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Effectiveness of Practice Change From Risk Model to Safety Model at DHS

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Abstract
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MPA, Strayer University, 2010
BSW, Temple University, 1994

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Public Policy and Administration

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Abstract

In 2012, the U.S. Department of Health and Human Services reported an estimated 686,000 victims of child abuse and neglect. Forty-nine states reported a total of 1,593 fatalities. This quantitative research study examined the relationship between the variables: age of child, gender of child, age of parent/caregiver, prior substantiated reports of abuse, and incidents of abuse in Philadelphia at the Department of Human Services using risk practice model (RPM) and safety practice model (SPM). Although child welfare practitioners have examined the relationship between family and societal factors that affect child abuse; few researchers have examined the correlation between service delivery practice models and incidents of abuse. The findings of this quantitative study examined 34,761 components of variable data from the Department of Human Services revealed that the age of the child, age of the caregiver, and incidents of abuse are statistically significant predictors of abuse, whereas the gender of child had minimal effect on incidents of abuse. The most accurate predictor of child abuse is prior substantiated reports of abuse. The study shows that reports received in 2007 using the RPM were 9.6% more likely to have a valid report; likewise, every report received during the years 2007 and 2012 increases the probability of a valid report by 94.2%. Development of a comprehensive assessment tool that combines the principle tenets of both RPM and SPM is recommended. The implications for social change include developing a practice model that can increase safety probabilities while diminishing incidents of abuse by using a more comprehensive assessment tool.
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Dedication

To my family and friends, I could not have achieved this feat without your continued love, support and encouragement. To Howard and Barbara, you two are the wind beneath my wings. To all my siblings, I wouldn’t be able to accomplish this task without your support. I am grateful for the legacy to pursue knowledge that was instilled in me by my mother and father that preceded me in death. To my colleagues at DHS who provided insight and expertise regarding child welfare practices and procedures, know that the work you do is profound and life changing. Never question your effectiveness for the personal sacrifices you make daily to help save the lives of children in Philadelphia is beyond measure. Mark and Nelson, you two have been my guardian angels. Thank you for helping me with the data. To those who read, edited and gave insight along the way, I thank you from the bottom of my heart. While there are many things I have learned on this journey, I walk away knowing that I can do all things through Christ that strengthens me! In times when I felt like giving up, there was strength on the inside that helped me maintain my focus as I stayed on course.
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Chapter 1: Introduction to the Study

Introduction

In the United States, each state has mandatory child abuse and neglect reporting laws that require certain professionals and institutions to report suspected maltreatment to a child protective service (CPS) agency. These findings are monitored and recorded by the Department of Health and Human Services (HHS, 2011). Although federal regulations and guidelines exist, each state develops its own definitions of child abuse and neglect gleaned from federal stipulations. The Child Abuse Prevention and Treatment Act (CAPTA; 42 U.S.C. §5101), as amended by the CAPTA Reauthorization Act of 2010, retained the existing definition of child abuse and neglect as, at a minimum: “Any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse, or exploitation; or an act or failure to act, which presents an imminent risk of serious harm” (HHS, 2011, p. vii). In this quantitative study, I examined the relationship between the risk practice model (RPM), safety practice model (SPM), identified independent variables (IVs) of the study, and incidents of abuse identified by the Department of Human Services (DHS) during the years 2007 and 2012 by using secondary data analysis.

Background of the Study

Despite child welfare laws and child protection services provided to families, child fatalities continue to occur. Every year, children die from abuse and neglect. In 2012, 49 states reported 1,593 child fatalities (HHS, 2013). In 2012, a nationally estimated 1,640 children died from abuse and neglect at a rate of 2.20 per 100,000
children in the U.S. population (HHS, 2013). Child welfare administrators are challenged with implementing practice models that promote systemic change while decreasing incidents of child abuse, neglect, and maltreatment. Although reform efforts are fundamental (Borsheim, 2009), effective service delivery is essential to ensure the safety, permanency, and well-being for those children involved in the child welfare system.

The effects of child abuse are heinous, and the most tragic incidents can lead to fatality. The National Child Abuse and Neglect Data System (NCANDS) collects case-level data in the Child File on child fatalities that result from maltreatment. Nationally, four-fifths (78.3%) of victims were neglected, 18.3% were physically abused, 9.3% were sexually abused, and 8.5% were psychologically maltreated (HHS, 2013). From 2008 to 2012, overall rates of victimization declined by 3.3%, from 9.5 to 9.2 per 1,000 children in the population (HHS, 2013). This results in an estimated 30,000 fewer victims in 2012 (686,000) compared with 2008 (716,000) (HHS, 2013). Child welfare systems are confronted with protecting vulnerable children by diminishing incidents of abuse and neglect by providing effective service delivery.

The quality of the child welfare service delivery becomes a concern of the general public, if only momentarily, when the media reports on the deaths of children previously or currently known to the child welfare system (Farber & Munson, 2010). Public child welfare systems undergo multitier reform efforts to develop sustainable change (Borsheim, 2009). By creating a greater awareness of systemic problems, putting pressure on politicians and administrators, and using the court to promote change, litigation has served as a catalyst for child welfare reform (Farber & Munson, 2010).
Although process data regarding clients served are widely captured by social service agencies, researchers have not established clarity with regard to the organizational factors that directly affect services (Collins-Comargo & Royse, 2010). Social service administrators must work diligently to identify, assess, and develop strategies to promote organizational change. Administrators must develop a mindset of continuous improvement, not simply change (Rubin, 2009).

**Philadelphia Department of Human Services**

The Department of Public Welfare (DPW) was founded in Philadelphia, Pennsylvania, in 1919 (DHS, 2013). In 1920, DHS was created as a bureau within the DPW to care for children who were deemed wards of the city. While HHS is the federal agency that houses the Administration on Children, Youth and Families; DHS is a state-mandated agency run by a mayoral appointed Commissioner in the City of Philadelphia. The DHS is designed to prevent child abuse and neglect by investigating suspected reports of child abuse and providing in home services and prevention services (DHS, 2013).

The DHS is composed of divisions such as Children and Youth Division (CYD), Community Based Prevention Services (CBPS), Performance Management and Accountability (PMA), and Juvenile Justice Services (JJS). In Philadelphia, more than 12,000 children are deemed dependent annually because of truancy (DHS, 2013). Each year, the Philadelphia School District, family court, and DHS spend $15 million on truancy prevention programs under the CYD umbrella (Graham, 2010). The CYD is the largest division in DHS. The CYD provides services to more than 100,000 children and
families in the city of Philadelphia. The services provided by DHS are designed to ensure the safety, well-being, and permanency for children in Philadelphia County (DHS, 2013).

The Child Protective Services Law (CPSL) was passed in 1975 under the jurisdiction of the Commonwealth of Pennsylvania (Pennsylvania Child Welfare Resource Center, 2012). This law established the statewide Child Abuse Hotline and Central Registry. The purpose of CPS law was to aid in the reporting of suspected child abuse and to set up a CPS agency in each county to investigate such reports. The CPS law was intended to shield children from abuse while providing intervention services to parents. The CPS law is the driving force of service execution at DHS.

Services provided by DHS can be court mandated or voluntary depending on the circumstances which facilitate DHS involvement. Families enter this system through report referrals made alleging child abuse or neglect (DHS, 2013). Services provided to families and children include foster care, kinship care (foster care with a relative or other known party to the child), in home protective services (IHPS), adoption, prevention services, and community-based support services. DHS also provides parenting support via parenting groups on a weekly basis. Services to families are provided on a continuum based on the identified needs of parents and children.


Reports alleging child abuse are made known to DHS through the hotline. Hotline staff is responsible to generate reports and determine whether reports are GPS (general protective services: neglect) cases or CPS (child protection services: physical injury or sex abuse) cases. Based on the vulnerability of the child (measured by age and mental
capacity), severity of allegations, and caregiver role as the alleged perpetrator, reports are
given a four-tier response time. The response time indicates the time frame in which a
child protection social worker is dispatched to begin the investigation. Tier 1 has an
immediate response time (0 to 2 hours). Tier 2 has a 24-hour response time. Tier 3 has a
3- to 5-day response time. Last, Tier 4 has a 7-day response time. Although GPS reports
have all four response times, CPS reports operate solely on Tiers 1 and 2 response times.
When reports enter DHS during daytime hours, cases are assigned to intake case
managers. During evening and weekend hours, hotline staff initiates investigations and
make assessments regarding child safety. After the hotline staff makes the initial
assessment, cases are sent to the intake division to complete the investigation regarding
alleged abuse and neglect.

Intake units assess the safety of children in their homes by using a multitiered
interview process. Intake is responsible for conducting in-depth interviews with all
children in the home, alleged perpetrators, and must make collateral contacts to medical
and educational providers (DHS, 2012). Successful assessment relies on information
gathering. To gain information on how a family operates, I examined six domains: type
of maltreatment, nature of maltreatment, adult functioning, child functioning, general
parenting, and parenting discipline (PCWRC, 2012).

Throughout the course of service delivery, social workers must assess factors to
determine the safety of all children in the home. To assess these factors, a safety
assessment is conducted. This tool employs five safety thresholds to measure present
danger factors, which serve as predictors of child maltreatment (PCWRC, 2012). These
safety thresholds measure factors to determine whether threats are serious, observable &
specific, out of control, includes a vulnerable child, and poses imminent danger (SOOVI).
On investigation, intake workers determine whether a case should be closed, referred for
prevention services, or receive ongoing support services, or whether removing the child is
needed.

On service implementation, cases are transferred to family service regions for
case monitoring, treatment, and planning. Family service regions must develop, monitor,
and implement treatment plans, which include parenting skills, life skills, mental health,
behavioral health, and drug treatment. The family service region is comprised of specialty
units such as adoptions, long term placement, and reunification. Although each region at
DHS has a distinct function in service delivery, each component works to ensure the
safety and well-being for children being serviced.

**Department of Human Services Reform**

Reform efforts in the wake of child fatalities continue to increase in child welfare
systems across the country (Borsheim, 2009). Although these efforts are aimed at
eradicating such fatalities, one must look at the causal factors of child fatality to begin to
improve preventive programs as well as intervention services. In response to incidents of
serious child maltreatment, reform efforts were implemented in Pennsylvania (PCWRC,
2012). Pennsylvania revamped how child protection services were implemented in
counties through the entire state.

The DPW began to shift its practice model from a treatment approach to a family
centered approach (PCWRC, 2012). The state began to implement several key core
values, which guided the practice of child welfare on a state-wide basis. The values promoted included principles such as every child deserves a family, every family needs support from the community, and public child welfare agencies need community as partners (PCWRC, 2012). These changes impacted child welfare practice in Philadelphia County.

Kelly (2006) and Bennet (2003) identified that in response to two child deaths DHS at the federal level underwent a major organizational change and overhauled the DHS at the state and local level. In response to those calamities, Mayor Street (Philadelphia Mayor in 2006) assembled a review panel to decide how the agency could be revamped through policy reformation. The findings of the review panel served as the premise for policy changes within the DHS.

The DHS shifted its practice model from the RPM to SPM in 2008. To achieve the objective of safety and permanency for children in Philadelphia, there have been higher levels of efficiency, accountability, and transparency instituted at DHS. The DHS has shifted from sole accountability to shared responsibility through use of community outreach endeavors and partnerships through the Improving Outcomes for Children (IOC) initiative using Community Umbrella Agencies (CUAs; DHS, 2013). This overhaul shifted the care to shared responsibility through community outreach, resources, and utilization of key stakeholders within the community that DHS serves.

The DHS redefined the core values that guide social service practice within the agency. The new core principles supported the ideology that families are experts on themselves. The agency began to develop policies that support the premise that a group
can be more effective in decision making (social service delivery teams) than an individual (social worker). The DHS analysts found that when families are included in the decision-making process, they can identify and participate in addressing their needs (DHS, 2013). The premise of empowerment was introduced to families as they were allowed to identify, engage, and use their own community resources in service delivery.

Although child protection agencies endeavor to ensure safety and well-being for children they serve, child fatalities continue to occur. The RPM uses gauges such as age of child, prior abuse, and family composition to measure the likelihood of future risk or maltreatment. The SPM employs five safety thresholds to measure present and impending danger factors, which serve as predictors of child maltreatment (PCWRC, 2012). These safety thresholds, SOOVI, measure factors to determine whether threats are serious, observable and specific, out of control, includes a vulnerable child, and poses imminent danger (PCWRC, 2012).

Although RPM is used to measure impending risk or danger, SPM is used to measure present danger. Although all safety threats are risk factors, not all risk factors are threats (PCWRC, 2012). Borsheim (2009) stated that for reform efforts to be successful and sustainable, there needs to be continuous attention to promoting consistency and providing support to the desired model of practice. To stimulate change within organizations, effective policies must be executed that facilitate change. Policy analysis is a comprehensive method used to measure growth, change, and development within an organization. According to Borsheim (2009), a clearly defined child welfare practice model is the basis for lasting reform efforts.
Problem Statement

Child fatality caused by maltreatment is a problem that plagues cities across the United States. Although countless child welfare agencies have undergone copious reform efforts to diminish this phenomenon, children continue to die at the hands of perpetrators, which include unrelated household adults (Schnitzer & Ewigman, 2008). Researchers have found that the social contexts in which children live are important; poverty and region are the strongest predictors of child maltreatment fatalities (Douglas & McCarthy, 2011). In 2008, DHS restructured service delivery from the RPM to a SPM in response to the heightening incidents of child fatalities.

