* (group history), *meso* (family history), and *micro* (life history) descending order of analysis . . . to show through time how ecological and economic conditions create sociocultural stresses and ambiguities, which in turn, lead to subcultural and psychological mechanisms of adjustment” (Vigil, 1988, p. 11). Freng & Esbensen (2007) state that a fundamental component to the theory of marginality is the importance of ecological or economic stressors, including low socioeconomic status and a lack of connection or involvement in

society that can be created by segregation and discrimination. Much like Vigil's (1988) study of Barrio gang life, it could be proposed that the economic hardships, or stressors, undermine social control institutions. When applied to this study this theory may explain that family life becomes stress ridden and contacts with the criminal justice system or CPS become problematic. Due to marginality in ecological, economic, social, cultural, and psychological factors, these minorities are at risk of being physical abusers.

### Purpose of the Study

Previous research using both NCANDS data and other sources has found that biases do exist with regard to racial differences. For example, Ards, Myers, Malkis et. al. (2003) and Fluke et. al. (2003) both found that disparities exist at the child's entry into the system, prior to assessment. It is still unclear, however, if the biases stem from those making and substantiating the referrals, or if they are more dependent on outside factors such as stressors that are more likely to be found in the living situations of minorities. It is important to further explore where the bias originates so that resources can be more effectively sourced to those areas. The current study will build on past research of biases in CPS involvement and reporting, and seek to answer the following questions:

1. Are there disparities in cases reported to CPS as reflected by race? Are minority children (Black and Hispanic) reported in higher numbers than their representation in the population at large?
2. Are there differences in the rates of family stressors reported by race? Do family stressors play a role independent of race on abuse report disposition?
3. Are minority (Black and Hispanic) cases more likely to be substantiated?
4. Are there racial differences in system involvement such as foster care placement or juvenile delinquency system participation?



5. Do the child abuse rates seen in Nevada look similar to comparison states?

## CHAPTER 3

### METHODOLOGY

This research sought to determine the effects that race plays in CPS reported physical abuse cases. Previous research determined that minorities are more likely to exhibit life stressors that have been demonstrated to be precursors of physical child abuse. This research sought to determine whether minorities are represented in higher numbers relative to their overall population and if family stressors play a role in case substantiation. In addition to analyzing the outcomes of these cases, this research looked at whether minorities were more likely to be referred to foster care or juvenile court petitions, and/or have their cases substantiated.

#### NCANDS Data Set

The current study used a secondary data set, the 2009 NCANDS dataset; which consists of child specific data of all investigated reports of maltreatment to state child protective service agencies (CPS). The NCANDS provides demographics of children and their abusers, type of maltreatment, investigation dispositions, risk factors, and services provided as a result of the investigation. Data is voluntarily submitted by states, and consists of all investigations or assessments of alleged child maltreatment that received a disposition in the reporting year (National Data Archive on Child Abuse and Neglect, 2011). Approval to use this secondary data was granted by the University of Nevada, Las Vegas IRB (#1008-3541M).

## Child Fatalities

Due to the low number of child fatalities, providing the state, county, age, and race of the child would allow them to be identified in a database so that information was redacted in NCANDS. Although the details cannot be reviewed by state, the numbers that our country reports as a whole, merit review. In 2009, forty-nine states reported 1,676 child fatalities; of these Nevada reported a total of 29. Of the United States as a whole, the racial breakdown of child fatalities is as follows: White 39.2%, Black 29.1%, Hispanic 17%, unknown 11.2%, multiple race 2.7%, American Indian/Alaskan Native 0.4%, Asian 0.4%, and Pacific Islander 0.1% . Further more, of the total of fatalities, 23.2% of those deaths were attributed to solely physical child abuse, and 36.7% to multiple maltreatment types (U.S. Department of Health and Human Services, 2010). The percentages of child fatalities in comparison to their general population is shown in Table 1; this table shows the great disparities between actual population representation and each racial groups percentage of child fatalities. These numbers suggest that there is a greater need for intervention and education in certain minority communities.

Table 1

*Child Fatalities in the United States*

	General Population (%)	Child Fatalities (%)
White	78.1	32.9
Black	13.1	29.1
Hispanic	16.7	17
Multiple Races	2.3	2.7
American Indian/Alaskan Native	1.2	0.4
Asian	5	0.4
Native Hawaiian/Other Pacific Islander	1.2	0.1

Nevada Demographics

Nevada has been racially and ethnically diverse from its beginnings. Just after Nevada's statehood in 1864, the 1870 Census found that Nevada had the highest figure of foreign-born population of any state and three times the national percentage of immigrants (Wright, 2004). According to the 2010 U.S. Census, Nevada has a total population of 2,700,551, and a White population (77.7%) almost mirrors that of the U.S. population (78.1%). Nevada's Black population is lower (8.6%) than that of the U.S. as a whole (13.1%). In every other group Nevada's population is close to or exceeds that of the national population: American Indian/Alaskan Native (NV 1.6%, US 1.2%); Asian (NV 7.7%, US 5%); Native Hawaiian/Other Pacific Islander (NV 0.7%, US 0.2%); Persons of two or more races (NV 3.7%, US 2.3%); and Hispanic or Latino origin (NV 27.1%, US 16.7%). In Nevada the median household income from 2006-2010 is \$55,726, compared to the national median of

\$51,914. In Nevada 11.9% of the population is living below the poverty level compared to 13.8% of the national population (U.S. Census Bureau, 2012). To get a more in depth economic picture of the U.S., when looking at home foreclosures (for September 2012) Nevada had 2,366, foreclosed properties, which accounts for 1 in every 496 housing units. In comparison 1 in every 730 housing units received a foreclosure filing Nationally in September 2012 (Realty Trac, 2012). By far Nevada's worst statistic economically is the unemployment rate. Nevada ranks 51 on the state list with a rate of 11.8% (U.S. Department of Labor, 2012a), in comparison to the national unemployment rate of 7.9% (U.S. Department of Labor, 2012b). This data would suggest that Nevada is a state that experiences family stressors associated with child abuse at a high rate.

#### Comparison State Demographics

Due to Nevada's diverse population being largely located in the Las Vegas area with sparse population throughout the majority of the state, choosing a state with similar populations was rather difficult. For the purpose of this study the comparison states of New Mexico and Kentucky were chosen.

##### *New Mexico*

New Mexico was chosen due to being a contiguous neighbor to Nevada and having a similar state population of 2,059,179. According to the 2010 U.S. Census New Mexico's White population is slightly higher than the U.S. percentage at 83.4%. New Mexico's Black population falls at 2.5%, American Indian/Alaskan Native at 10.1%, Asian at 1.6%, Native Hawaiian/Other Pacific Islander 0.2%, persons of two or more races 2.3%, and Hispanic 46.7%. In New Mexico the median household income is \$43,820, and the percentage of persons below the poverty level between 2006-2010 is 18.4% (U.S. Census Bureau, 2012). In New Mexico the number of foreclosed properties is 1,223 or 1 in every 737 homes

(Realty Trac, 2012). The ranking for New Mexico on the Unemployment Rates for States is fifteenth with an unemployment rate of 6.4% (U.S. Department of Labor, 2012a).

*Kentucky*

Kentucky was chosen as a comparison state because their Black population most closely resembles that of Nevada. The 2010 U.S. Census lists Kentucky’s total population as 4,339,367 and the White population is the highest of the comparison states at 88.9%.

Kentucky’s Black population falls at 8%, American Indian/Alaskan Native at 0.3%, Asian at 1.2%, Native Hawaiian/Other Pacific Islander 0.1%, persons of two or more races 1.6%, and Hispanic 3.2%. The median household income in Kentucky is \$41,567, and the percentage of persons below the poverty level between 2006-2010 is 17.7% (U.S. Census Bureau, 2012).

The number of foreclosed properties in Kentucky is 1,211 or 1 in every 1,591 homes (Realty Trac, 2012). The ranking for Kentucky on the Unemployment Rates for States is 35<sup>th</sup> with an unemployment rate of 8.4% (U.S. Department of Labor, 2012a).

Table 2

*Economic Breakdown by State*

	Median Household Income	Percent of Persons Below the Poverty Level	Foreclosed Property Rate	Unemployment Rate
Kentucky	\$41,576	17.7%	1 in 1591	8.4
New Mexico	\$43,820	18.4%	1 in 737	6.4
Nevada	\$55,726	11.9%	1 in 496	11.8
United States	\$51,914	13.8%	1 in 730	7.9

## Measures

### *Independent Variables*

The variable maltreatment type that was used was physical child abuse cases (1=physical abuse) (National Data Archive on Child Abuse and Neglect, 2011).

This study utilized two victim characteristic variables from the NCANDS database as independent variables. The first of these variables is race and ethnicity. There are a series of items that categorize the child's race and ethnicity. These items all had a yes/no response and are as follows: Child race American Indian or Alaskan Native; Child race Asian; Child race Black or African American; Child race Hawaiian or other Pacific Islander; Child race White; Child race undetermined; and child ethnicity referring to a child of Hispanic or Latino ethnicity (i.e., Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race).

The second independent variable considered in this study was the child being a prior victim. This refers to the existence of previous substantiated or indicated incidents of the maltreatment to the child. Responses of this variable are limited to yes, no, or unknown/missing (National Data Archive on Child Abuse and Neglect, 2011).

Variables related to family stressors that lead to physical child were also used as independent variables. Prior research has linked these stressors to abuse. These variables all had a yes/no response, including alcohol abuse-caretaker(s) referring to the principal caretaker(s) compulsive use of alcohol that is not of a temporary nature; Drug abuse-caretaker(s) compulsive use of drugs that is not of a temporary nature; Domestic violence meaning incidents of inter-spousal physical or emotional abuse; Inadequate housing referring to the substandard, overcrowded, unsafe, or otherwise inadequate housing

conditions including homelessness; and, Financial problem meaning the family's inability to provide sufficient financial resources to meet minimum needs.

The relationship of the perpetrator to the victim was also examined. In the original data source, this variable broke down into a number of categories: parent; other relative (non foster parent); relative foster parent; non-relative foster parent; group home or residential facility staff; child daycare provider; unmarried partner of the parent; legal guardian; other professionals; friends or neighbors; foster parent; other; or unknown or missing (National Data Archive on Child Abuse and Neglect, 2011).

Finally to explore possible bias in case outcomes or case handling, agency involvement was considered. The variables of juvenile court petitions and foster care services were analyzed. Both items had yes/no responses. Juvenile court petition refers to a legal document filed with the court requesting that the court take action regarding the child's status as a result of the investigation. Foster care services referred to services of activities associated with 24 hour substitute care for all children placed away from their parents or guardians and for whom the State agency has placement and care responsibility (National Data Archive on Child Abuse and Neglect, 2011).

#### *Dependent Variable*

The dependent variable in this study was the case substantiation. This was determined by the variable report disposition; this is the conclusion reached by the responsible agency regarding the report of maltreatment (1=substantiated; 2=indicated or reason to suspect; 3=alternative response disposition-victim; 4= alternative response disposition-not a victim; 5=unsubstantiated; 6= unsubstantiated due to intentionally false; 7=closed-no finding; 88=other; 99=unknown or missing) (National Data Archive on Child Abuse and Neglect, 2011).



## Victim Demographics

The first data that was analyzed was the demographics and characteristics of the physical child abuse victims. This information is presented in Table 4 by state. Gender was more likely to be male across in Kentucky and Nevada. In New Mexico was it was more likely to be female by 0.1%. Interesting when compared to state gender populations, in both Kentucky and Nevada there was a higher percentage of male victims (2.2% in Kentucky: 2.9% in Nevada). It is also important to note that Kentucky had a high number of missing gender entries (167) when compared to the other states. With regards to the child's age, New Mexico's average age was much higher than the other states at 10.72 years. The median age in Kentucky was 8.37. Nevada's average age fell considerably lower than the others at 7.29 years. When analyzing the child's race, while the majority of the victims are White, the state breakdown of the racial populations as compared to the racial victim population tells a different story. To compare the total population of children in each racial group by state, the assumption was made that the percentage of children in each state would be represented in the same racial percentages as reported at the state level.

In Nevada, Kentucky and New Mexico, American Indian and Alaskan Native victim populations were similar to representation in the state (i.e., <1% difference, victim numbers went slightly over 100% due to being allowed to select more than one ethnicity). The same was seen for Hawaiian and Pacific Islander populations (i.e., <1% difference). Asian populations were similar in Kentucky and New Mexico (i.e., <1% difference). In Nevada the Asian population may have seen underrepresentation as they were only 2.8% of reported victims but represent 7.7% of the state population.

Black children are represented in the abuse victim population at higher rates than represented in the general population in all three states. In Kentucky, Black children

makeup 8% of the population but account for 16.8% of the victims. In New Mexico Black children were 2.5% of the state population but 4.6% of victims. Nevada saw the largest discrepancy in Black representation with 8.6% in the state population but 23% of the victims.

Table 3

*Victim Demographics by State*

	Kentucky	Victim%	New Mexico		Nevada	
	State%		Victim%	State%	Victim %	State %
	(n = 12,110)		(n = 4,348)		(n = 5,701)	
<b>Gender:</b>						
Male	52.2%	49% <sup>1</sup>	49.8%	49%	52.9%	50%
Female	46.4%	51%	49.9%	51%	47.1%	50%
Unknown/Missing	1.4%	N/A	0.3%	N/A	0%	N/A
<b>Age:</b>						
Mean	8.37		10.72		7.29	
<b>Child's Race:<sup>2</sup></b>						
A. I. / A. N. <sup>3</sup>	0.2%	0.3%	7.5%	10.1%	2%	1.6%
Asian	0.3%	1.2%	0.8%	1.6%	2.8%	7.7%
Black	16.8%	8%	4.6%	2.5%	23%	8.6%
H / P. I. <sup>4</sup>	0.1%	0.1%	0.3%	0.2%	1.8%	0.7%
White	80.1%	88.9%	89.7%	83.4%	75.7%	77.7%
Undetermined	4.9%	N/A	1.6%	N/A	1.8%	N/A
Two or More Races	N/A	1.6%	N/A	2.3%	N/A	3.7%
<b>Ethnicity:</b>						
Hispanic/Latino	3.4%	3.2%	61.6%	46.7%	30.1%	27.1%

Note: <sup>1</sup> (U.S. Census Bureau, 2011) <sup>2</sup> Child's race may add up to slightly above 100% because victims may select multiple ethnicities (e.g., Kentucky adds up to 102.4, New Mexico to 104.5 and Nevada to 107.1%) <sup>3</sup>A. I./A. N. represents American Indian and Alaskan Native. <sup>4</sup> H/P.I. represents Hawaiian/Pacific Islander.

White children were the only racial category where victim percentages did not exceed the expected population across all states. White children make up 88.9% of the population and 80.1% of the victims in Kentucky. In Nevada the expected population is 77.7%, however they account for 75.7% of victims. Only in New Mexico was the expected population, 89.7%, higher than the percentage of victims at 83.4%.

The assumption was also made that the ethnicity of the victims would match the state representations, e.g., persons of Hispanic or Latino origin. Hispanic or Latino children made up 3.2% of the population and 3.4% of the victims in Kentucky. In New Mexico Hispanic or Latino children comprise 46.7% of the population, however, account 61.6% of the victims. In Nevada Hispanic or Latino children make up 27.1% of the population, and 30.1% of the victims.

Due to the low representation of American Indian/Alaskan Native, Asian, and Pacific Islander/Hawaiian Native victims, from this point forward minority will refer to Black and Hispanic populations only.

#### Perpetrator Characteristics

Also analyzed were characteristics pertaining to perpetrators including family stressors. One important perpetrator characteristic that this research planned to consider was the relationship of the offender to the victim. Unfortunately nearly all relationships coded were parental and that could reflect state's definition of abuse. In Nevada, for example, CPS only records familial abuse. This variable proved to be unusable due to restrictions in range and was not included in analyses

### *Family Stressors*

To explore the stressors placed upon the family unit the variables of alcohol or drug abuse by the caretaker, domestic violence, inadequate housing, and financial problem were looked at. Unfortunately, in majority of these cases data on these variables were not recorded. Due to the bulk of these variables reporting missing data, it is difficult to draw solid conclusions from these numbers. New Mexico consistently reported the most valid data responses across these variables. Table 4 presents the findings of these variables. The variables of alcohol abuse and drug abuse were combined because both variables had identical reporting levels across all three states which implied that they were coded together in the original data source.