Purpose of the Study

My purpose in this quantitative study was to determine whether a relationship exists between the IV and dependent variable (DV) which occurred during the years 2007 and 2012. I examined execution of these practice models to ascertain the effectiveness of minimizing incidents of abuse. In 2007, while using RPM, DPW reported that Philadelphia County received 4,670 reports of suspected child abuse (DPW, 2008). Of the reports received in 2007, DHS substantiated 21.6% (1,007; DPW, 2008). In 2012, while using SPM, DPW reported that Philadelphia County received 4,537 reports of suspected abuse (DPW, 2013), and 14.6% (662) of reports were substantiated (DPW, 2013). I used secondary data analysis study design.

Nature of the Study

I used secondary data to determine the correlation between IVs, DV, and the use of RPM and SPM in the city of Philadelphia. A quantitative research plan is a means for
testing theories and correlates by examining the relationship among variables (Creswell, 2009). I used secondary data to examine the relationship between RPM, SPM, and serious incidents of child abuse, which include child fatalities.

The population for this study came from DHS cases accepted for service for the years 2007 and 2012, respectively. I investigated IVs such as age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse in relation to the DV of serious incident of child abuse. The practice models that were studied were the RPM and the SPM. Each model distinctly measures child safety, which in turn affects child maltreatment and can lead to child fatalities if left uncontrolled.

**Research Question and Hypothesis**

I investigated the relationship between the IVs of the study (age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse) as predictors of incidents of abuse (DV). I gathered incidents of abuse data from the DHS database for the years 2007 and 2012. Logistic regression may be used to predict the probability that an observation falls into one of two categories of a dichotomous DV based on one or more IVs (http://www.statistics.laerd.com) and was the selected statistic for these analyses.

The research questions asked whether a relationship exists between the IVs and their ability to predict incidents of abuse as measured by RPM and SPM in the city of Philadelphia during their respective assessment years. The research questions and related hypotheses for this study are as follows:
RQ1: To what extent, if any, does age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007?

$H_01$: There is no probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007.

$H_11$: There is a probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007.

RQ2: To what extent, if any, does age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012?

$H_02$: There is no probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012.

$H_12$: There is a probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012.

To answer the research question, I used logistic regression, which describes the extent of linear relationships between the DV and several other IVs (Frankfort-Nachmias & Nachmias, 2008). I chose this design type because data cannot be manipulated; instead, I examined relationships among the variables. I used the Hosmer and Lemeshow
goodness of fit test to verify whether the model fits the data well. To estimate the probability, called \( p \), an S-curve was used. If my study results reject one or more of the null hypotheses, then this study shows that the DV is affected by the IVs; therefore, the alternative hypothesis must be accepted as evidenced. However, if the study results do retain one or more of the null hypotheses, then my study shows that there is no likelihood of incidents of abuse based on the influence of the IVs. My intent was to understand the probability of the occurrence of incidents of abuse between the IVs and their ability to predict incidents of abuse as measured by RPM and SPM in the city of Philadelphia during their respective assessment years.

**Theoretical Framework**

According to Rutter (2008), a correlation exists between household risk factors (mental health capacity of caregiver, drug and alcohol abuse, and employment status of caregivers) and child fatalities. According to a report by the U.S. Department of Health and Human Services, 19% of perpetrators of child fatalities were identified as fathers or male partners of a parent (Gagnon, 2010). The attachment theory purports that children that have been identified with multiple risk factors have higher probabilities of being victims of child maltreatment, which can lead to death (Schnitzer & Ewigman, 2008). However, the child protective service theory was developed out of concern for the care of children, which is conveyed through laws established in every state (HHS, 2013).

**Child Protective Services Theory and Child Abuse**

There are seven foundational principles to the child protective services theory. These guiding values include: child safety, building family strengths, CPS responsiveness
to cultural differences, CPS agency accountability, client participation and planning, appropriate CPS intervention, CPS timely permanency planning (HHS, 2013). Child protective services theory explains the legal authority and mandates that developed from child abuse laws.

The CPS agencies are required to intervene when parents fail to meet the physical, mental, emotional, educational, and medical needs of their children (HHS, 2013). The CPS agencies focus on building family strengths and support the goal of keeping children safe, while providing parents with needed resources. To ensure safety, CPS workers help identify and build protective factors within both the home and community (HHS, 2013).

The CPS agencies must use family supports to identify and achieve family level outcomes that reduce the risk of maltreatment (HHS, 2013). According to child protective service theory, researchers found that CPS efforts are more likely to succeed when clients actively participate in the service planning process (HHS, 2003). Researchers suggest that although CPS law and social service practice is designed to help parents protect their children, CPS intervention and placement may be deemed necessary when parents fail to protect children. When children are placed, CPS agencies should expeditiously move to permanency.

**Risk Practice Model**

Appendix A, the Risk Assessment, is guided by the RPM. The RPM in child welfare measures the probability of future risk or maltreatment of a child (PCWRC, 2012). The purpose of using this model was to help child welfare practitioners measure the likelihood of risk based on several key factors. The factors that are measured include:
age of child, family composition, and prior family involvement with child welfare agencies.

Assessing the potential risk and severity of abuse to a child is the process the CYD social worker uses to determine whether a child is safe, whether a child is likely or unlikely to be abused in the near future, as well as the severity of current abuse or neglect (PCWRC, 2012). Risk and severity factors are used to complete a risk assessment tool. The risk assessment tool is essential for investigations, assessments, evaluation for services, planning, and service delivery (DHS, 2013). The risk assessment tool, done prior to planning process, serves to highlight the areas of concerns to be addressed in the Family Service Plan (FSP).

One significant goal of the risk assessment is to focus child welfare resources on those children determined to be at greater levels of risk of maltreatment. Due to scarce funding and resources in many child welfare agencies, the RPM served as a strategy for identifying those in greatest need (Price-Robertson & Bromfield, 2011). This model was also developed to provide a structured, consistent, and uniform process for determining which families would receive services through CYD agencies. Using this tool left minimal room for personal bias on judgment on social service professionals regarding case planning.

The RPM primarily utilizes two common approaches in child welfare: consensus-based instrument and actuarial instrument (Price-Robertson & Bromfield, 2011). Both models incorporate using family characteristics thought to be associated with risk or maltreatment to assess on a “risk instrument.” Despite the aforementioned similarity,
each model differs in approach to identifying factors for inclusion in the instrument as well as how the instruments are used (Price-Robertson & Bromfield, 2011).

**Safety Practice Model**

Appendix B, the Safety Assessment, is guided by the SPM. The Adoptions and Safe Families Act (ASFA) was signed into federal law in November of 1997 (PCWRC, 2012). ASFA law is tied to federal Title IV-B and IV-E funding, building on and amending the Adoptions Assistance and Child Welfare Act of 1980. The development of AFSA changed the requirements of issues surrounding child safety, well-being, permanency, and timeliness for service delivery in the child welfare system.

Since the implementation of AFSA, the State of Pennsylvania has strived to prioritize the tenets set forth by AFSA, making safety a primary goal (PCWRC, 2012). In 2002, a Federal Child and Family Service Review determined that safety was an area that needed further improvement. Because of the outcome of that review, counties throughout the state of Pennsylvania introduced the Safety Assessment and Management Process. Based on research conducted by the National Resource Center on Child Protective Services (NRCCPS) and Action for Child Protection (PCWRC, 2012) the safety assessment model was introduced.

The purpose of safety assessment and management process is to assure that each child in a family is protected (PCWRC, 2012). The safety model was developed as a comprehensive tool to measure a caregiver’s ability to provide protection to the children for whom they are responsible. Safety is the primary and essential focus that informs and guides all decisions made from intake through case closure, including removal and
reunification decisions (PCWRC, 2012). The safety model examines three primary components: safety threats, safety threshold, and protective capacity to determine a child’s safety.

A safety threat is the condition or actions within the child’s own home that represent the likelihood of imminent serious harm to the child (PCWRC, 2012). There are two types of safety threats: present danger or impending danger. Present danger refers to an immediate, significant, and clearly observable family condition occurring to a child in the present, whereas impending danger refers to threatening conditions that are not immediately obvious or currently active but are out of control and likely to cause serious harm to a child in the near future (PCWRC, 2012).

Safety threshold is the point when a caregiver’s behaviors, attitudes, emotions, intent, or situations are manifested in such a way that they are beyond being risk influences and have become an imminent threat to child safety (PCWRC, 2012). To reach the safety threshold, one of the following five conditions must be met (SOOVI): (a) serious harm: could include serious physical injury, untreated serious physical illness, or significant pain and suffering; (b) observable and specific: the condition must be specific and observable in the form of behavior, emotion, attitude, perception, intent, or situation; (c) out of control: there is no apparent natural, existing means within the family network that can assure control; (d) affects a vulnerable child: a child’s vulnerability is based on their emotional, behavioral, and cognitive function; health and ability to care for himself/herself; and (e) imminent: means that serious harm could happen anytime within
the near future; from today, tomorrow, or up to but not exceeding 60 days (PCWRC, 2012).

**Definition of Terms**

*Administration for Children and Families (ACF)*: ACF is a division of the Department of Health & Human Services. ACF promotes the economic and social well-being of families, children, individuals, and communities (HHS, 2014).

*Adoptions and Safe Families Act (ASFA)*: AFSA was signed and became federal law on November 19, 1997. The law is tied to federal Title IV-B and Title IV-E funding, building on and amending the Adoption Assistance and Child Welfare Act of 1980. ASFA refocuses requirements to the issues of child safety, well-being, permanence, and timeliness (PCWRC, 2012).

*Assessment*: A process by which the CPS agency determines whether the child or other persons involved in the report of alleged maltreatment is in need of services (HHS, 2011).

*Attachment theory*: Attachment theory provides an explanation of how the parent-child relationship emerges and influences subsequent development. Attachment theory examines a child’s relationship with their mother in terms of their social, emotional, and cognitive development. This theory examines the link between early infant separations with the mother and later maladjustment (Rutter, 2008).

*Child Abuse Prevention and Treatment Act (CAPTA)*: The Child Abuse Prevention and Treatment Act (CAPTA) is a federal legislation amended and reauthorized in 1996 that provides the foundation for Federal involvement in child
protection and child welfare services. The 1996 Amendments provide for, among other things, annual State data reports on child maltreatment to the Secretary of Health and Human Services. The most recent reauthorization of CAPTA, The CAPTA Reauthorization Act of 2010, retained and added to these provisions (HHS, 2010).

*Caregiver:* A person responsible for the care and supervision of the alleged child victim (HHS, 2010).

*Child abuse:* Any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse, or exploitation; or an act or failure to act which presents an imminent risk of serious harm (HHS, 2011).


*Child at Risk Field System (CARF):* CARF is being used by child protection service agencies in several states to enable caseworkers to use “risk” as a basis for decisions regarding the family. The scale identifies levels and sources of risk and facilitates identification of strategies to alter and measure risk reduction (Steib, 2008).

*Child Fatality Review Team (CFRT):* A State or local team of professionals who review all or a sample of cases of children who are alleged to have died due to maltreatment or other causes (HHS, 2010).

*Child maltreatment:* An act or failure to act by a parent, caregiver, or other person as defined under State law that results in physical abuse, neglect, medical neglect, sexual
abuse, emotional abuse, or an act or failure to act, which presents an imminent risk of serious harm to a child (HHS, 2010).

*Child Protective Services (CPS):* An official agency of a State having the responsibility for CPS and activities (HHS, 2010).

*Child welfare practice model:* Practice models guide the work of those involved with the child welfare system to work together to improve outcomes for children, youth, and families. Practice models serve as the “explicit link connecting . . . policy, practice, training, supervision and quality assurance with its mission, values, and strategic plan” (NRCOI, 2008) PCWRC, 2012).

*Children’s Bureau:* The Children’s Bureau is the first federal agency within the U.S. government to focus exclusively on improving the lives of children and families (HHS, 2014).

*Children’s Research Center (CRC):* CRC has been working to improve child safety, permanency, and well-being since its establishment in 1993. CRC works in partnership with child-serving agencies to improve direct practice and organizational operations through models that integrate evidence-based assessments, family-centered engagement strategies, and implementation science (http://www.nccdglobal.org/what-we-do/children-s-research-center, 2014).

*Control variable:* A variable used to test whether the observed relations between the independent and DVs are real or spurious (Franfort-Nachmias & Nachmias, 2008).

*DAPIM model:* DAPIM is a primary model of change management. DAPIM means define, assess, plan, implement, and monitor. For organizations, DAPIM is a
proven model of success as a continuous improvement method that promotes strategic efforts toward long-term sustainable change (Rubin, 2009).

*D & A:* Drug and alcohol—the compulsive use of drugs that is not temporary in nature (HHS, 2012).

*Department of Health and Human Services (HHS):* The Department of Health and Human Services (HHS) is the U.S. government’s principal agency for protecting the health of all Americans and providing essential human services, especially for those who are least able to help themselves (HHS, 2014).

*Department of Human Services (DHS):* In 1920, the Department of Human Services (DHS) was created as a bureau within the DPW to care for children who were deemed wards of the city (DHS, 2012).

*Dependent variable:* The variable that the researcher is trying to explain (Frankfort-Nachmias & Nachmias, 2008).

*Fatality:* Death of a child as a result of abuse and neglect, because either an injury resulting from the abuse and neglect was the cause of death or abuse and neglect were contributing factors to the cause of death (HHS, 2010).