Table 4

*Perpetrator History Variables*

	Kentucky % (n = 12,110)	New Mexico % (n = 4,348)	Nevada % (n= 5,701)
Alcohol & Drug Abuse:			
Yes	0.2	25.1	3.6
No	1.4	74.9	67
Missing	98.5	0	29.3
Domestic Violence:			
Yes	3.5	10.7	2.1
No	94.5	89.3	68.5
Missing	2	0	29.3
Inadequate Housing:			
Yes	1.6	1.8	0.3
No	96.4	98.2	70.4
Unknown/Missing	2	0	29.3
Financial Problem:			
Yes	0.02	16.1	1.1
No	1.5	83.9	69.5
Unknown/Missing	98.5	0	29.3

When groups showed a significant difference on a factor, follow up analyses using Least Squared Differences (LSD) post-hoc test were undertaken to see which states varied from each other. All of the family stressor variables and external interventions differed significantly from each other. In cases with alcohol and drug abuse ( $F = 348.118 (2, 8556)$ ,  $p < .001$ ) Kentucky differed from New Mexico but did not differ from Nevada, however New Mexico did differ Nevada. Nevada differed from Kentucky and New Mexico for the variable of inadequate housing ( $F=18.505 (2, 20243)$ ,  $p < .001$ ). For financial problems ( $F=298.992$

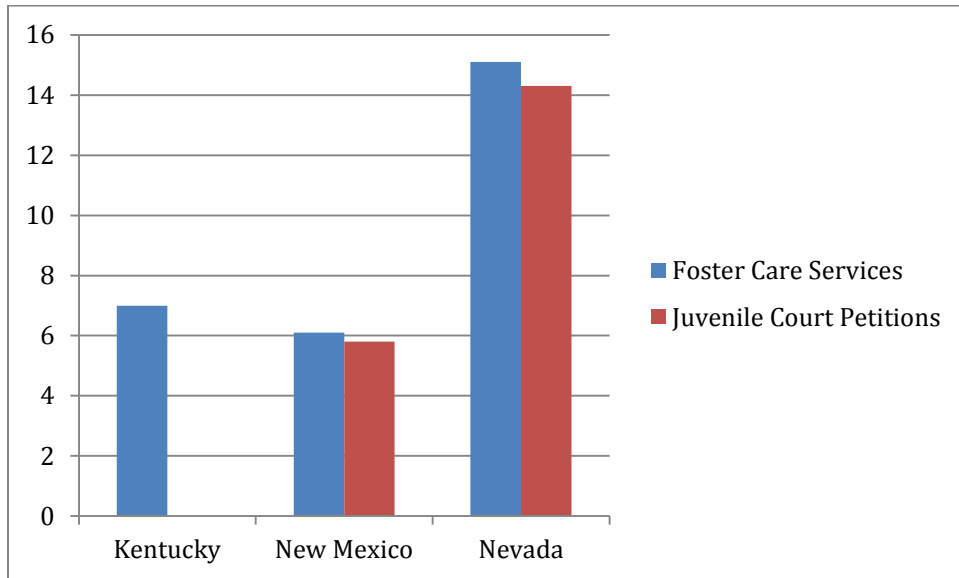
(2, 8556),  $p < .001$ ) New Mexico differed Kentucky and Nevada, however there was no difference between Kentucky and Nevada.

#### External Interventions

Of the physical child abuse cases, those that required the referral to foster care services or involved a juvenile court petition could be seen as more serious cases requiring further intervention. Foster care services refer to 24 hour substitute care for child placed outside the care of their parents or guardians with whom the State has placement and care responsibility (National Data Archive on Child Abuse and Neglect, 2011). A juvenile court petition is a legal document filed with the court requesting that the court take action as a result of the investigation. These petitions usually request that the child be declared a dependent or delinquent child, or placed in an out of home setting (National Data Archive on Child Abuse and Neglect, 2011). Follow up analyses using Least Squared Differences (LSD) post-hoc test were undertaken to see which states varied from each other. For both external intervention variables, juvenile court petition ( $F=125.201$  (2, 10947),  $p < .001$ ) and foster care services ( $F=188.771$  (2, 22156)  $p < .001$ ), Nevada differed from Kentucky and New Mexico, however there was no difference between Kentucky and New Mexico. Figure 1 shows the percentage of cases that were referred for further services.

Figure 1.

Referrals for Further Services



Due to the low numbers of juvenile court petitions in Kentucky (92.6% of the cases reported unknown or missing) made it impractical to compare Kentucky on this variable. Both Nevada and New Mexico did not have any missing data for these variables. Kentucky had no missing data for foster care services. Nevada was over double the comparison states for both foster care referrals and juvenile court petitions. These numbers suggest that Nevada is much more likely to seek punitive results for physical child abuse than the comparison states.

Report Disposition

Report disposition refers to the conclusion that was reached by the agency. The substantiation rates varied significantly between the three states ( $F = 89.58 (2, 22122)$ ,  $p < .001$ ). Overall Nevada had the highest percentage of substantiated physical child abuse cases at 25.8%. Table 5 shows the percentage of cases that were substantiated broken down

by race and ethnicity. Nevada had the highest percentage of substantiated Black cases at 33.3%. In cases where the victim was White, Nevada had the highest percentage of substantiated cases at 24.4% followed by New Mexico 21%; and Kentucky 16.2%. New Mexico had a significantly greater percentage of cases where the child victim was determined to be of Hispanic or Latino ethnicity (61.6%), this is expected as they also have the highest Hispanic population, however they had the lowest rate of substantiated Hispanic or Latino cases at 20.8%. This is compared to Kentucky with 29.1% of their Hispanic or Latino cases substantiated, and Nevada at 26.2%.

Table 5

*Substantiated Cases by State and Race*

	Kentucky		New Mexico		Nevada	
	N	(%)	N	(%)	N	(%)
Black	348	(19.9)	40	(20.4)	436	(33.3)
White	1457	(18.5)	795	(21)	1054	(24.4)
Hispanic	58	(30.6)	533	(20.8)	425	(26.2)

Table 5 shows the number and percentage of substantiated cases for each race by state. The rates of substantiation vary by race. Among Black children, Nevada substantiated a significantly higher percentage of physical abuse cases than Kentucky and New Mexico ( $F = 39.96$  (2, 3242),  $p < .001$ ). Kentucky and New Mexico rates did not differ significantly from each other using the LSD post-hoc test. Among white children, Nevada again had the highest substantiation rate and all three states differed significantly from each other ( $F = 42.26$  (2, 16381),  $p < .001$ ). Among Hispanic children, Kentucky showed the highest substantiation rate ( $F = 11.23$  (2, 4372),  $p < .001$ ) but post-hoc tests showed that it only differed significantly from New Mexico's rate. Nevada's rate was also significantly higher than New Mexico's.



Figure 2. Substantiated Cases

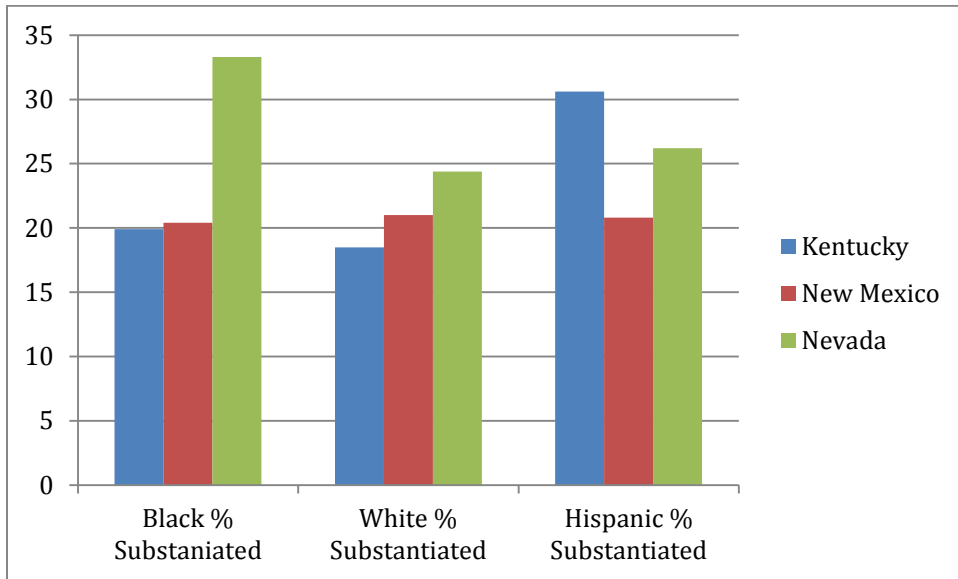


Figure 2 shows the percentages of substantiated cases separated by race in order to be compared across the states and to allow comparisons between racial groups. It can be seen that the Black cases are substantiated at a much higher rate than Whites. Hispanic cases fall in the middle however they are quite high compared to their general population. Figure 2 shows in detail the great disparity between the White population and the low substantiation rate. If in fact physical child abuse is evenly distributed between all racial groups, then there is a great disparity in the substantiation rate that requires further research and perhaps policy changes in either reporting or substantiation procedures.

## CHAPTER 4

### FINDINGS OF THE STUDY

The National Child Abuse and Neglect Data System has considerable variation in the consistency of data reported in child abuse cases for victim and perpetrator characteristics. These limitations meant that not all of the data was available for the cases across the three states. Final analyses include those variables that provided enough data to be relevant.

White physical abuse was alleged at rates equivalent to their representation in the state populations, however was substantiated at low rates compared to their overall population in all states. Black victims, consistent with previous research, are reported as alleged victims of physical child abuse at much higher percentages than their population representation. Black cases are substantiated at much lower rates compared to the number of alleged Black cases, yet their rates are still high compared to their general population, as well as when compared to the substantiations of other races. Hispanic cases were reported fairly close to their population representation in Kentucky; their substantiation rate was also fairly equal to their alleged rate. In New Mexico and Nevada the substantiation rate was much lower compared to their alleged rate and their general population rate.

#### Correlations

A two-tailed correlation test was used to find correlations between race and family stressors. A correlation was done by state for two reasons. First, the states differed in amount of data detail available. Second, when state was used as a variable in the correlation matrix, all other variables besides state were not statistically significant. This showed that the differentiations between the three states were high. Tables 6 through 8 show the correlation between race and family stressors for each state. Due to the high number of cases this study will only be looking at the .01 findings and not the .05 findings.

Table 6

*Race and Family Stressors for Kentucky*

	Alcohol/Drug Abuse	Domestic Violence	Inadequate Housing	Financial Problem	Foster Care Services	Child Race Black	Child Race White	Child Ethnicity Hispanic	Prior Victim
Alcohol/Drug Abuse	1								
Domestic Violence	.018	1							
Inadequate Housing	-.030	.093**	1						
Financial Problem	.309**	-.027	-.010	1					
Foster Care Services	-.036	.039**	.101**	.160*	1				
Child Race Black	.075	.036**	.033**	.048	.109**	1			
Child Race White	.057	.034**	.034**	.026	.114**	.968**	1		
Child Ethnicity Hispanic	-.074	.055**	.055**	.089	.254**	.230**	.235**	1	
Prior Victim	.002	.014	.008	.138	.122**	.214**	.219**	.307**	1
Report Disposition	.159*	.243**	.172**	.048	.041**	.037**	.033**	.050**	.017

Note: \*Correlation is significant at the 0.05 level (2-tailed) \*\* Correlation is significant at the 0.01 level (2-tailed)

Table 7

*Race and Family Stressors for New Mexico*

	Alcohol/Drug Abuse	Domestic Violence	Inadequate Housing	Financial Problem	Foster Care Services	Child Race Black	Child Race White	Child Ethnicity Hispanic	Prior Victim
Alcohol/Drug Abuse	1								
Domestic Violence	.179**	1							
Inadequate Housing	.100**	.109**	1						
Financial Problem	.187**	.166**	.165**	1					
Foster Care Services	.158**	.157**	.317**	.282**	1				
Child Race Black	.011	.041**	.012	.016	.031*	1			
Child Race White	.013	.018	.017	.021	.018	.882**	1		
Child Ethnicity Hispanic	.026	-.006	.021	.045**	.024	.661**	.728**	1	
Prior Victim	.064**	.046**	.063**	.080**	.149**	.028	.021	.016	1
Report Disposition	.195**	.188**	.139**	.210**	.290**	.026	.014	.011	.055**

Note: \*Correlation is significant at the 0.05 level (2-tailed) \*\* Correlation is significant at the 0.01 level (2-tailed)

Table 8

*Race and Family Stressors for Nevada*

	Alcohol/Drug Abuse	Domestic Violence	Inadequate Housing	Financial Problem	Foster Care Services	Child Race Black	Child Race White	Child Ethnicity Hispanic	Prior Victim
Alcohol/Drug Abuse	1								
Domestic Violence	-.041**	1							
Inadequate Housing	.037**	-.011	1						
Financial Problem	.007	-.022	-.008	1					
Foster Care Services	.172**	.027	.060**	.039*	1				
Child Race Black	-.034*	-.044**	-.005	-.044**	.090**	1			
Child Race White	.041**	.019	.013	.039*	-.053**	-.709	1		
Child Ethnicity Hispanic	.001	.056**	.013	.010	.009	-.217**	.308**	1	
Prior Victim	.058**	-.024	.008	.023	.240**	.091**	-.044**	-.020	1
Report Disposition	.212**	.066**	.024	.019	.450**	.089**	-.057	.002	.093**

Note: \*Correlation is significant at the 0.05 level (2-tailed) \*\* Correlation is significant at the 0.01 level (2-tailed)

The correlations that proved to be the most significant (0.01 level) for each state are as follows:

- Kentucky, New Mexico, and Nevada:
  - Families who experienced domestic violence were more likely to receive a substantiated case disposition (.243; .188; .066).
  - Families who experienced inadequate housing were more likely to have children placed in foster care services (.101; .317; .060).
  - Prior victims were more likely to be placed in foster care services (.122; .149; .240).
- Kentucky and New Mexico:
  - Families who experienced domestic violence were more likely to experience inadequate housing (.093; .109) and foster care services (.039; .157).
  - Black children are more likely to experience domestic violence (.036; .041).
  - Families who experienced inadequate housing were more likely to receive a substantiated case disposition (.172; .139).
  - Children who were placed in foster care services were more likely to receive a substantiated case disposition (.041; .290)
- Kentucky and Nevada:
  - Hispanic children are more likely to experience domestic violence (.055; .056).
  - Black children were positively correlated foster care services (.109; .090).
- New Mexico and Nevada:
  - Families who experienced alcohol and drug abuse are more likely to experience inadequate housing (.100; .037).

- Families who experienced alcohol and drug abuse were more likely to have children placed in foster care services (.158; .172).
- Families who experienced alcohol and drug abuse were more likely to be prior victims (.064; .058).
- Families who experienced alcohol and drug abuse were more likely to receive a substantiated case disposition (.195; .212).
- Being a prior victim was positively associated with receiving a substantiated report disposition (.055; .093).Kentucky:
  - White children are more likely to experience domestic violence (.034).
  - Black, White and Hispanic children were positively associated with inadequate housing (.033; .034; .055).
  - White children were positively correlated to foster care services (.114).
  - Hispanic children were positively correlated to foster care services (.254).
  - Black, White, and Hispanic children were positively correlated with being prior victims (.214; .219; .307).
  - Black, White, and Hispanic children were positively correlated with receiving a substantiated report disposition (.037; .033; .050).
- New Mexico:
  - Families who experienced alcohol and drug abuse are more likely to experience domestic violence (.179)
  - Families who experienced alcohol and drug abuse problems were more likely to experience financial problems (.189).
  - Families who experienced domestic violence were more likely to experience financial problems (.166).