*Independent variable (IV):* The explanatory variable; the hypothesized or presumed cause of the changes in the values of the DV (Frankfort-Nachmias & Nachmias, 2008).

*Intake:* The activities associated with the receipt of a referral—the assessment or screening and the decision to accept for a CPS response (HHS, 2010).
MH: Issues involving emotional disturbance or maladaptive behavior adversely affecting socialization, learning, or development (HHS, 2012).

National Resource Center on Child Protective Services (NRCCPS): NRCCPS is one of 10 national resource centers (NRCs) funded by the Children’s Bureau, U.S. Department of Health and Human Services to provide free on-site training and technical assistance to State and Tribal child welfare agencies (http://www.nrccps.org, 2014).


Perpetrator: The person who has been determined to have caused or knowingly allowed the maltreatment of a child (HHS, 2010).


Risk assessment: This actuarial assessment estimates the likelihood of future harm to children in the household and assists investigation workers in determining which cases should be continued for ongoing services and which may be closed at the end of an investigation (http://www.nccdglobal.org, 2014).

Risk practice model (RPM): The social service practice model using a risk driven basis for determination of service delivery (PCWRC, 2012).
**Safety assessment:** A safety assessment includes gathering necessary information to identify the presence of present and impending danger, threats, and protective capacities. In addition, an analysis of the information gathered becomes the basis for deciding whether present or impending danger exists and if a Safety Plan is needed (PCWRC, 2012).

**Safety Plan:** A written arrangement between caregivers, responsible persons, and the County Children and Youth Agency that delineates the actions implemented to control safety threats identified in the in-home safety assessment (PCWRC, 2012).

**Safety practice model (SPM):** The social service practice model utilizing a safety driven basis for the determination of service delivery (PCWRC, 2012).

**Safety threat:** The conditions or actions within the child’s own home that represent the likelihood of imminent serious harm to the child (PCWRC, 2012).

**Safety threshold:** The point when a caregiver’s behaviors, attitudes, emotions, intent, or situations are manifested in such a way that they are beyond being risk influences and have become an imminent threat to child safety (PCWRC, 2012).

**SOOVI:** Safety thresholds, which measure factors to determine whether threats are serious, observable, and specific, or out of control, and includes a vulnerable child and poses imminent danger (PCWRC, 2012).

**Assumptions**

My study was based on the following assumptions: (a) risk assessments and safety assessments were properly implemented based on guidelines and regulations of the State of Pennsylvania, (b) data acquired in the study reflect the larger population of children
serviced at DHS, and (c) the assessments used in the study were completed by certified child protective social workers in Philadelphia, Pennsylvania. The aforementioned child welfare practitioners receive annual training to renew certification regarding Pennsylvania’s child welfare laws inclusive of policy and practice changes. I assumed that all available assessments were relinquished to the researcher to ensure accuracy of findings.

**Limitations**

My study was limited to data acquired and assessed by me during a 2-year time span (2007 and 2012). The results are limited to data acquired from the DHS. Because the study was done at DHS, the results cannot be generalized on a national scale. Because of the significant difference of child welfare institutions across the State of Pennsylvania, effort must be taken not to generalize the results on a state-wide basis.

**Scope and Delimitations**

The scope of my study focused on investigating the relationship between the IVs of the study as predictors of the DV and proposed ways to increase successful identification of these factors to decrease incidents of child abuse. The study took place in Philadelphia at the DHS. The scope of my research may help policymakers develop methods to effectively minimize child abuse by enhancing service delivery.

The delimitations of my study were restricted to data reported and collected by social workers at DHS. I used data evaluated by child protective social workers who provided service delivery during the timeframe of 2007 and 2012. The tools used (risk assessments and safety assessments) were developed by the State of Pennsylvania.
Significance of the Study

Child fatalities are a phenomenon that can diminish and or become eradicated with an increase of preventive measures being used (Rubin, 2009). As child welfare agencies develop polices to combat this problem, consistent efforts in effective application of practice models must be employed. According to research by Borsheim (2009), there have been improved outcomes for families when social service practice models shifted from being deficit based to strength based.

Social service agencies must use strategic planning to implement desired policy changes to increase the probability of effectiveness (Rubin, 2009). Child welfare agencies must define desired outcomes, assess current practice models, and implement desired changes through staff training programs. Rubin (2009) suggested that the same principles that can be used to promote organizational change can be used by social workers to provide effective services.

Implications for Social Change

Although numerous studies focus on the societal context in which children die from maltreatment, limited research examines the influence of child welfare practice model implementation regarding this phenomenon. By understanding the phenomenon of child maltreatment and the devastation that it causes, DHS can implement effective service delivery changes, which may reduce the number of serious incidents of maltreatment (Rubin, 2009) as well as child maltreatment fatalities. Policymakers need to develop an operational assessment tool that enables social service practitioners to successfully identify children at risk while minimizing safety threats. Rubin (2009) stated
that following the DAPIM model supports systematic continuous improvement and makes large change management goals achievable.

My study may also provide legislators, child welfare administrators, and child welfare practitioners with information needed to reduce incidents of child maltreatment by aiding in the development of more comprehensive assessment tools. Child welfare administrators must ensure that viable assessment tools are used effectively to decrease the likelihood of maltreatment, fatalities, and incidents of abuse. Developing comprehensive practice models helps increase safety probabilities for those deemed most likely at risk.

Summary

Rubin (2009) recognized that long-term sustainable change inquires incremental positive movement built through customized phased work plans. DHS introduced a new practice model in 2008 that was safety driven versus risk driven. Although the driving force of child safety assessments uses risk factors, assessment skills are primarily focused on present danger (SPM) versus impending danger (RPM) (PCWRC, 2012).

In Chapter 1, I focused on determining a possible relationship between the IVs of age of child, gender of child, age of caregiver/parent, and prior substantiated reports of abuse and the DV of incidents of abuse. In Chapter 2, I review literature, and I provide the framework for the study by examining prevalent child welfare practice models used in child welfare institutions across the nation. In Chapter 3, I describe the methodology that I used to conduct this quantitative study. In Chapter 4, I provide the data analysis and
findings of the study. Last, in Chapter 5, I provide implications for social change, and I explore future topics of research.
Chapter 2: Literature Review

Introduction

Child welfare policy and practice affect service implementation in child welfare agencies across the nation (Borsheim, 2009). Reform efforts often result from public outcries of a failed child welfare system (Douglas, 2009). I examined the relationship between the IVs of the study as predictors of the DV during the years 2007 and 2012.

Despite the abundance of knowledge regarding child maltreatment fatalities in the United States, no proven solutions to the problem exist (Sheldon, Wilson, & Smith, 2013). Regardless of improvements in child welfare systems, reform efforts alone have not forged a significant decrease in child maltreatment fatalities (Sheldon et al., 2013). Researchers have found that several vital factors affect the likelihood and probability for the occurrence of child maltreatment fatalities (Douglas, 2013). Child welfare practitioners must effectively define, assess, implement, and monitor service delivery to help assure the safety and well-being of children they service (Rubin, 2009).

To examine child maltreatment fatalities and serious neglect, Snyder et al. (2012) examined Bowlby’s original construct on attachment theory model. This model output shows that a direct correlation between healthy/poor parent child attachment and incidents of child abuse (Snyder et al.). This theoretical framework purports that caregivers that have been identified with multiple risk factors have higher probabilities of being perpetrators of child maltreatment (Snyder et al.).

Historically, the RPM focuses on measuring factors which examine the probability of future risk, while the SPM focuses on measuring factors surrounding
present danger (Pennsylvania Child Welfare Resource Center [PCWRC], 2012). Chahine and Saunders (2013) provided an overview of the complex issues, opportunities, and challenges involved in improving child safety and preventing child maltreatment fatalities from a multidisciplinary prospective. The researchers completed a multiple regression study to examine the IVs ability to serve as predictors of the DV to determine whether either practice model has a greater predictive power in relation to incidents of abuse. This literature review is formulated on various compelling concerns that child welfare, government entities, and policy makers have identified.

**Historical Perspective of Child Welfare System**

Because of the economic strains that families were encountering in the early twentieth century, children were at risk. Blight, famine, and disease created harsh environments. A growing child welfare movement led to the establishment of the first federal agency in the world, the United States Children’s Bureau, designed to investigate and report on the circumstances of children.

The era of the Great Depression had vast social and economic implications for families and children (Scaliger, 2008). During the great depression era, families found themselves unable to provide for their children; thus, many children were forced into the workplace, working dangerous jobs, such as chimney sweeps, because of their size and agility (Holt, 2011). These actions caused grave danger because of the harsh nature and surroundings of the job. Although families saw these things as a matter of survival, the government viewed these actions as an issue of abuse. During this time, countless
numbers of children were abandoned or deemed without a guardian after parents left them without a guardian or died.

To promote the well-being of children by ensuring safety, achieving permanency, and strengthening families to effectively care for their children (Mallon, 2010), the child welfare system began. Nationally, few systems have garnered as much criticism and backlash for its systemic faults and shortcomings, consequently mandating constant organizational changes. Although the primary responsibility for child welfare services lay with individual states, the role of the federal government heavily impacts service delivery as a result of funding programs and legislative initiatives (Mallon, 2010).

The Children’s Bureau, which is a part of ACF, is primarily responsible for implementing federal legislation regarding child welfare. The primary function of the Children’s Bureau is to work with state and local agencies to prevent child abuse, develop child protection services, and provide permanency for children removed from their homes. The child welfare system works in collaboration with other systems such as law enforcement, education systems, and court systems to ensure the safety, well-being, and permanency of children.

**Child Welfare Reform**

In 1994, U.S. Congress mandated that HHS develop regulations for reviewing state child and family service programs administered under Titles IV-B and IV-E of the Social Security Act (Mallon, 2010). Because of the failing review process that was prevalent across the country, the newly developed child and family service review (CFSR) measure was initiated in fourteen states. The Administration for Children and
Families (ACF) shaped the CFSR’s with the goal of apprehending the authentic experiences of children and families serviced through state child welfare programs (Mallon, 2010). The focus of CFSR was on evaluating service delivery outcomes, not regulations and procedures.

Using the statutory and regulatory underpinnings of the Title IV-B Child and Family services plan (the state plan), ACF developed measures that reveal the substance and goal of those requirements through practice-based casework with children, youth, and families (Mallon, 2010). The researcher’s argument was that service delivery shifted on a national platform from regulation focused service delivery to practice based casework. The CFSR’s examined child welfare practices on the ground level to determine the effectiveness of service delivery for children and families. Mallon (2010) emphasized that social service practice stems from the belief that although policy and procedures are essential to an agency’s capacity to support positive outcomes, it is daily casework practices that most influence outcomes.

Borsheim (2009) stated that a well-developed and clearly defined child welfare practice model is the basis for child welfare reform efforts. Reform efforts should be purposeful, constant, and carefully implemented. Reform efforts often take several years to implement. For reform efforts to be successful and sustainable, there needs to be continued attention to promoting consistency and providing support to the desired practice model (Borsheim, 2009). Similarly (Baumann, et al., 2011) determined that decision making is a framework for organizing decisions made in child welfare and places it in the context of actual protective service operations. Borsheim argued that
numerous child reform efforts were often directed toward a systemic approach in response to reports of child maltreatment instead of focusing on engaging parents as partners to secure child safety. The author further suggested that organizations must align, build capacity, and utilize strategic readiness to support the model of practice that is being implemented through child welfare reform. In order for growth and change to occur, organizations must develop a continuous improvement plan to include short, midterm and long-term plans to achieve sustainability. The focal point in child welfare agencies needs to shift from being problem centered to solution oriented for reform to effectively occur (Borsheim, 2009).

**DAPIM Model**

Rubin (2009) stated that change management is essential to redesign and improve organizations. The DAPIM (define, assess, plan, implement, and monitor) model provides strategic efforts to yield lasting progress. Bauman et al (2011), found that the systemic context in decision making includes a set of influences that encompass a range of factors such as external influences, organizational policy, procedures, and individual factors that when combined influence decisions and outcomes. Rubin (2009) suggested that the same principles that can be used to promote organizational change can be used by social workers to provide effective services. As with most organizational change, the higher the level of “buy in” from employees, the greater probability of success.

The principles utilized in this model incorporate the expertise of clients about their situation to develop realistic treatment plans. Rubin (2009) stated that usage of this model builds good learning environments, taking into consideration the safety and trust
of clients while still holding them accountable. The author suggested that sustainable change requires: building capacity of an organization, incremental changes, and root cause analysis as an assessment tool.

Unlike historic methods where social service delivery focused on the agency worker identifying areas of concern, this model uses a partnership between client and worker to help define where the areas of concern lie (Rubin, 2009). Once the problem is defined, then the human service worker completes an assessment to develop a baseline to address concerns. Planning is developed with short, mid, and long-term goals to eradicate identified problems. The plans are often identified as family service plans. Once plans are established, implementation occurs and is followed by monitoring. DAPIM, when applied to front line practice and used as a supervisory technique, serves as a strategy that defines the process of engagement, empowers clients, and promotes partnerships, while also monitoring families (Rubin, 2009). Despite such reform efforts, child maltreatment continued to be a growing problem in the child welfare system.

**Media Influence in Policy Reform**

Douglas (2009) examined the effect that media coverage has on legislative response to child fatalities. Douglas explores whether media coverage influences policy and practice changes in child welfare agencies resulting from child fatalities. The author used a 3-year study to examine the correlation between child fatalities, media coverage, and policy changes to determine the effect on policy changes caused by media reporting of child abuse. The U.S. Department of Health and Human Services and Administration for Children and Families found in 2007, approximately 794,000 children in the United
States were the victims of child maltreatment (HHS, 2009). Douglas (2009) examined whether high levels of media attention about agency involved CMF’s spurs legislative change in Congress that is intended to prevent future deaths, as opposed to symbolic system reform. The author further reported that child welfare, policy, and legal scholars assert the belief that the child welfare profession is shaped by scandal, which, in turn, forces change. When a child dies while under the supervision of a child welfare system changes are implemented within the system (Douglas, 2009).

Douglas (2009) suggested a direct correlation between media coverage, which influences public opinion, in turn influencing elected officials’ responses to child welfare policies. The premise that child welfare policy and practice is shaped by public outrage appears to be true. In 2008, following the death of Danieal Kelly in Philadelphia, whose family was receiving services through DHS, the media began an outcry for reform at DHS. The media influenced uproar led to the mayor of the city convening a review panel, which in turn led to mandated policy and practice changes within DHS.

To address the issues laid out in the mayor’s review panel, the management team at DHS, under the auspices of its commissioner Annemarie Ambrose, implemented the SPM in 2008. The remaining counties in the State of Pennsylvania used SPM before its implementation at DHS. However, because of the vast client population, DHS had not been forced to use this practice model by the state until 2008.

**Improving Outcomes for Children (IOC) Initiative**

In 2011 the IOC (Improving Outcomes for Children) plan was introduced. The IOC is an initiative which engages community umbrella agencies (CUA) in the role of
providing direct service to families engaged in child protection services. The CUA agencies “wrap services” around the family unit, while providing preventive measures in the home to decrease incidents of abuse and neglect. IOC began phase one implementation in the spring of 2012 and was fully implemented by the spring of 2016.

The purpose of the IOC is to achieve higher safety standards, greater levels of culpability, and quicker rates of permanency. The community umbrella agencies are working with DHS staff to provide direct oversight regarding child safety in the homes of the families serviced. CUA agencies will assess, monitor, and educate families regarding parenting skills, coping skills, and bonding methods (DHS, 2012).

The IOC has been designed to garner greater levels of accountability regarding child safety. The IOC implementation places the “safety assessment” in the hands of both the provider agency as well as the DHS. The belief is that this system will develop a multi-tiered level assessment system. The use of this system is believed to be able to produce a decrease in the incidents of child abuse, neglect, and maltreatment.

**Child Maltreatment / Child Maltreatment Fatality**

In 2008, about 772,000 children in the United States were the victims of child maltreatment (HHS, 2010). One of the most egregious outcomes of child abuse is the death of a child, or a child maltreatment fatality (CMF). To better comprehend CMF’s societal level, factors were examined (Douglas & McCarthy, 2011).

Child maltreatment encompasses varying factors such as: physical abuse, neglect, medical neglect, and emotional abuse. Victims of child maltreatment fatalities are more likely to come from families that have experienced a major life stressor such as
unemployment, birth of a child, or change in residence (Douglas & McCarthy, 2011). Although fatalities most often occur from incidents of physical abuse, neglect can likewise be the causal factor in reported incidents of child fatalities.

Child maltreatment fatalities describe a wide range of causes of death that include actively killing a child in methods such as beatings, suffocation, or passively killing a child by failing to provide medical care (medical neglect), and failure to provide appropriate care and supervision (Douglas & McCarthy, 2011). Data analyzed in this study revealed the correlation between age of child and level of violence used. Douglas and McCarthy (2011) found that the rate of violent crime predicts child maltreatment fatalities, where each additional one-unit increase in the crime rate increases child maltreatment fatalities by .02 per 100,000 children.

Researchers found that a major factor in child abuse maltreatment is the relationship/attachment between child and caregiver (Douglas & McCarthy, 2011). A caregiver can be defined as anyone left in a caretaker capacity providing care and supervision for a child. Findings suggest that as the age of a child increases, so does the violent method used by perpetrators to inflict injury which results in death.

Douglas and McCarthy (2011) purported that racial minorities, especially African Americans, are overrepresented among those who are victims of CMF’s and thus are more at risk to become victims. Researchers found that minority families are disproportionately involved in the Child Protection System (Hornstein, 2013). Statistics compiled from the U.S. Department of Health and Human Services (2011) collected by child protection services (CPS) agencies found that maltreatment is not randomly
distributed throughout the population. Researchers revealed that African-American children are over represented among maltreatment whereas Latino and Caucasian children are typically underrepresented (Hornstein, 2013).

**Fatal Neglect**

Child maltreatment is defined as a behavior directed toward a child which is outside the norms of conduct and entails a substantial risk of causing physical or emotional harm (Schnitzer & Ewigman, 2008). The aforementioned behaviors can include both acts of omission and acts of commission. Likewise, such acts can be unintentional or intentional. While this study focused on fatal unintentional injuries, the author’s likewise examined acts of neglect and physical abuse.

Child maltreatment, including incidents of physical abuse and severe neglect, is a growing problem across the nation. Schnitzer and Ewigman (2008) reported that young children residing in households with unrelated adults, step parents, or foster parents are at increased risk of fatal unintentional injury related to maltreatment. Researchers found that children under the age of five residing with a single parent and another unrelated adult had an exceptionally high risk of inflicted injury death (Schnitzer & Ewigman, 2008).

Schnitzer and Ewigman (2008) examined the difference between child neglect, which ends in fatality, versus non-life-threatening neglect. The author examined the difference between deliberate acts of physical abuse which led to fatality versus neglect which led to child death. The study revealed that child deaths which occurred due to neglect occurred at the same rate as child maltreatment fatalities which occurred from incidents of physical abuse.
Schnitzer and Ewigman (2008) reasoned that neglect is a key cause of child fatality. Cases of neglect are not often deemed as “life threatening” as incidences of physical abuse. However, both can lead to child maltreatment and fatality (Schnitzer & Ewigman, 2008). Researchers found that while most fatalities which occurred from physical abuse were deemed as purposeful and violent acts, fatalities which occurred due to neglect happened due to the absence of the caregiver at a critical moment (Schnitzer & Ewigman, 2008). Child neglect fatality is a growing cause for concern in child welfare institutions across the nation. Child neglect cases, such as Daniel Kelly (DHS, 2013), have become the basis for models of child neglect which lead to dire consequences. Caregiver culpability needs to be stringently examined, measured, and scrutinized to help ensure child safety and to eradicate child fatalities.

**Correlation between Protective Factors and Child Maltreatment**

Shultz et al. (2009) explored the relationship between protective factors and outcomes for children investigated for maltreatment. Researchers found that to prevent or alleviate consequences of maltreatment, it is essential to understand factors that help children move beyond poor outcomes (Shultz et al.). Researchers found that while some at risk children fare poorly, others do not show maladaptive functioning. Risk factors can produce adverse outcomes while protective factors can produce a buffering effect (Schultz et al.).

In the study conducted by Schultz et al. (2009), three protective factors were examined: social competence, adaptive functioning skills, and peer relationships. Social competence deals with both externalizing and internalizing behaviors in children.
Children who were investigated for sexual maltreatment had lower odds of being in the normal range for externalizing behaviors than children who were investigated for physical abuse (Shultz et al.). At any given level of social competence, children with scores one standard deviation higher have 2.2 times greater odds of being in the normal range for externalizing behavior (Schultz et al.). Findings from Shultz et al. did not reveal that there is an association between adaptive functioning and externalizing behaviors. For the reported models, it is noted that for all three outcomes the increase in pseudo $r$-square between models 1 and 2 was significant at the $p < .05$ level and the increase in pseudo $r$-square between models 2 and 3 was significant at well below the $p < .001$ level (Shultz et al., 2009). The study revealed that positive peer relationships may be protective against a range of negative outcomes for maltreated or high-risk children.

Shultz et al. (2009) revealed how the hypothesized protective factors operate over time. For children investigated for maltreatment, researchers found that a relationship exists between a child’s social competence, adaptive functioning skills, and positive peer relationships and select outcomes three years after the close of the investigation (Shultz et al.). Researchers found that screening and intervention to increase protective factors could improve outcomes for maltreated children.

**Child Fatality Review Teams**

Multidisciplinary child fatality review teams (CFRT) have existed for over thirty years in the United States (Douglas & Cunningham, 2008). When child maltreatment fatalities first caught public attention in the United States, one of the earliest organized efforts in response to these events was the development of review teams. Douglas and
Cunningham (2008) reported that in the United States, there is great variation concerning the focus of child fatality reviews. Some states appear to focus on all types of child deaths, where other states primarily focus on maltreatment related deaths.

Douglas and Cunningham (2008) studied child mortalities and the comprehensive review process in child welfare organizations. The authors’ purport that child fatality review teams were developed to identify and assess child abuse which led to death. The purposes of the multidisciplinary teams were to provide comprehensive child welfare policy recommendations concerning the phenomenon of child fatalities.

The main purpose of the study by Douglas and Cunningham (2008) was to focus on child fatality which occurred due to maltreatment. Due to the multidisciplinary method, this practice model is deemed as a foremost authority on child welfare reform. Child welfare review teams often consist of psychological, medical, and social experts in the field of child development. Douglas and Cunningham (2008) determined that as review teams develop recommendations to eradicate this phenomenon, systems can create reform efforts that support suggested changes.

The widespread use of the review model indicates a degree of faith in the outcome of such reviews (Douglas & Cunningham, 2008). Recommendations from such child welfare review teams are utilized to develop new policies and procedures in child welfare institutions across the country. Researchers found that 88% of the teams that published information about child maltreatment deaths also published findings and recommendations about fatal maltreatment (Douglas & Cunningham, 2008).
Attachment Theory / Parental Protective Capacity

Attachment theory, formulated by Bowlby, is a psychological theory of human connection (Snyder et al., 2012). While Bowlby developed the principle constructs of attachment theory, Snyder later conceptualized and discovered other constructs to enhance knowledge regarding this model. There are three main principles of attachment theory: a) Human beings are wired to bond with each other emotionally in intimate relationships, b) There is significant influence on a child’s development based on the way they are treated by their parents, and c) Theory of developmental pathways can explain future behavior in relationships based on earlier experiences (Snyder et al.).

Synder et al., 2012 suggest that there are four main categories of attachment. These categories of attachment are believed to be associated with specific characteristics and behaviors (Snyder et al.). Such characteristics influence a child’s development into adolescence and adulthood. The four categories can be characterized as secure, avoidant, anxious, and disorganized (Snyder et al.). Synder suggests that attachment patterns have been found to persist once developed, both because parents tend to treat children in the same way and because such patterns tend to be self-perpetuating (Snyder et al.).

Attachment refers to the continuing and lasting relationships that young children form with one or more adults (Rutter, 2008). Theorists suggest that human attachment functions to regulate behaviors designed to sustain closeness to a caregiver, which provides a secure base. Children often use such connections to their caregivers to develop, maintain, and achieve a sense of security in the world (Rutter, 2008).
Researchers found that there is a strong association between occurrences of child abuse and one’s attachment orientation (Rutter, 2008). Researchers found that those with a healthy connection to caregivers are least likely to become committers of child abuse (Rutter, 2008). Consequently, those with a poor history of attachment to caregivers as a child have a greater probability of becoming perpetrators of child abuse (Rutter, 2008).

Gorman (2012) found that secure attachments in caregivers minimize the possibility of maltreatment. Secure attachments can be conceptualized as featuring stability in that the child can reliably anticipate that the caregiver will be accessible and demonstrate positive interactions. The researcher further argued that such positive attachments heavily influence a child’s external influences.

Caldwell, Shaver, Li, and Minzenberg (2011) stated that childhood abuse and neglect can have far-reaching effects on adult relationships, mental health capacity, and parenting. Research has shown that human development is intertwined with social experiences, specifically parent-child relationships (Cassidy & Shaver, 2008). The study indicated that there is a strong association between occurrences of child abuse and one’s attachment orientation. Researchers found that those with a healthy connection to caregivers are least likely to become committers of child abuse (Cassidy & Shaver, 2008). Consequently, those with a poor history of attachment to caregivers as a child have a greater probability of becoming perpetrators of child abuse.

**Risk Factors**

According to Schnitzer and Ewigman (2008), there is a correlation between household risk factors and child fatalities. Researchers found that children that have been
identified with multiple risk factors have higher probabilities of being victims of child maltreatment, which can lead to death (Schnitzer & Ewigman, 2008). These factors serve as key indicators, or predictors, for those predisposed to child abuse which leads to fatalities.

Schnitzer and Ewigman (2008) studied household configuration as a risk factor in child fatality. A major component explored in the study was perpetrator characteristics as a determinant in child abuse which led to fatalities. Researchers found that young children that reside in households with unrelated adults are at exceptionally high risk for inflicted injury deaths (Schnitzer & Ewigman, 2008). Researchers found that most perpetrators were males that lived in the home. To minimize such deaths, prevention services must be utilized by child welfare systems.

English et al. (2009) stated that although increasing research on children’s exposure to intimate partner aggression/violence (IPAV) and co-occurrence of maltreatment, little is known about IPAV in at-risk maltreating families. This study examined the nature of IPAV for children identified as at risk or reported for maltreatment in homes where one or both intimate partners were the alleged perpetrators (English et al.). It is believed that as the level of IPAV increases, so does the probability of child maltreatment. English et al. note that IPAV primarily took the form of verbal aggression in the study conducted, with differences in perpetrator gender for verbal, minor, and severe violence. Researchers found the need for comprehensive assessments of IPAV when assessing risk and safety issues for children reported as being at risk.
Social service professionals must be able to effectively identify factors that place families at risk for future child maltreatment to facilitate necessary services and to potentially help prevent abuse and neglect (Magder, 2011). It is imperative that risk factors are reviewed in a systematic manner to ensure reliability and consistency. Risk factors must be used to gauge the protective capacity of caregivers.