- Families who experienced domestic violence were positively correlated with being prior victims (.046).
- Families with inadequate housing were more likely to experience financial problems (.165).
- Families who experienced inadequate housing were positively correlated with being prior victims (.063).
- Families with financial problems were more likely to have children placed in foster care services (.282).
- Hispanics were more likely to experience financial problems (.045).
- Families who experienced financial problems were positively correlated with being prior victims (.080).
- Financial problems were positively correlated with receiving a substantiated report disposition (.210).
- Nevada:
  - Alcohol and drug abuse were negatively correlated with domestic violence (-.041).
  - White families were more likely to experience alcohol and drug abuse (.041).
  - Black children are less likely to experience domestic violence (-.044).
  - Black children were less likely to experience financial problems (-.044).
  - White children were less likely to be referred to foster care services (-.053).
  - Black children were more likely to be both prior victims and receive a substantiated report disposition (.091; .089).
  - White children were less likely to be prior victims (-.044).

Kentucky was fairly even across all three racial/ethnic groups, they were all positively associated with situations of domestic violence, inadequate housing, and prior



victimization and subsequently positively associated with foster care placement and substantiated report disposition. Repeat victimization is prevalent among all races in Kentucky, in Nevada it was only prevalent among Black and White children whereas in New Mexico it was not significantly correlated among any of the races. In New Mexico, Black children were more likely to be in situations of domestic violence and Hispanic children were more likely to experience financial problems. These were the only significant correlations to the family stressor variables in regards to race. This is compelling because in New Mexico family stressors were found to be the only significantly related to each other, prior victimization and case substantiation. In Nevada Black children were less likely to be in situations alcohol or drug abuse, domestic violence, inadequate housing or financial problems, but were still more likely to have foster care placements. White children in Nevada were negatively correlated to foster care placements. Black children were positively associated with substantiated report disposition, while White children were negatively correlated to substantiated report disposition.

### Regression Analysis

Regression analysis was used to determine the relationships between variables, specifically considering the relationship between a dependent variable (case disposition) and the independent variables (race, repeat victimization, alcohol and drug abuse, domestic violence, financial problems, parent as perpetrator, foster care and juvenile court petition). Regression analysis was used in this study to help us understand which of the independent variables were predictors of the case disposition of physical child abuse cases or those being substantiated.

Table 9 through 11 show the regression analysis for each of the three states. The tables display the regression model for the prediction of report disposition using first child characteristics in step one, in order to determine if race was a significant factor in predicting the outcome. Family characteristics were then applied in step two, to determine these factors were more significant than race, and if once applied to see if race was still as significant.

Table 9

*Regression Model for Prediction of Report Disposition in Kentucky Using Child and Family Characteristics*

	Predictor	B	S.E.	β	Sig
Step 1	Child Black	-0.172	.142	.842	.224
	Child White	-0.415	.138	.660	.003
	Child Hispanic	0.381	.179	1.463	.033
	Child Prior Victim	.185	.066	1.203	.005
Step 2	Child Black	-0.231	.153	.794	.130
	Child White	-0.525	.149	.592	.001
	Child Hispanic	0.403	.492	1.497	.035
	Child Prior Victim	0.222	.072	1.248	.002
	Inadequate Housing		.234	.096	.001
	Domestic Violence	-2.591	.163	.075	.001
	Foster Care	-1.101	.088	.333	.001

For Kentucky the high number of missing or uncoded cases for juvenile court petitions, alcohol and drug abuse, and financial problem required that these three variables not be included. In step one of Kentucky's analysis the child's race being White and Hispanic proved to be a significant predictor. When the family characteristics were added to the equation the child's race being White and Hispanic remained significant. The family stressors of inadequate housing and domestic violence that proved significant. Being a prior victim and foster care placement also were significant predictors.

Table 10  
*Regression Model for Prediction of Report Disposition in New Mexico Using Child and Family Characteristics*

	Predictor	B	S.E.	$\beta$	Sig
Step 1	Child Black	-.410	.219	.664	.061
	Child White	-.335	.147	.715	.023
	Child Hispanic	-.070	.085	.932	.407
	Child Prior Victim	-.072	.097	.930	.459
	Juvenile Petition	-2.302	.147	.100	.000
Step 2	Child Black	-.280	.222	.756	.207
	Child White	-.220	.151	.802	.145
	Child Hispanic	-.118	.087	.888	.173
	Child Prior Victim	.004	.100	1.004	.966
	Juvenile Petition	-1.135	.480	.321	.018
	Alcohol/Drug Abuse (Caretaker)	-.688	.088	.503	.000
	Domestic Violence	-.736	.116	.479	.000
	Inadequate Housing	-.495	.289	.610	.087
	Financial Problem	-.631	.102	.532	.000
	Foster Care	-.656	.471	.519	.164

In New Mexico, White was the only race that was a significant predictor of substantiation in step one of the analysis. Juvenile petition was significant in step one of the analysis, and remained significant in step two after the addition of the family characteristics. In step two none of the race variables were significant, however the family characteristics of alcohol/drug abuse, domestic violence, and financial problem were significant predictors.

Table 11

*Regression Model for Prediction of Report Disposition in Nevada Using Child and Family Characteristics*

	Predictor	B	S.E.	$\beta$	Sig
Step 1	Child Black	.225	.159	1.252	.156
	Child White	.029	.163	1.030	.857
	Child Hispanic	-.030	.106	.970	.776
	Child Prior Victim	-.341	.102	.711	.001
	Juvenile Petition	-3.505	.135	.030	.000
Step 2	Child Black	.271	.161	1.311	.092
	Child White	.023	.165	1.023	.891
	Child Hispanic	-.035	.108	.966	.749
	Child Prior Victim	-.173	.109	.841	.111
	Juvenile Petition	-2.990	.163	.050	.000
	Alcohol/Drug Abuse (Caretaker)	-1.530	.190	.217	.000
	Domestic Violence	-1.008	.226	.365	.000
	Inadequate Housing	.821	.773	2.272	.289
	Financial Problem	-.295	.352	.745	.403
	Foster Care	-.757	.158	.469	.000

For Nevada, during step one of the regression analysis both the child being the prior victim and juvenile court petition were significant predictors. None of the race variables were significant in either step. In step two of the analysis, juvenile petition remained significant. The family characteristics of alcohol/drug abuse, domestic violence, and foster care referral were significant.

Overall the only variable that remained significant across all states was domestic violence. Interestingly only in one case (Kentucky Black victims) did race remain significant after the addition of the family characteristics.

## CHAPTER 5

### DISCUSSION, LIMITATIONS, AND CONCLUSIONS

#### Discussion

The purpose of this research was to explore racial differences in risk factors and substantiation of childhood physical abuse. Also considered were differences in system responses such as agency engagement as demonstrated by foster care placement or juvenile delinquency petition. This project also sought to determine if there were any differences between Nevada and states similar in demographics when managing physical child abuse cases. Direct state comparisons were sometimes hindered by inconsistency in variable coding or reporting.

#### *Disparities in Cases as Reflected by Race*

It was found that there was an overrepresentation of minorities when their base population levels were compared to victim levels in the NCANDS database. The percentage of minority victims was always higher than their population percentage in every state. Family stressors, when working in connection with race and report disposition, again reveal racial differences. It was found that for the five family stressor variables (alcohol and/or drug abuse, domestic violence, inadequate housing, financial problem, and foster care services) all three groups were found to be of fairly even prevalence in Kentucky, all being significantly correlated to domestic violence, inadequate housing and foster care services. In New Mexico they were all generally insignificant for all groups, with the exception of Blacks significant correlation to domestic violence and Hispanics to financial problems. In Nevada, however, Black families were less likely to be correlated with situations of alcohol and/or drug abuse, domestic violence, and financial problems. However, being Black was positively associated with foster care placements. Based on previous research it was expected that

minorities would be the most likely to exhibit the family stressor variables, and thus result in higher substantiated case outcomes. This study found that independent of the race variable, the majority of family stressor variables were significantly related to the report disposition.