**Risk Practice Model Instruments**

The DHS utilized two RPM instruments during the years 2006 and 2007. A consensus based assessment tool was the primary instrument utilized to assess the risk of a child, followed by the SDM tool (DHS, 2013). The SDM tool was utilized solely by the hotline department to determine whether cases were accepted for investigation or rejected. Since the SDM tool was not used for the investigation or assessment of a report of child abuse, its usage is not relevant for cases examined in this research study.

**Consensus Based Instrument**

The consensus based assessment tool is derived from various child maltreatment literature and opinions of expert practitioners (Price-Robertson & Bromfield, 2011). The consensus based approach to risk assessment utilizes the underlying theoretical assumption that the causes of child maltreatment are multi-dimensional. The consensus based instrument primarily utilizes two decision making strategies. While specific items guide practitioners when considering risk factors, decision as to the overall risk category is left to the practitioner’s discretion (Price-Robertson & Bromfield, 2011).

Using the consensus instrument, the overall score of assessment items are added and families are assigned a risk category based on the overall score. The outcome of
scoring for this tool garners more autonomy in deciphering data to the practitioner’s assessment and ratings. The consensus based tool attempts to bridge the gap between unstructured clinical and actuarial decision making (Price-Robertson & Bromfield, 2011).

The identified strengths of the consensus assessment tool can be debated in child welfare arenas. This tool allows greater flexibility of assessment. The consensus assessment tool often does not impose restrictions on the weighing or combining of different risk factors (Price-Robertson & Bromfield, 2011). Child welfare professionals are able to combine clinical judgment with practical knowledge. This model heavily relies on the practice expertise of the child welfare professional administering the assessment.

While there are advantages to utilizing this tool, there are significant weaknesses. The inner reliability and predictive validity has been reported as poor compared to actuarial measures (Price-Robertson & Bromfield, 2011). The identified risk indicators have likewise been characterized as ambiguous. While child welfare professionals are deemed the experts in the field, this tool may be too subjective and too reliant on professional discretion (Price-Robertson & Bromfield, 2011). Lastly, this tool uses the same variables to predict all forms of maltreatment despite the probability of significant and different indicators for various types of abuse: physical abuse, sexual abuse, and neglect.

Price-Robertson and Bromfield (2011) purported that if the goal of an assessment is to gain a comprehensive understanding of an individual child or family to determine their service needs, then a consensus-based tool may be more effective. The study
suggests that due to the flexibility, wide-ranging data acquisition, and number of items assessed with the tool, it provides a greater knowledge base to evaluate. It is suggested that the outcomes using consensus based tools are more easily linked to an intervention plan for working with families to reduce risk (Price-Robertson & Bromfield, 2011).

In the field of child welfare, there are several widely used consensus based instruments including the Washington Assessment of Risk Matrix (WARM), developed in Washington State. The Child Abuse and Neglect Tracking System was developed in Illinois and the Child at Risk Field System (CARF) from Action for Child Protection in North Carolina (Steib, 2008). CARF has been crucial in developing tools that are more specialized in detecting immediate risk of harm. These tools have been widely used and adapted by child welfare agencies across the United States. Actuarial Instrument

Actuarial instruments help practitioners focus their risk assessments on a small set of characteristics that have demonstrated a strong statistical relationship to future maltreatment (D’Andrade, Austin, & Benton, 2008). Actuarial instruments use statistical analysis to identify and weigh factors that predict child maltreatment (Price-Robertson & Bromfield, 2011). This tool utilizes statistical procedures that predict future maltreatment. Most times, the statistical analysis is done in the county, state, or municipality in which the instrument is applied. This type of model often uses fewer factors than consensus-based tools.

Practitioners utilizing this tool score each individual item on the assessment tool. The score of individual items are added, and families are assigned a risk category according to their overall score (Price-Robertson & Bromfield, 2011). Actuarial
assessment tools grant practitioners a degree of latitude to override an assessment rating, thusly enabling practitioners the ability to increase the risk category by one level.

The strengths often associated with this tool show stronger evidence of inter-rater reliability and predictive validity. This tool uses separate variables to predict the likelihood of different forms of child maltreatment, versus the “cookie cutter” approach to the consensus-based tool. The actuarial assessment tool provides precise, probabilistic estimates of further maltreatment (Price-Robertson & Bromfield, 2011), which in turn helps child welfare practitioners develop realistic interventions. Lastly, it is due to the empirical analysis being done in the state where the tool is applied, which helps ensure the accuracy and relevance of data (Price-Robertson & Bromfield, 2011).

Some researchers assert that the actuarial tool does not facilitate clinical judgment of skilled practitioners. Price-Robertson and Bromfield (2011) suggested that this tool places less emphasis on unique, unusual, or context specific factors that may be identified by the more flexible consensus-based tool. It seems that this tool does not incorporate the practice knowledge of practitioners who are deemed the “experts” in the field of study. Lastly, this tool may be rejected by practitioners’ due to a perceived lack of supporting theory (Price-Robertson & Bromfield, 2011).

In general, researchers found that if the goal of the assessment is to identify those children whose situation warrants further investigation, then the actuarial assessment tool will probably produce a more accurate prediction than consensus-based tools (Price-Robertson & Bromfield, 2011). Since actuarial tools are usually developed by statistically modeling the factors that increase the risk of re-referral to child protection services, there
is a perceived level of greater accuracy. Utilizing this tool enables practitioners to make evidence-based judgments about which children are at the highest risk of returning to child protection services, thusly necessitating closer scrutiny (Price-Robertson & Bromfield, 2011). Actuarial tools are perceived as being good for decisions about how to prioritize resources in the child welfare system, but not to be used as a case planning tool.

The best known actuarial system is Structured Decision Making (SDM), developed by the Children’s Research Center of the National Council on Crime and Delinquency in California (Steib, 2008). The SDM tool includes a variety of instruments designed for assessments. The SDM tool is primarily utilized for intake screenings as well as assessing immediate and longer-term risks of abuse and neglect.

Structured Decision-Making Tool (SDM)

The first SDM model was developed in child welfare. The SDM system pairs actuarial assessments with structured tools and engagement strategies to build a comprehensive practice model for service delivery (National Council on Crime and Delinquency, 2014). This model is utilized in child welfare, adult protection, and substitute care giving entities. SDM combines research with child welfare practice strategies to provide a uniform framework for decision making in child welfare agencies. This process helps child welfare institutions determine ways to target resources for those families identified to be in greater need. In 2014, The National Council on Crime and Delinquency stated that the SDM is comprised of four major components: reliability, validity, equity, and utility.
SDM provides reliability because it delivers assessments systematically that focus on critical decision points at various timeframes in the span of a case. By utilizing specified timeframes during which assessments are administered, it provides congruency in case planning. The actuarial research-based risk assessment, which accurately classifies families according to the likelihood of subsequent outcomes, enables agencies to target services to those at highest risk for negative outcomes (National Council on Crime and Delinquency, 2014). To ensure equity in assessments, SDM measures case characteristics, risk factors, and domains for every client irrespective of social, class, or ethnic differences. The SDM assessments are designed to focus on critical elements that are relevant to a specific decision process in a case.

This instrument is designed to guide informed decisions by child welfare practitioners. In no way, is this assessment instrument designed to make decisions. The result, outcome, and usage of this instrument is to provide a comprehensive assessment coupled with practice skills of the child welfare professional to assess the current strengths, weaknesses, and areas of need for case families. Integrating research based assessments instruments into evidence based practice models provides a cohesive approach to improving the accuracy and consistency of decisions while working constructively and collaboratively with clients.

The SDM approach is designed to minimize the recurrence of future abuse or neglect by targeting those deemed high risk families. SDM utilizes response priority assessment when children are most likely to be unsafe, clarity about the threshold for danger, use of a checklist to ensure dangers not listed are assessed, and identification of
children who have a significantly higher probability of future maltreatment (Pecora, Chahine, & Graham, 2013). This approach is designed to be used with strong practice skills, which include good interviewing skills, participatory assessment, and congruent planning with parents.

**Criticisms of Standardized Risk Assessment Instruments**

Price-Robertson and Bromfield (2011) stated that there is documented criticism regarding both the consensus-based tool and the actuarial-based tool. Maiter (2009) stated that these assessment tools are ill suited for indigenous communities and other minority and/or marginalized groups. The use of expansive and anti-racist framework for assessments and intervention in practice with members of diverse ethnic/racial communities is essential in child welfare systems. For child welfare institutions to effectively assess risk factors within families, there must be an accurate and comprehensive understanding of cultural mores, norms, and values.

Maiter (2009) purported that while understanding culture and ethnicity are important concepts to comprehend when providing services to families from diverse backgrounds, considering race can provide additional insights. The author further found that in child welfare systems, cultural variations are seen as a deficit and are assessed as such. Anti-racism recognizes the social effects of race despite the lack of any biological basis for the concept of race (Maiter, 2009).

Price-Robertson and Bromfield (2011) suggested that both tools neglect social and environmental influences on behavior. Due to this factor, societal problems are concealed. Likewise, structural inequalities are hidden by attributing sole responsibility
for problems to parents and caregivers. While child welfare practitioners and experts request the use of structured risk assessment tools, it is apparent that child protection institutions need to enhance the research base to develop such comprehensive tools.

**Safety Practice Model Instruments**

When utilizing the safety model, protective capacities must be assessed. Protective capacities are specific and explicit strengths that manage and control safety threats (PCWRC, 2012). Protective capacities are measured in the areas of cognitive, behavioral, and emotional protective capacities. Cognitive protective capacity measures the intellectual, knowledge, understanding, and perceptions to protect the child. Behavioral protective capacity measures whether the caregiver behaves in a manner that is consistent with protecting the child. Emotional protective capacity measures whether the caregiver has specific feelings, attitudes, and identification with the child and motivation to protect the child (PCWRC, 2012).

**Safety Assessment Tool**

The process of safety assessment and management leads to making informed decisions about safety planning and implementation of safety interventions that will control identified threats (PCWRC, 2012). It is essential for child welfare practitioners to understand that safety assessment and management is not incident based nor is it defined by determining the presence or absence of injuries or incidents. Safety analysis makes use of all data collected to conduct a thorough assessment to decide whether a safety plan or intervention is needed. A safety assessment determines whether interventions provided
need to be in home, out of home, or a combination of the two (PCWRC, 2012). To measure the “safety” of children, a safety assessment tool was developed.

The SPM uses a five “safety thresholds” barometer to determine whether children are “safe” or “unsafe” at home given their present circumstances. This safety tool is used to assess the safety of a child at set intervals throughout a family’s interaction with DHS. This tool is used to determine whether services are implemented in the home or whether children are removed and placed in the protective custody of DHS.

**Signs of Safety (SofS) Approach**

Although there are two primary methods, such as consensus based and actuarial based instruments, used to assess risk in child protection, a third approach called Signs of Safety (SofS) has been implemented in several states (Turnell, 2012). The SofS tool has a clearly designed approach to mapping harm, danger, and complicating factors (Pecora, Chahine, & Graham, 2013). Each of the three approaches uses a slight variation of concepts to assess danger, safety, risk, and need.

The SofS approach is a strength based, safety focused approach to CPS. SofS approach has three guiding principles: establishing constructive work relationships between families and practitioners, engaging in critical thinking and maintaining a position of inquiry, and staying grounded in everyday work of CPS practitioners (Pecora et al., 2013). Using this approach, practitioners “map” four familial components: 1) Harm, danger, and complicating factors, 2) Existing strengths and safety factors, 3) Agency and family goals regarding future child safety, and 4) A safety judgment. Child welfare practitioners develop a “map” with families to help identify areas of concern
while helping guide the family’s goals from the beginning of the case until its closure. Signs of safety provide concrete tools and strategies for engaging children in the risk assessment and safety planning process (Pecora et al., 2013).

Pecora et al. (2013) stated it is crucial that child welfare practitioners have an ample understanding of each tool and their respective roles for decision making. While none of these approaches were designed to prevent severe maltreatment or fatalities, they were designed to identify immediate safety threats, estimate the risk of maltreatment, and safeguard child safety (Pecora et al., 2013). The author further argued that while child welfare practitioners use the knowledge gained administering each of these tools, they operate with the realization that none of these tools can completely prevent the most severe cases of child maltreatment (Pecora et al., 2013).

**Relationship Between Safety Assessment and Risk Assessment**

Historically safety assessment and risk assessment have been linked together in child welfare case practice. It is imperative to understand that safety and risk are intertwined and dependent upon each other (PCWRC, 2012). In child welfare practice, it is impossible to minimize the value of importance of one element without diminishing the significance of the other. Both safety and risk are key elements in protecting children from harm (PCWRC, 2012).

While both risk processes and safety processes are administered at different intervals, they often seek to acquire the same information to make different decisions. Both safe assessment management and risk assessment are continuous and ongoing processes (PCWRC, 2012). Data gathered from both assessments serve as the guide for
development of the family service plan. At the initial investigation stage, the focus is on child safety; however, once the investigation is complete and the ongoing monitoring of safety occurs, the safety and risk becomes a parallel process (PCWRC, 2012).

A safety assessment includes gathering data needed to identify the presence or present and impending safety threats and protective capacities. Based on the data gathered and analyzed, the child welfare practitioner decides whether present or impending danger is present and if a safety plan is needed (PCWRC, 2012). If safety threats are identified, the child welfare professional must determine if protective capacities exist within the current family structure to control the identified threats. If so, the child is deemed safe and no safety plan is needed. If protective capacities are diminished, then a plan needs to be developed (with external safety interventions) to ensure the safety of the child. If protective capacities do not exist, then the child must be placed by the CPS practitioner.

While safety identifies present danger, the risk assessment evaluates future threats of harm to a child (PCWRC, 2012). The conclusion of risk factors is determined by evaluating overall what is happening within a family. Based upon the presence of risk influences, a determination is made that maltreatment is likely to occur or reoccur (PCWRC, 2012). The risk assessment helps identify factors which must be addressed to reduce future risk levels. The concept of risk is focused on treating family conditions that are associated with and can lead to a child being maltreated (PCWRC, 2012). While risk assessment deals with the potential of future maltreatment, it is unspecified and can deal with the long-term future.
Risk factors and safety threats are family conditions or dynamics that differ in quality, degree, presentation, and timing. While all safety threats are risk factors, all risk factors are not safety threats (PCWRC, 2012). Research shows that children who are at high risk of future maltreatment are likely to also be experiencing safety threats. In order to effectively utilize both safety assessment and risk assessment and the impact on child welfare practice, child welfare practitioners must have a clear understanding of the distinct differences and their operational functions.

**Summary**

Reform efforts implemented over time can result in the transformation of a child welfare system (Borsheim, 2009). For reform initiatives to be effective and sustainable, there must be continuous effort to promote consistency while providing sustenance to the desired model of practice (Borsheim, 2009). A primary source for accomplishing such a task lies in implementation of an effective training system.

Throughout the literature review, this chapter described the current scholarly literature on: child welfare reform, child maltreatment fatality, RPM instruments, and SPM instruments. Researchers found that there are precursors, which predispose individuals to become perpetrators of abuse (Rutter, 2008). In order to minimize instances of abuse, it is vital that child welfare practitioners understand the impact of both risk and safety factors in child welfare service delivery. While both models are utilized to measure the safety of children, RPM focuses on future risk while the SPM focuses on present danger (PCWRC, 2012).
The literature and research synthesized in Chapter 2 amalgamates the primary factors (child welfare reform, attachment theory, fatal neglect, RPM, and SPM) that are associated with systemic reform and change. My study investigated the relationship between the IVs as predictors of the DV as measured by RPM and SPM in the city of Philadelphia during their respective assessment years. Chapter 3 provides an in-depth analysis of the methodology used to determine the factors that result in policy change and formulation.
Chapter 3: Research Method

Introduction

Incidents of serious maltreatment and child fatalities continue to be a growing problem across the nation (Sheldon-Sherman, Wilson, & Smith, 2013). Child welfare institutions are charged with ensuring the safety, permanency, and well-being of abused, neglected, and maltreated children under their jurisdiction (PCWRC, 2012). Although families and children are provided services in both their homes and communities, children continue to die at the hands of caregivers responsible for their safety (Schnitzer & Ewigman, 2008). Child welfare practitioners are responsible for assessing safety factors, risk factors, and service implementation of families serviced under their jurisdiction. To proactively identify, evaluate, and service vulnerable children, child welfare practice models must effectively be used (Rubin, 2009).

I investigated the relationship between the IVs as predictors of the DV as measured by RPM and SPM in the city of Philadelphia during their respective assessment years. In this chapter, I describe the research methodology that I used. In this nonexperimental, regression study, I used a quantitative method research design to collect and analyze data regarding factors which influence serious incidents of child abuse. By using logistic regression, I was able to examine the relationship between the IVs as drivers of the DV as measured by RPM and SPM in the city of Philadelphia.

In the previous chapters, I presented the background of the study, research problem, significance of the study, and theoretical framework, as well as the literature review. In Chapter 3, I describe the methodology that I used in this analysis. I used a
secondary data analysis design to examine the occurrence of serious incidents of child abuse during the years 2007 and 2012. In the initial segment of this chapter, I discuss the research design and the approach that I used. In the next portion of the study, I focus on ethical considerations. Next, I discuss the instrumentation section along with issues surrounding participant selection, validity, reliability, and data collection. Last, I present the research analysis.

**Research Design and Approach**

A quantitative study is a means for testing objective theories by examining the relationship among variables (Creswell, 2009). By using a quantitative study, data can be analyzed using statistical procedures (Creswell, 2009). A quantitative study was deemed appropriate for the proposed study because it seeks to obtain information regarding serious incidents of child maltreatment on an expanded scale, and DHS is the child welfare agency in Philadelphia responsible for collecting such data.

I used data from DHS cases that were accepted for services during the years 2007 and 2012 was used. The RPM and SPM were used to examine the relationships between practice model service delivery and serious incidents of child abuse. I examined outcomes using both RPM and SPM. Because I had no categorical variables in the study, I used logistic regression analysis to determine the relationship between incidents of abuse using the RPM and SPM.

**Research Question and Hypothesis**

The research questions asked whether a relationship exists between the IVs and their ability to predict incidents of abuse as measured by RPM and SPM in the city of
Philadelphia during their respective assessment years. The research questions and related hypotheses for this study are as follows:

**RQ1:** To what extent, if any, does age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007?

\[ H_0 \]: There is no probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007.

\[ H_1 \]: There is a probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007.

**RQ2:** To what extent, if any, does age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012?

\[ H_0 \]: There is no probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012.

\[ H_1 \]: There is a probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012.
**Ethical Considerations**

To ensure the study maintains ethical standards, secondary data collected by program analysts at DHS ensure participants anonymity. Upon approval from the Walden University Institutional Review Board (IRB), I began to collect data for the study while following the approved procedures outlined by the IRB. To protect study participants anonymity, a consent form signed by the commissioner of the DHS precluded the need to get individual signatures from case families whose data were used for the study. The consent form served as informational research consent. The consent form explained how the participants’ rights and privacy are protected during the study and data collection process. By signing the consent form, which details information about the study, the DHS Commissioner demonstrated their consent. No information is present in the reporting of findings which can identify participants. There is no potential risk expected. I used SPSS version 24.0 to analyze the study findings. I ensured the data was uncompromised by keeping the data in a safe and undisclosed area. To properly dispose of data collected, I used the degaussing method of destruction, which erases the magnetic field of the storage media where data are housed. This destruction process took place within 30 days after data analyzation.

**The Role of the Researcher in the Data Collection Process**

I am presently employed as a full time social worker at the DHS. This position includes assessing the safety of children in their homes, assessing family dynamics and its impact on child safety, and assessing family service needs. While serving in the capacity of an intake Social Worker at the DPW have trained the researcher to utilize
both the risk assessment and safety assessment tools. While serving in this capacity, I have completed approximately 200 risk assessments and 200 safety assessments during the years of 2007 and 2012. Having utilized these tools repeatedly, the researcher is very experienced with data collection utilized in RPM and SPM. The researcher was responsible for collecting and entering data into SPSS 24.0.

I used the RPM and SPM to analyze secondary data collected by program analysts at DHS regarding incidents of child maltreatment that occurred during the years 2007 and 2012. I examined data regarding incidents of abuse which occurred under usage of the RPM (2007) and SPM (2012). Secondary data were utilized in this proposed study. Secondary data analysis can be defined as the utilization of secondary data, where “secondary data can include any data that are examined to answer a research question other than the question(s) for which the data were initially collected (Vartanain, 2011). I used coding methodology to describe the original and recoded variables of interest. All data collection was coded and input into SPSS v. 24.

The analysis of more than two variables serves three major functions in empirical research: control, elaboration, and prediction (Frankfort-Nachmias & Nachmias, 2008). In research studies, the control variable is utilized to test whether the computed association between the dependent (serious incidents of child abuse) and IVs (age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse) either support or reject the retention of the null hypothesis. While utilizing RPM and SPM, I measured whether the IVs have predictive ability to impact the DV during the identified assessment years.
To analyze research, data logistic regression was utilized. Logistic regression can be used in prediction problems when the goal is to determine the probability of the outcome (DV) based on values of a set of predictor variables (IVs). Logistic regression relies on maximum likelihood estimation (MLE). Logistic regression measures the relationship between the categorical DV and one or more IVs, with the assumption of a normal distribution.

**Setting and Sample**

This research focuses on incidents of abuse reports that occurred at the DHS during the years 2007 and 2012 while the RPM and SPM were respectively utilized. Utilizing RPM, incidents of abuse are characterized as those with assessment levels of moderate and high. Utilizing SPM, incidents of abuse are characterized as those with an identified measure of present danger. The sample population consisted of case record data for cases that were accepted for services at DHS during the specified timeframes of the study where the outcome of the risk assessments was deemed high and moderate, and cases were examined utilizing safety assessments where present danger was found. Case data were examined through DHS annual reports as well as demographic data collected by DHS program analysts during the years of 2007 and 2012. The DHS was selected as

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**Table 1**

*Variables*

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
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<tbody>
<tr>
<td>Incidents of abuse</td>
<td>Age of child</td>
</tr>
<tr>
<td></td>
<td>Gender of child</td>
</tr>
<tr>
<td></td>
<td>Age of parent/caregiver</td>
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<td></td>
<td>Prior substantiated reports</td>
</tr>
</tbody>
</table>

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the child welfare institution to be studied because the researcher had access to the data through case records and files.

In 2007, DHS received 4,670 case reports of suspected abuse. In 2012, DHS received 4,537 case reports of suspected abuse. I first conducted a power analysis to determine the appropriate sample size needed in the study. Numerically, power is equal to 1-b (beta) (Creswell, 2013). Once the sample size was determined, the researcher computed the effect size. Effect size is the size of the relationship between two variables and is usually defined as the difference in mean outcomes between the IV and the DV (Creswell, 2013). Once I computed the power analysis (.80), effect size (d = .50) medium, and alpha level (.05), the researcher then completed a G*Power analysis to compute the necessary minimum sample size needed for each arm of the hypothesis. The $F$-statistic is a value resulting from a standard statistical test ($F$-test) used in ANOVA and regression analysis to determine if the variances between the means of two populations are significantly different (Faul, Erdfelder, Buchner, & Lang, 2009).

**Reliability and Validity**

Data collected was entered utilizing SPSS 24.0 (Statistical Program for analysis in Social Science) database software for reliability. According to Frankfort-Nachmias and Nachmias (2008), reliability refers to the extent to which a measuring instrument contains variable errors. While reliability deals with the extent of variable errors, validity deals with the degree to which an instrument measures what it is intended to measure (Frankfort-Nachmias & Nachmias, 2008).
The researcher utilized the RPM and SPM, which were developed and implemented by the Pennsylvania DPW. Both the Risk Assessment and Safety Assessment tools, which guide both models, were constructed based on research conducted and technical assistance provided by the National Resource Center on Child Protective Services (NRCCPS) and Action for Child Protection (PCWRC, 2012). Research from NRCCPS was utilized to develop the tools which was utilized in this research; therefore, content validity has been established. According to Frankfort-Nachmias and Nachmias (2008), sampling validity (at type of content validity) can be defined as the degree to which a given population is adequately sampled by the measuring instrument.

**Data Collection**

Data were collected upon approval and receipt of accepted IRB application. The researcher reviewed data collected from case records that were open and accepted for service during the years 2007 and 2012 at DHS. After the researcher obtained written permission from the Commissioner of the DHS as well as from the Walden Institutional Review Board (IRB), the researcher began reviewing data. Data collection encompassed looking at DHS historical reports regarding GPS reports, CPS reports, and serious incidents of child maltreatment.

I analyzed data collected utilizing the RPM in 2007 while examining the relationship between the IVs and their ability to predict incidents of abuse. Likewise, the researcher analyzed data collected utilizing the SPM in 2012 while examining the relationship between the IVs and their ability to predict incidents of abuse. The researcher
then examined data collected to determine whether RPM over SPM found the IVs to be stronger predictors of DV.

**Data Analysis**

The data were collected from DHS historical data reports, DHS annual reports, and case record findings. Data collected was entered into a databank using SPSS v. 24.0. Risk Assessments and Safety assessments were analyzed as input/output measures for keeping records. The researcher analyzed data guided by the premise that data were collected as means of determination of possible risk or danger of maltreatment of children. The quantitative data were evaluated utilizing logistic regression analysis procedures.

Regression analysis is the area of statistics used to examine the relationship between a quantitative response variable and one or more explanatory variables (Frankfort- Nachmias & Nachmias, 2008). While trying to assess the likelihood between the DVs and IVs, the researcher utilized logistic regression. By utilizing this type of analysis, the researcher aims to show a relationship between the DV (incidents of abuse) and one or more of the IVs (age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse). The goal in analyzing these data were to determine whether there was a greater likelihood that the age of child, gender of child, age of parent/caregiver, or prior substantiated reports of abuse impact incidents of abuse.