#### *Differences in Family Stressors Reported by Race*

This research project was particularly interested in seeing if race affected substantiation rates. In two of the three states White cases had a lower substantiation rate. The exception to this was New Mexico where cases were substantiated at a fairly even rate for all races (less than 1% difference). The largest difference was in Kentucky where Hispanics and Blacks were more likely to see substantiated cases than for White children (30.6: 19.9: 18.5). In Nevada, again Black and Hispanic cases were more likely to be substantiated than White Children (33.3: 26.2: 24.4). In both Nevada and Kentucky minority cases were more likely to be both reported and substantiated. It was found that only in Kentucky did being race prove to be a significant predictor of a case being substantiated once the family stressor variables were introduced. White and Hispanic cases were a significant predictor of case substantiation in Kentucky. The only other remaining significant predictors for substantiation were family stressor variables.

#### *Substantiation of Minority Cases*

This study found that observed maltreatment, or alleged maltreatment, was high for minorities. Black physical child abuse was alleged at very high rates across all states, and substantiated at a much lower rate. However they were substantiated in high percentages compared to the other races/ethnicities. Rates of alleged Hispanic child abuse were fairly equivalent to their base population in Kentucky, moderately higher in Nevada, and considerably higher in New Mexico. Hispanic cases, however, were substantiated at a much

lower rate in New Mexico and Nevada. White physical abuse was alleged at relatively equal rates to their populations and substantiated at low rates compared to the population across all states. Consistent with previous research, Black victims were reported for alleged maltreatment at rates inconsistent with their population, as well racial differences were seen in the percentage of cases which are substantiated.

Previous research found that Hispanics culturally are a group that practice corporal punishment because in their culture it is important that their children be well behaved and represent the family well in public, often being stricter and more authoritative than non-Hispanic White or Black parents (Fontes, 2002). This study found that Hispanic cases were more likely to be substantiated in Kentucky and Nevada, in addition was it found that being Hispanic was a predictor of a substantiated case outcome in Kentucky. Hispanic cases showed correlations to only one of the family stressor variables in Nevada and New Mexico, and correlations to three of the five stressors in Kentucky. In Kentucky and Nevada Hispanic cases are being substantiated at a percentage that is much higher than would be expected for their population.

The substantiation of cases can be interpreted two ways. The higher substantiation rates for blacks could mean that the system is doing their job, protecting children by finding cases of abuse. However the contradiction to that is that the higher rates could represent bias against black parents by either the system or the individuals who are making the referrals. It is important that these findings be considered carefully. This discussion would benefit from future research that could look into which pattern is the cause of the underlying the results.

### *Racial Differences in Foster Care Placement and Juvenile Court Petitions*

Foster care services were a variable that was found to be significantly correlated to report dispositions in both Kentucky and New Mexico. Using the regression analysis, foster care services were a significant predictor of a substantiated case outcome in both Kentucky and Nevada regardless of race. In Nevada the foster care referrals and juvenile court petitions were over double the comparison states. These numbers may suggest that Nevada is more likely to resort to punitive results for physical child abuse than the comparison states. Foster care services were less likely to be associated with White cases than Black cases while Hispanic cases fell in the middle. Due to missing and unreported data juvenile court petitions were left out of the correlations for all three states.

### *Child Abuse in Nevada versus Comparison States*

When compared to Kentucky and New Mexico, the substantiated physical child abuse rate in Nevada for Black children is much higher. Nevada also substantiates at a higher rate for White children, although with a much smaller discrepancy for rates of White children between Kentucky and New Mexico and New Mexico to Nevada. For Hispanic substantiated cases Nevada falls in the middle with Kentucky being the high end of substantiation. Clearly the biggest discrepancy here for Nevada is the Black cases. With the Black population in Nevada making up 8.3%, alleged Black cases make up 23% of alleged cases. A third (33.3%) of those cases are then substantiated. Kentucky provides the closest mirror image here (8% population: 16.8% alleged: 19.9% substantiated) and their substantiation rate is considerably lower than Nevada. Further research is required to explain the differences here.



### *Complications with Kentucky's Data*

Kentucky proved to be an interesting state to study. It is difficult to draw conclusions from Kentucky with the wealth of missing data presented in this database. Keeping that information in mind, it is interesting that Hispanics were substantiated at such a higher rate than Whites when they had the most missing data and the lowest correlation rate to the family stressor variables. This difference would suggest that there are racial differences in the way that the cases are handled. Kentucky was additionally the only state that was positively associated with situations of domestic violence, inadequate housing and prior victimization and subsequently positively associated with foster care placement and substantiated report disposition for all three racial/ethnic groups. The high correlation of three of the five family stressor variables, in addition to prior victimization with all races suggests that these are prevalent problems that Kentucky as a whole faces. Kentucky also had the highest number of unsubstantiated cases as a whole; however, it had the highest number of Hispanic substantiated cases of the three states. Due to the low overall substantiation rate one would tend to believe that cases of abuse are being missed. However another explanation for this could be that a large amount of cases are being improperly reported and therefore this is a correlation that you would expect to find if cases are being handled properly by the system and thrown out when allegations are found to be false. There is a positive correlation between family stressors variables and foster care placement and between foster care placement and substantiated report disposition. This suggests that there is the possibility that these cases are being accurately accessed. It would be interesting to have more research into this area to further understand why Kentucky has such a high number of alleged physical child abuse cases and such a low substantiation rate for all children except Hispanics.

### *In Comparison with Previous Research*

In alignment with the Ards, Myers, Malkis et. al. (2003) which found that there was a greater disproportionally in the pre-assessment stage than later in the process, the greater racial and ethnic discrepancies are found within the alleged cases. When viewed next to one another, the sequential order of the percentage of minorities in the general population, to the representation among alleged cases, and finally to the rate of substantiated cases, these rates tell a story of disparity. Minorities are greatly over represented in comparison from alleged cases to general population. Then at the substantiation phase minorities are still substantiated at a higher percentage than Whites in all states except New Mexico, however the numbers to begin to level out and are substantiated at a more equal percentage. Although Blacks and Hispanics are still considerably overrepresented in the substantiation phase, the greatest overrepresentations are in the allegations of physical child abuse. As Ards, Myers, Malkis et. al. (2003) found the majority of the disproportionality between minorities and the total population in reported and substantiated cases appears to develop in the steps preceding the assessment of the abuse.

Much like the work of Ards, Myers, Chung and his colleagues (2003) the previous research of Fluke et. al. (2003) found that the professionals and non-professionals are referring a disproportionate amount of Black children to CPS. This research further supports these findings. Knott and Donovan (2010) found a link between the Black racial status and foster care placement by CPS. This study found a similar pattern for Black victims in all three states, in that they had higher rates of foster care placement than victims in other ethnic groups. The same relationship between White and Hispanic children and foster care placement in Kentucky, On the other hand, White children in Nevada were found to be negatively associated with foster care placement.

Previous research has indicated that although referrals were higher for Blacks, the substantiation rates were roughly the same between all racial groups (Mumpower, 2010). The findings of the current study are consistent with those of Mumpower. The percentages of substantiated cases of each racial group or ethnicity are fairly even within each state. This would in turn imply that the disproportionality falls at the front end of the system when cases are reported from a wide variety of sources (the majority of whom are teachers or day care providers) It is important to note that although cases are substantiated at fairly even rates across any given state, the numbers of Blacks that are substantiated are considerably overrepresented for their size in the general population.

Mumpower's conclusion that the system works in different way for Blacks than it does for Whites and Hispanics in terms of diagnosing and detecting maltreatment, implying that the system is less accurate for Blacks (by producing a lower rate of correct diagnoses and a higher rate of errors, especially false positive errors for Blacks than for other groups [Mumpower, 2010]), follows the theoretical framework of Critical Race Theory. This study sought to determine if all racial and ethnic groups were treated the same in CPS involvement or substantiation of cases that are referred to the criminal justice system. In addition whether this is due to policy or law which may be have a more detrimental effect on blacks as opposed to whites. Black cases of physical child abuse are alleged at much higher rates than other races, and substantiated at higher rates despite the relatively even distributions of substantiated cases across the races within the states. This clearly implies the detrimental effect that the system applies to Black victims, more so than other races or ethnicities.