The research questions asked if there is a relationship between the RPM and SPM’s effectiveness to address serious incidents abuse in the City of Philadelphia. The IVs are assigned rankings of low, moderate, and high on the Risk Assessment tool to be
able to compare and contrast the measures. The measures indicate the severity of Risk. Likewise, the IVs are assigned rankings of present danger or no present danger on the Safety Assessment tool to be able to compare and contrast the measures. The main null hypothesis for linear regression, which was utilized, is: \( H_0: b_1 = 0 \), the coefficient of the slope equals 0 (zero), and the alternate hypothesis utilized is: \( H_A: b_1 \neq 0 \), the coefficient of the slope does not equal 0 (zero).

The research hypotheses,

\( H_{01} \): There is no probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007.

\( H_{11} \): There is a probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007.

\( H_{02} \): There is no probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012.

\( H_{12} \): There is a probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012 were tested using logistic regression analysis. The expectation that RPM would score differently than SPM was confirmed using an analysis of variance (ANOVA). Logistic regression techniques were used to examine the relationship between the variables of incidents of abuse, age of child, gender of child, age
of parent/caregiver, and prior substantiated reports of abuse. The $r^2$ coefficients were computed via a series of logistic regression analyses based on the hypothesized models.

I ran a correlation matrix. Correlation matrices present a convenient method of summarizing the correlation between each pair of predictors as well as the correlation between each predictor and the DV (Cohen, Cohen, West, & Aiken, 2003). I examined five direct relationships using logistic regression. These include incidents of abuse and age of child, incidents of abuse and gender of child, incidents of abuse and age of parent/caregiver, and incidents of abuse and prior substantiated reports.

**Summary**

Chapter 3 presented the purpose and questions, study procedures, study instrumentation, data collection, and analysis. This chapter focused on using statistical procedures to measure, quantify and explain the nature of the relationship between the IVs and DVs. The understanding of the relationship between these variables is crucial for child welfare practitioners and administrators to understand as it directly impacts child safety. In chapter 4 the data will be analyzed regarding the relationship between incidents of abuse, age of child, gender of the child, age of parent / caregiver, and serious incidents of abuse as assessed by RPM and SPM.
Chapter 4: Data Analysis

Introduction

My objective in this study was to investigate the relationship between the IVs of the study (age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse) as predictors of incidents of abuse (DV) in Philadelphia at the DHS using the RPM and SPM. I used data regarding incidents of abuse from the DHS database for the years 2007 and 2012. I used logistic regression to predict the probability that an observation falls into one of two categories of a dichotomous DV based on one or more IVs and is the selected statistic for these analyses. The sample in the study consisted of data collected regarding serious incident of abuse reports investigated by the DHS for the years 2007 and 2012.

The research questions asked whether a relationship exists between the IVs and their ability to predict incidents of abuse as measured by RPM and SPM in the city of Philadelphia during their respective assessment years. Child welfare practitioners developed the RPM to measure the probability of future risk or maltreatment of a child (PCWRC, 2012). The purpose of using this model was to help child welfare practitioners measure the likelihood of risk based on several key factors. The factors that measured include age of child, family composition, and prior family involvement with child welfare agencies. Assessing the potential risk and severity of abuse to a child is the process the CYD social worker uses to determine whether a child is safe, whether a child is likely or unlikely to be abused in the near future, as well as the severity of current abuse or neglect (PCWRC, 2012). Child welfare practitioners developed the SPM as a comprehensive
tool to measure a caregiver’s ability to provide protection to the children for whom they are responsible. The safety model examines three primary components: safety threats, safety threshold, and protective capacity to determine a child’s safety.

The research questions and related hypotheses for this study were as follows:

RQ1: To what extent, if any, does age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007?

H01: There is no probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007.

H11: There is a probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007.

RQ2: To what extent, if any, does age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012?

H02: There is no probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012.

H12: There is a probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012.
The sample included data from all reports of substantiated and unsubstantiated abuse reports in the city of Philadelphia DHS from calendar years 2007 and 2012. Reports were pulled from 2007 as that was the year the RPM was last implemented. Likewise, reports were used from calendar year 2012 to represent the SPM. Cases pulled from 2007 were representative of reports investigated at DHS using the RPM as the assessment model for child safety, while cases pulled from 2012 were representative of reports investigated at DHS using the SPM as the assessment model for child safety. The DHS reports received 34,761 components of variable data for both years.

The DV is dichotomous. A dichotomous variable is a variable that can be assigned only two values, categories, or levels (Frankfort-Nachmias & Nachmias, 2008). A report is deemed substantiated when an assessment completed using the RPM or SPM model determines that abuse occurred, whereas a report is deemed unsubstantiated when an assessment completed using RPM or SPM deems that abuse did not occur. In the study the DV, incidents of abuse, is dichotomous because there are only two possible outcomes: abuse occurred, or abuse did not occur. The study is predicting the likelihood of a substantiated (1) or unsubstantiated (0) report based on the IVs described previously. I chose logistic regression analysis to measure the relationship between one DV and four IVs in the study. Logistic regression analysis is predictive in nature as it measures the likelihood of a relationship between the IV and DV (Fankfort-Nachmias, 2008). Logistic regression examines the relationship between one or more IVs and dichotomous outcome by calculating changes of the DV itself. The logistic regression describes a more probabilistic relationship of the variables and the outcome as opposed to the linear
relationship in a regression analysis. Logistic regression is used to measure the relationship between one DV and one or more IVs. In this study, logistic regression was used to measure the likelihood of incidents of abuse in relation to age of child, gender of the child, age of the parent/caregiver, and prior substantiated reports of abuse.

Summary Statistics and Sample Protocol

In this study, there were 34,761 components of variable data pulled for the calendar years 2007 and 2012. The initial descriptive statistics had shown 4,578 where the age of the perpetrator was unknown, which amounted to 13.2% of the sample size pulled. Of the sample population used, it was determined that a closer look would be needed to determine what to do with the missing data. An analysis was run to identify patterns/reasons for missing variables.

Table 2 and Figure 1 depict and highlight the perpetrator age groups by the report type. There were approximately 16 distinct categories utilized for GPS report investigations at the DHS. There were a high number of similar report codes with the perpetrators being over 18. Due to the similarity to the other age groups, the missing cases were deleted as the missing group did not appear different than the remaining cases. Additionally, because of the missing cases that were similar to the other age categories and due to the remaining sample being so large, the missing cases were deleted. I determined that the 13.2% of missing data did not skew the findings. Since the study had 87% remaining viable data available, the sample size was adequate. The researcher determined that because the sample size was not greatly impacted by the percentage of unavailable component data, I proceeded forward with data analyzation. I determined that
this did not impact the validity to the study. According to Creswell (2009), internal validity threats are experimental procedures, treatments, or experiences of the participants that threaten the researcher’s ability to draw correct inferences from the data about the population in an experiment. Since the researcher utilized secondary data analysis, data were examined that was previously collected from DHS statisticians, therefore it did not involve the previously aforementioned elements.

Deleting the ‘missing’ data left 30,133 components of variable data for the study. The DHS lists the perpetrator as someone more than 18 years of age. A sample of cases were pulled from the data base where the perpetrator was under 18 years of age and many of them displayed an allegation code for sexual mistreatment. As shown in Table 2, 33.8% of the allegations were of ‘sexual mistreatment’. ‘Sexual mistreatment’ is a code given by DHS when there is no adult perpetrator, but a report must be made. An example of this kind of allegation is when a child reports that another child inappropriately touched them. In some cases, the allegations are false, but the report does not rise to the level of a CPS report. As a result of this and because the entire sample of 156 children perpetrators had shown the reports to be invalid, this age group would be best suited for qualitative study or a more specific quantitative study. This left 30,027 components of variable data.

Table 2 below provides an overview of the occurrence of incidents of abuse divided into categories of allegation description and perpetrator age groups. The table shows for incidents of abandonment 1.7% (0-17 perp age group), 2.4% (18-29 perp age group), 2.8% (30-39 perp age group), 3.5% (40-49 perp age group), 3.6% (50-64 perp age
group), 3.4% (65 and older perp age group), and 1.8% for reports where perpetrator’s age was left blank. Child endangerment showed: 16.3% (0-17 perp age group), 20.3% (18-29 perp age group), 17.8% (30-39 perp age group), 17.1% (40-49 perp age group), 15.8% (50-64 perp age group), and 15.2% (65 and older age group). Failure to provide appropriate supervision category showed: 10.8% (0-17 perp age group), 25% (18-29% perp age group), 25.3% (30-39 perp age group), 23.1% (40-49 perp age group), 21.6% (50-64 perp age group), and 20.9% (65 and older perp age group). The category with the highest percentage for incidents of occurrence was failure to provide appropriate supervision.

Table 2

<table>
<thead>
<tr>
<th>Allegation Description</th>
<th>0-17</th>
<th>18-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-64</th>
<th>65+</th>
<th>(blank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abandonment / Unattended Child</td>
<td>1.7%</td>
<td>2.4%</td>
<td>2.8%</td>
<td>3.5%</td>
<td>3.6%</td>
<td>3.4%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Child Endangerment</td>
<td>16.3%</td>
<td>20.3%</td>
<td>17.8%</td>
<td>17.1%</td>
<td>15.8%</td>
<td>15.2%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Child Under 10 / Delinquent Act</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Chronic Lack of Physical Hygiene</td>
<td>1.3%</td>
<td>5.5%</td>
<td>4.9%</td>
<td>4.4%</td>
<td>3.8%</td>
<td>3.4%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Emotional Harm</td>
<td>0.0%</td>
<td>0.4%</td>
<td>0.8%</td>
<td>1.5%</td>
<td>1.4%</td>
<td>0.9%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Failure to Provide Appropriate Supervision</td>
<td>10.8%</td>
<td>25.0%</td>
<td>25.3%</td>
<td>23.1%</td>
<td>21.6%</td>
<td>20.9%</td>
<td>17.0%</td>
</tr>
<tr>
<td>Failure to Provide Sufficient Clothing</td>
<td>0.5%</td>
<td>1.8%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>2.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Inadequate Medical / Mental Health Care</td>
<td>3.2%</td>
<td>4.8%</td>
<td>4.2%</td>
<td>4.2%</td>
<td>4.0%</td>
<td>3.4%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Inappropriate Sexual Acting Out</td>
<td>14.6%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.8%</td>
<td>0.2%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Inappropriate Tying / Confinement / Restraint</td>
<td>0.3%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.2%</td>
<td>0.4%</td>
<td>0.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Incorrigible Child</td>
<td>0.8%</td>
<td>0.1%</td>
<td>0.5%</td>
<td>0.8%</td>
<td>1.3%</td>
<td>2.4%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Lack of Education as Required by Law</td>
<td>0.3%</td>
<td>2.4%</td>
<td>6.5%</td>
<td>8.5%</td>
<td>5.6%</td>
<td>5.8%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Lack of Food or Essential Nutrition</td>
<td>2.8%</td>
<td>9.1%</td>
<td>8.3%</td>
<td>7.6%</td>
<td>7.4%</td>
<td>8.1%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Lack of Shelter or Unsafe Shelter</td>
<td>4.9%</td>
<td>17.2%</td>
<td>14.8%</td>
<td>13.3%</td>
<td>12.2%</td>
<td>17.7%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Physical Harm / Inappropriate Discipline</td>
<td>8.7%</td>
<td>9.4%</td>
<td>10.9%</td>
<td>12.2%</td>
<td>17.4%</td>
<td>13.7%</td>
<td>14.5%</td>
</tr>
<tr>
<td>Sexual Mistreatment</td>
<td>33.8%</td>
<td>1.2%</td>
<td>1.0%</td>
<td>1.6%</td>
<td>2.9%</td>
<td>2.6%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Age Group

Figure 1 shows an identifiable similar pattern between age groups over 18 and less than 18 years of age. The age group of 65 and older had 296 subjects in this category, which was not enough to include in the analysis. There were 296 subjects and compared
to those other age groups, as shown in Table 2, resulted in a low frequency when a cross-tabulation was produced. This low or empty frequency inside the cells can impact results. Low frequency means less than 5%, usually 0 cell in the cross, tabulation that is occurring (displayed in Table 9). If the researcher used those 65 and older in the model it affects the significance of the model (as shown in Table 9). As a result, this group was also excluded from the analysis. Additionally, this group, like the children who were under 18, may have their own development or life cycle factors that may impact a report determination. Likewise, there is a cognitive developmental difference in this age group. Studies have shown that as people get older their cognitive abilities are impacted. The 65 and older age category would need a separate quantitative or qualitative study. Deleting this age group resulted in 29,685 components of variable data.

![Figure 1. Pattern of allegation type.](image)

*Perpetrator Age Group*
Table 3 highlights the frequency of data present in the model from the specific age groups listed regarding the age of the perpetrators. Table 4 depicts the number of cases ($n$) pulled for the study and the number of missing cases that researcher was unable to access. The total number of cases pulled were 29,685. The number of cases missing were four, therefore the total number of cases included in the analysis was 29,681.

Table 3

**Perpetrator Age Group Frequency**

<table>
<thead>
<tr>
<th>Age group</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>11,048</td>
</tr>
<tr>
<td>30-39</td>
<td>11,553</td>
</tr>
<tr>
<td>40-49</td>
<td>5,262</td>
</tr>
<tr>
<td>50-64</td>
<td>1,818</td>
</tr>
</tbody>
</table>

**Logistic Regression Results and Analysis**

A logistic regression model was utilized to measure the relationship between the IVs, age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse, and the DV, incidents of abuse, as investigated by the DHS in Philadelphia while utilizing the RPM and SPM for the years 2007 and 2012, respectively. Logistic regression was used as the DV was coded substantiated (0) and unsubstantiated (1). The analysis sought to predict whether the IVs (age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse) impacted the likelihood of incidents of abuse for the years 2007 and 2012.