Ards, Myers, Chung, Malkis, and Hagerty (2003) and Drake and Zuravin (1998) both looked at at four types of potential bias: visibility, labeling, reporting and substantiation

bias in child abuse cases. This study intended to look at substantiation bias, and in doing so found that the risk factors (family stressors and external interventions) may influence visibility, placing families in the view of potential reporters. Labeling bias also became a possibility, as a strong predictor of domestic violence may mean police involvement. A family with a history of police interactions could be at risk of labeling bias. Children who were referred for foster care placement or who received juvenile court petitions may also be at risk of labeling bias in any future reports of abuse. The direct testing of reporting bias was outside the scope of this study, and would require more information. In regards to substantiation bias, that implies that identical cases are not substantiated at the same rate. This study did find that minority cases are substantiated at a higher percentage than White cases.

### *Child Fatalities*

The most important indicator of differences between states and races may be found in the child fatalities. States have the abilities to change definitions of what is and is not abuse and CPS workers can choose to substantiate or not bases on a wealth of information that is all subject to interpretation. However the truth remains you cannot hide a child's death. Some bias will always remain; a coroner has the ultimate decision of whether to rule the death due to abuse or maltreatment. Previous reports in a families file for allegations of abuse substantiated or not will raise concern to those investigating. Once a child dies however there is really nothing left to hide.

### *Application of Theory*

The application of Multiple Marginality Theory to this study could be framed that as family life becomes stress ridden then contacts with the criminal justice system or CPS become problematic and more frequent. Due to marginality in ecological, economic, social,

cultural, and psychological factors, these minorities are put at risk of being physical abusers. The majority of the family stressors proved to be statistically significant predictors of a substantiated case disposition. The majority of the family stressors also proved to be positively correlated to case disposition. This implies that if homes are bogged down with family stressors (which are more likely to occur in minority homes); these homes are more likely to have a CPS case that is given a substantiated rating. For example, in every state alcohol/drug abuse and domestic violence were indicators that a family was likely to receive a substantiated case outcome.

Due to the inconsistency in reporting economic stressors and the lack of useable data for the perpetrator characteristics this theory cannot be directly tested, applied or refuted. From those cases that did provide data a picture begins to develop of family stressors that do seem to be likely to affect the occurrence of physical abuse.

### Limitations

Although the National Child Abuse and Neglect Data System (NCANDS) provides a wealth of information on abuse and neglect, limitations do exist. There are inconsistencies in the reporting process, as each state is given the freedom to choose how they report their data. This discretion did not allow for all variables to be easily compared across states. Furthermore a great many variables offered valid results for only a few cases, while the remainder was coded unknown or missing. For example, Hispanics had the highest reported numbers of missing responses for all three states, and this may have influenced the finding that Hispanics were least likely to correlate with the family stressors. These findings and limitations suggest that the manner in which each state reports could have a significant impact on the results.

## Suggestions for Future Research

This study provides a small window into the way the CPS system works for minority children. Future research would benefit from focusing on more social justice related issues. It would be helpful to determine if minorities are more likely to be involved in the criminal justice system they may be more likely to be scrutinized by social workers and other social service workers. Whereas a White family may be more likely to be treated by family doctors and other private facilities making them less visible to and thus scrutinized by the system.

It may also be more telling to conduct a self-reported survey to determine if Whites are more likely to reveal that they were victims of unreported physical abuse as children than their minority counterparts. Higher socioeconomic status may allow for hidden White cases due to their low visibility to the social services system. It may be a possibility that due to this low visibility that the abuse was never seen or documented and as adults they are willing come forward.

Future research would benefit from a more unified collection of data. Due to the fact that each state is given the freedom to choose how they report their data, there are major holes in the way that researches can effectively evaluate the data. By establishing a model that allows all states to gather the same essential data benefits not only researchers but also the system as a whole as children are able to receive all the services they need. This will allow for statistics to back-up the appeals for funding to go to the programs and services that are greatly needed.

There are many outside factors that could help to further explain the differences between the states that are presented here. For example: demographics of the CPS workers; demographics of individuals making the referrals; differences in state reporting criteria;

and the socioeconomic status of the state and the community. Further research into these area would provide a wider scope of the problem.

### Conclusion

Despite the limitations of this study, these findings support previous research reporting that the largest disproportionalities are found in the front end of the CPS system, in rates of alleged reports of physical child abuse. Although the initial influx of cases may be high for minorities who are experiencing those family stressors, those reports are coming in from everywhere, not just CPS workers. It seems then as cases make their way through the CPS system the largest portion of potentially biased cases are weeded out. Even though disproportionalities still exist at the tail end of the system they are not near as great as the front end of the system. This finding suggests that the system is working to help correct biases. The study reveals that despite the relatively even distributions of substantiated cases across the races for the states considered, Black cases remain considerably overrepresented for their proportion of the general population. Although Nevada does have the highest substantiation rate among the states considered, there is little if no evidence to suggest that we are doing any better or worse than other states in detecting and authenticating cases of actual physical child abuse. The substantiation rates are low for these three states, only one-fifth of allegations are confirmed. Why would there be such a high rate of unfounded physical abuse allegations? Unfounded does not mean a lack of abusive behavior. There is the fear that in under substantiating cases we are letting the physical abuse slide and possibly escalate to more harmful behavior. The other side of the debate is that in over substantiating cases, government agencies may be unnecessarily removing children from homes and families that support them. Somehow a balance must be struck where we are able to say with more certainty that unfounded cases are truly cases of

no abuse and those that are substantiated are truly children who were in harm's way. If in fact the majority of our disproportionalities are in the front end, then perhaps a large portion of that balance is informing our public, our teachers, our relatives and our neighbors what is and is not child abuse and which cases demand our immediate attention.



## REFERENCES

Ards, S.D., Myers, S.L., Chung, C., Malkis, A., & Hagerty, B. (2003). Decomposing black-white differences in child maltreatment. *Child Maltreatment*, 8, 112-121.

Ards, S.D., Myers, S.L., Malkis, A., Sugrue, E., & Zhou, L. (2003). Racial disproportionality in reported and substantiated child abuse and neglect: An examination of systematic bias. *Children and youth services review*, 25, 375-392.

Book of Proverbs, 13:24. *The Holy Bible: New international version*. Michigan: Zondervan Bible Publishers.

Carey, T.A. (1994). Spare the rod and spoil the child. Is this sensible justification for the use of punishment in child rearing? *Child Abuse & Neglect*, 18, 1005-1010.

The Center for Effective Discipline (2011). *Discipline and the law*. Retrieved from <http://www.stophitting.com/index.php?page=laws-main>

Children's Defense Fund (July, 2011). *Portrait of inequality 2011: Black children in America*.

Retrieved from Children's Defense Fund website:

<http://www.childrensdefense.org/programs-campaigns/black-community-crusade-for-children-II/bccc-assets/portrait-of-inequality.pdf>

Child Trends Data Bank (January, 2012). *Foster care: Indicators on children and youth*.

Retrieved from Child Trends Data Bank website:

[http://www.childtrendsdatbank.org/sites/default/files/12\\_Foster\\_Care\\_2012.pdf](http://www.childtrendsdatbank.org/sites/default/files/12_Foster_Care_2012.pdf)

Chow, J.C-C., Jaffee, K., & Snowden, L. (2003). Racial/ethnic disparities in the use of mental health services in poverty areas. *American Journal of Public Health*, 93, 792-797.

- Creighton, S.J. (1995). Fatal child abuse – How preventable is it? *Child Abuse Review*, 4, 318-328.
- Deley, W.W. (1988). Physical punishment of children: Sweden and the U.S.A.. *Journal of Comparative Family Studies*, 19, 419-431.
- Dietz, T.L. (2000). Disciplining Children: Characteristics associated with the use of corporal punishment. *Child Abuse & Neglect*, 24, 1529-1542.
- Drake, B., & Zuravin, S. (1998). Bias in child maltreatment reporting: Revisiting the myth of classlessness. *American Journal of Orthopsychiatry*, 68, 295-304.
- Euser, E.M., Van IJzendoorn, M.H., Prinzie, P., Bakermans-Kranenburg, M.J. (2011). Elevated child maltreatment rates in immigrant families and the role of socioeconomic differences. *Child Maltreatment*, 16, 63-73.
- Ferrari, A.M. (2002). The impact of culture upon child rearing practices and definitions of maltreatment. *Child Abuse & Neglect*, 26, 793-813.
- Finkelhor, D., & Korbin, J. (1988). Child abuse as an international issue. *Child Abuse & Neglect*, 12, 3-23.
- Fluke, J.D., Yuan, Y.T., Hedderson, J., & Curtis, P.A. (2003). Disproportionate representation of race and ethnicity in child maltreatment: Investigation and victimization. *Children and Youth Services Review*, 25, 359-373.
- Fontes, L.A. (2002). Child discipline and physical abuse in immigrant Latino families: Reducing violence and misunderstandings. *Journal of Counseling & Development*, 80, 31-40.

- Freng, A. & Esbensen, F.A. (2007). Gang and race affiliation: An examination of Multiple Marginality. *Justice Quarterly*, 24, 600-628.
- Hampton, R.L., & Newberger, E.H. (1985). Child abuse incidence and reporting by hospitals: Significance of severity, class, and race. *American Journal of Public Health*, 75, 56-60.
- Herman-Giddens, M.E., Brown, G., Verbiest, S., Carlson, P.J., Hooten, E.G., Howell, E., & Butts, J.D. (1999). Under ascertainment of child abuse mortality in the United States. *Journal of the American Medical Association*, 281, 463-467.
- Hill, R.B. (2004). Institutional racism in child welfare. *Race and Society*, 7, 17-33.
- Hong, G.K., & Hong, L.K. (1991). Comparative perspectives on child abuse and neglect: Chinese versus Hispanics and Whites. *Child Welfare*, 70, 463-475.
- Hylton, K. (2012). Talk the talk, walk the walk: Defining Critical Race Theory in research. *Race, Ethnicity and Education*, 15, 23-41.
- Kapp, S.A., McDonald, T.P., & Diamond, K.L. (2001). The path to adoption for children of color. *Child Abuse & Neglect*, 25, 215-229.
- Knott, T. & Donovan, K. (2010). Disproportionate representation of African-American children in foster care: Secondary analysis of the National Child Abuse and Neglect Data System, 2005. *Children and Youth Services Review*, 32, 679-684.
- Korbin, J.E. (1989). Fatal maltreatment by mothers: A proposed framework. *Child Abuse & Neglect*, 13, 481-489.
- Lewit, E.M. (1994). Reported child abuse and neglect. *The Future of Children*, 4, 233-242.

- Lindholm, K.J., & Willey, R. (1986). Ethnic Differences in child abuse and sexual abuse. *Hispanic Journal of Behavioral Sciences*, 8, 111-125.
- Lindsey, K. (2013). U.S. Continues to Fall Behind the Rest of the World of Child Rights. *First Focus*. Retrieved from: <http://www.firstfocus.net/news/reading-list/us-continues-to-fall-behind-the-rest-of-the-world-on-child-rights>
- Lu, Y.E., Landsverk, J., Ellis-Macleod, E., Newton, R., Ganger, W., & Johnson, I. (2004). Race, ethnicity, and case outcomes in child protective services. *Children and Youth Services Review*, 26, 447-461.
- Maker, A.H., Shah, P.V., & Agha, Z. (2005). Child physical abuse: Prevalence, characteristics, predictors, and beliefs about parent-child violence in South Asian, Middle Eastern, East Asian, and Latina women in the United States. *Journal of Interpersonal Violence*, 20, 1406-1428.
- Mash, E.J., Johnston, C., & Kovitz, K. (1983). A comparison of physically abused and non-abused children during play and task situations. *Journal of Clinical Child Psychology*, 12, 337-346.
- McClain, P.W., Sacks, J.J., Froehlke R.G., & Ewigman, B.G. (1993). Estimates of fatal child abuse and neglect, United States, 1979 through 1988. *Pediatrics*, 91, 338-343.
- Miller, B.V., Fox, B.R., & Garcia-Beckwith, L. (1999). Intervening in severe physical child abuse cases: Mental health, legal, and social services. *Child Abuse & Neglect*, 23, 905-914.

- Mumpower, J.L. (2010). Disproportionality at the “front end” of the child welfare system: An analysis of the rates of referrals, “hits,” “misses,” and “false alarms”. *Journal of Health & Human Services Administration*, 33, 364-405.
- National Center for Education Statistics (2007). *Status and trends in the education of racial and ethnic minorities* (NCES 2007-039) Retrieved from <http://nces.ed.gov/pubs2007/minoritytrends/>
- National Data Archive on Child Abuse and Neglect (2011). *National child abuse and neglect data system (NCANDS) child file, ffy 2009* [User's guide and codebook] Retrieved from <http://ndacan.cornell.edu/Ndacan/Datasets/UserGuidePDFs/156user.pdf>
- Overpeck, M.D., Brenner, R.A., Trumble, A.C., Trifiletti, L.B., & Berendes, H.W. (1998). Risk factors for infant homicide in the United States. *The New England Journal of Medicine*, 339, 1211-1216.
- Payne, M.A. (1989). Use and abuse of corporal punishment: A Caribbean view. *Child Abuse & Neglect*, 13, 389-401.
- Rashid, K. (2011). ‘To break asunder along the lesions of race’. The Critical Race Theory of W.E.B. Du Bois. *Race, Ethnicity and Education*, 14, 585-602.
- Realty Trac (2012). *National real estate trends*. Retrieved from: <http://www.realtytrac.com/trendcenter/>
- Salzinger, S., Feldman, R.S., Hammer, M., & Rosario, M. (1991). Risk for physical child abuse and the personal consequences for its victims. *Criminal Justice and Behavior*, 18, 64-81.

- Straus, M.A., & Donnelly D. A. (2009). *Beating the devil out of them: Corporal punishment in American families and its effects on children*. New Jersey: Transaction Publishers.
- U.N. General Assembly (1989). *Convention on the rights of the child*. Retrieved from <http://sithi.org/admin/upload/law/Convention%20on%20the%20Rights%20of%20the%20Child.ENG.pdf>
- UNICEF (2004). *Convention on the rights of the child a success but millions of children still unprotected*. Retrieved from [http://www.unicef.org/crc/index\\_30229.html](http://www.unicef.org/crc/index_30229.html)
- U.S. Census Bureau (2012). *State and county quick facts*. Retrieved from: <http://quickfacts.census.gov/qfd/index.html>
- U.S. Census Bureau (2011). *Age and Sex Composition: 2010*. Retrieved from: <http://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf>
- U.S. Census Bureau, Housing and Household Economic Statistics Division, Fertility & Family Statistics Branch (2010). *America's families and living arrangements: 2010*. Retrieved from <http://www.census.gov/population/www/socdemo/hh-fam/cps2010.html>
- U.S. Department of Health and Human Services, Administration for Children and Families (April, 2008). *What is child abuse and neglect?*. (Factsheet) Retrieved from Child Welfare Information Gateway website: <http://www.childwelfare.gov/pubs/factsheets/whatiscan.cfm>
- U.S. Department of Health and Human Services, Administration for Children and Families (2010). *Child Maltreatment 2009*. Retrieved from: [http://www.acf.hhs.gov/programs/cb/stats\\_research/index.htm#can](http://www.acf.hhs.gov/programs/cb/stats_research/index.htm#can)

U.S. Department of Labor (2012a). *Labor force statistics from the current population survey*.

Retrieved from: <http://www.bls.gov/cps/>

U.S. Department of Labor (October, 2012b). *Local area unemployment statistics*. Retrieved

from: <http://www.bls.gov/web/laus/laumstrk.htm>

Vigil, J.D. (1988). *Barrio gangs: Street life and identity in Southern California*. Austin:

University of Texas Press.

Whipple, E.E., & Richey, C.A. (1997). Crossing the line from physical discipline to child

abuse: How much is too much?. *Child Abuse & Neglect*, 21, 431-444.

Whipple, E.E., & Webster-Stratton, C. (1991). The role of parental stress in physically

abusive families. *Child Abuse & Neglect*, 15, 279-291.

Wright, T.C. (2004). *Immigration and ethnic diversity in Nevada*. Retrieved from:

<http://cdclv.unlv.edu/healthnv/immigration.html>

Zhai, F. & Gao, Q. (2009). Child maltreatment among Asian Americans: Characteristics and

explanatory framework. *Child Maltreatment*, 14, 207-224.

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