After the sample was obtained and cleaned, the logistic results showed that those reports in 2007 utilizing the RPM were 9.6% more likely to have a valid report than those
in 2012 utilizing SPM. That for every report received, it increases the likelihood of a valid report by 94.2%. The findings illustrate that the victim age matters. Children in the age group of 6-10-year-old were 25% less likely than the younger group to have a valid report. However, those in the 11-17-year-old age group were 7% more likely to have a report than the 0-5-year-old age group. The likelihood of having a valid report decreased with perpetrator age when comparing the older age groups with the 18-29-year-old age group. Those in the 30-39-year-old age group were 16.7% less likely to have a valid report. Perpetrators that were in the 40-49-year-old age group were 27.4% less likely to have a valid report. Finally, those in the 50-64-year-old age group were 27.1% less likely to have a valid report. There was no significant difference with victim gender and likelihood of a valid report.

Table 4

*Shows the N of Cases and the Total Number of Missing Cases*

<table>
<thead>
<tr>
<th>Unweighted Cases</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected Cases</td>
<td>29,681</td>
<td>100.0</td>
</tr>
<tr>
<td>Included in Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing Cases</td>
<td>4</td>
<td>.0</td>
</tr>
<tr>
<td>Total</td>
<td>29,685</td>
<td>100.0</td>
</tr>
<tr>
<td>Unselected Cases</td>
<td>0</td>
<td>.0</td>
</tr>
<tr>
<td>Total</td>
<td>29,685</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 5 depicts the DV coding utilized for the study. Invalid reports (reports where child abuse did not occur) were coded as 0. Valid reports (reports where abuse occurred) were coded as a 1.
Table 5

Values

<table>
<thead>
<tr>
<th>Original Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invalid</td>
<td>0</td>
</tr>
<tr>
<td>Valid</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 6 shows the frequency of each categorical group and the parameter coding. Perpetrator’s age 18-29-year-old was the comparison group and is encoded as 0; the 30-39-year-old age group was encoded as 1; the 40-49-year-old age group was coded as 2; the age group of 50-64 was coded as 3; and so on. Subsequently, the 0-5-year-old age group was coded as 0, the 6-10-year-old age group was coded as 1, and the 11-17-year-old age group was coded as 2. The female group was coded as 1 and the male group was coded as 0. Lastly, the year 2012 was coded as 0 and 2007 was coded as 1. The only variable not shown in Table 6 is the ‘prior valid’ variable. Due to the IV (prior valid) being a categorical variable, no parameter coding is needed.
Table 6

*Categorical Variables Coding*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Parameter coding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perp Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>11,048</td>
<td>0</td>
</tr>
<tr>
<td>30-39</td>
<td>11,553</td>
<td>1</td>
</tr>
<tr>
<td>40-49</td>
<td>5262</td>
<td>2</td>
</tr>
<tr>
<td>50-64</td>
<td>1,818</td>
<td>3</td>
</tr>
<tr>
<td><strong>Child Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>11,709</td>
<td>0</td>
</tr>
<tr>
<td>6-10</td>
<td>8,388</td>
<td>1</td>
</tr>
<tr>
<td>11-17</td>
<td>9,584</td>
<td>2</td>
</tr>
<tr>
<td><strong>Victim Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>14,396</td>
<td>1</td>
</tr>
<tr>
<td>Male</td>
<td>15,285</td>
<td>0</td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>12,782</td>
<td>0</td>
</tr>
<tr>
<td>2007</td>
<td>16,899</td>
<td>1</td>
</tr>
</tbody>
</table>

The Block 0 (Table 7) output is for a model that includes only the constant on whether a report is valid or invalid and how well it predicts a valid or invalid report. The base rates of the determination where 66.5% were invalid and 33.5% were valid. This model correctly predicts an outcome 66.5% of the time. Table 7 highlights the model classifying the outcome with precision for 66.5% of the cases in the study based on the findings of the study. This table predicts the percentage in which a report is deemed valid.
or invalid based on the study variables assessed. This table shows how well the model predicts a valid or invalid report. This table displays the percent of cases for which the DV was correctly predicted given the model. In this part of the output, this is the null model.

Table 7

*Block 0: Beginning Block - Classification Table*${}^{a,b}$

<table>
<thead>
<tr>
<th>Determination</th>
<th>Observed</th>
<th>Predicted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invalid</td>
<td><strong>19,730</strong></td>
<td><strong>0</strong></td>
</tr>
<tr>
<td>Valid</td>
<td><strong>9,951</strong></td>
<td><strong>0</strong></td>
</tr>
<tr>
<td>Overall Percentage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

${}^a$ Constant is included in the model.

${}^b$ The cut value is .500

Table 8 shows the intercept-only model is $\ln(\text{odds}) = -.684$. If we use exponentiation on both sides of this expression we find that our predicted odds $[\text{Exp}(B)] = .504$. That is, the predicted odds of a valid report are .504. Since 9,951 of our cases were valid and 19,730 were invalid, our observed odds are $9951/19730 = .504$. 
Table 8

*Block 0: Beginning Block Variables in the Equation*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 0</td>
<td>Constant</td>
<td>-.684</td>
<td>.012</td>
<td>3,098.993</td>
<td>1</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 9 show how much the -2 Log likelihood(-2LL) would drop if a single predictor were added to the model (which already has the intercept) and if that additional variable is predicted to be significant.

Table 9

*Block 0: Beginning Block Variables not in the Equation*

<table>
<thead>
<tr>
<th></th>
<th>Score</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 0 Variables</td>
<td>Year (1)</td>
<td>10.317</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Prior Valid</td>
<td>4,924.136</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Victim Age (0)</td>
<td>154.825</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Victim Age (1)</td>
<td>86.302</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Victim Age (2)</td>
<td>131.938</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Victim Gender (1)</td>
<td>1.731</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Perp Age (0)</td>
<td>27.922</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Perp Age (1)</td>
<td>11.027</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Perp Age (2)</td>
<td>5.201</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Perp Age (3)</td>
<td>.006</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Overall Statistics</td>
<td>5,065</td>
<td>8</td>
</tr>
</tbody>
</table>
Block 1 in SPSS is the model with all the predictor variables added to the equation. Table 10 shows that the current model is better than the predictor only model shown in Table 8.

Table 10

**Block 1 Method = Enter Omnibus Tests of Model Coefficients**

<table>
<thead>
<tr>
<th></th>
<th>Chi-square</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>5,381.131</td>
<td>8</td>
<td>.000</td>
</tr>
<tr>
<td>Block</td>
<td>5,381.131</td>
<td>8</td>
<td>.000</td>
</tr>
<tr>
<td>Model</td>
<td>5,381.131</td>
<td>8</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 11 highlights the model summary which provides the -2LL and pseudo $R^2$ for the alternative model. The -2LL value for this model (32482.606) is what was compared to the prior null model in the omnibus test of model coefficients. Table 11 shows how much the -2Log likelihood (-2LL) would drop if a single predictor were added to the model (which already has the intercept) and if that additional variable is predicted to be significant. Caution should be used in interpreting the model summary but the -2LL shows a decrease from the Block 0 model it drops from 37,000. The Nagelkerke $R^2$ is one method to explain the variance in the model. However, this is not similar to the $R^2$ in an ordinary regression. As a result, this output should be interpreted with caution.
Table 11

*Block 1 Method = Enter - Model Summary*

<table>
<thead>
<tr>
<th>SStep</th>
<th>-2 Log likelihood</th>
<th>Cox &amp; Snell R Square</th>
<th>Nagelkerke R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>32,482.606a</td>
<td>.166</td>
<td>.230</td>
</tr>
</tbody>
</table>

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

The Hosmer Lemeshow Test and Contingency Table is shown in Table 12 and Table 12a. This test is utilized to show how well data fits the model. Generally, this test should be greater than .05. In this case is .000. Most likely, if the model was run without the insignificant variable ‘victim gender,’ the model would see a better fit. However, like the items in Table 11, caution should be used here as the model may have been influenced by unknown interactions. Additionally, chi-square statistics are heavily influenced by sample size, such as this one, so that with a very large sample even minute differences are significant.

Table 12

*Block 1 Method = Enter - Hosmer and Lemeshow Test*

<table>
<thead>
<tr>
<th>SStep</th>
<th>Chi-square</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5,407.864</td>
<td>8</td>
<td>.000</td>
</tr>
</tbody>
</table>
Table 12a

*Block 1 Method= Enter - Contingency Table for Hosmer and Lemeshow Test*

<table>
<thead>
<tr>
<th></th>
<th>Determination = 0</th>
<th></th>
<th>Determination = 1</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Observed</td>
<td>Expected</td>
<td>Observed</td>
<td>Expected</td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2,973</td>
<td>2,549.021</td>
<td>0</td>
<td>423.979</td>
<td>2,973</td>
</tr>
<tr>
<td>2</td>
<td>3,078</td>
<td>2,552.164</td>
<td>0</td>
<td>525.836</td>
<td>3,078</td>
</tr>
<tr>
<td>3</td>
<td>2,887</td>
<td>2,338.516</td>
<td>0</td>
<td>548.484</td>
<td>2,887</td>
</tr>
<tr>
<td>4</td>
<td>2,494</td>
<td>2,042.175</td>
<td>82</td>
<td>533.825</td>
<td>2,576</td>
</tr>
<tr>
<td>5</td>
<td>2,039</td>
<td>2,214.050</td>
<td>864</td>
<td>688.950</td>
<td>2,903</td>
</tr>
<tr>
<td>6</td>
<td>1,262</td>
<td>2,041.186</td>
<td>1,612</td>
<td>832.814</td>
<td>2,874</td>
</tr>
<tr>
<td>7</td>
<td>1,220</td>
<td>2,024.544</td>
<td>1,787</td>
<td>982.456</td>
<td>3,007</td>
</tr>
<tr>
<td>8</td>
<td>1,203</td>
<td>1,765.574</td>
<td>1,726</td>
<td>1163.426</td>
<td>2,929</td>
</tr>
<tr>
<td>9</td>
<td>1,246</td>
<td>1,445.752</td>
<td>1,762</td>
<td>1562.248</td>
<td>3,008</td>
</tr>
<tr>
<td>10</td>
<td>1,328</td>
<td>757.019</td>
<td>2,118</td>
<td>2,688.981</td>
<td>3,446</td>
</tr>
</tbody>
</table>

Table 13 shows output for the model that includes the constant and the predictor variables on whether a report is valid or invalid. In this table, a 3% increase in the classification frame from 66.5% to 69.7% of the cases correctly classified is seen. The overall rate improved, and the model correctly predicts at a rate of 69.7%.

*Table 13*

*Block 1 Method= Enter - Classification Table*

<table>
<thead>
<tr>
<th></th>
<th>Observed</th>
<th>Predicted</th>
<th>Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage Correct</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Step 1</td>
<td>Determination</td>
<td>17,656</td>
<td>2,074</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>6,909</td>
<td>3,042</td>
</tr>
<tr>
<td>Overall Percentage</td>
<td></td>
<td></td>
<td>69.7</td>
</tr>
</tbody>
</table>

a. The cut value is .500

Table 14 summarizes the outcomes of the significance of the logistic regression and coefficients of the variables in the logistic regression study as such:

- The Exp(B) in Table 13 is the odds ratio or likelihood that an event will occur.
● Year – 2007 versus 2012 so that according to table 12 those cases in 2007 were 1.096 times more likely or 9.6% more likely to have a valid report.

● Prior Valid Reports – Prior valid is a continuous variable so for every .664 more reports, the odds of having a valid report are 1.94 more times likely than an invalid report. A person is 94.2% more likely to have a valid report as the number of prior reports increases.

● Victim Age – the reference group for victims is 0-5 years of age. The victims whose ages were 6-10 were .25 or 25% less likely than the 0-5-year olds to have a valid report. However, those in the 11-17-year old age group were 1.07 or 7% more likely than 0-5-year old age group to have a valid report.

● Perpetrator Age- the reference group for perpetrators was 18-29 years of age. Generally, as the perpetrator grew older, the less likely it was that they would have a valid report compared to the 18-29-year-old group. Those that were in the 30-39 age groups were .167 or 16.7% less likely to have a valid report than the 18-29-year-old group. Those in the 40-49 age group were .274 or 27.4% less likely to have a valid report than those in the 18-29-year-old group. Finally, those in the 50-64 years age group were .271 or 27.1% less likely than the 18-29 group to have a valid report.

● Victim Gender did not determine if a male or female child was likely to have a valid report.

The analysis of this logistic study determined the effect the IVs age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse have
on the DV, incidents of abuse. The coefficients, standard error, Wald test, degrees of
freedom, \( p \) value (sig.), and odds ratio (Exp B) are computed in Table 14. Logistic
regression estimates a log odds ratio for each test, simultaneously taking account of
other test utilized in the model (Glas, Lijmer, Prins, Bonsel, & Bossuyt, 2003). In this
study, a .05 level of significance was utilized. Based on the results of the study, the
null hypothesis was retained using a .05 level significance. The presence of statistical
significance of the data were enough to accept the null hypothesis \( (H_{10}) \) that there is
no probability that gender of child, as assessed by RPM, predicts incidents of abuse
during the year 2007; and null hypothesis \( (H_{20}) \) that there is no probability that
gender of child, as assessed by the SPM, predicts incidents of abuse during the year
2012. Therefore, the findings would show that there is a statistically significant
relationship between the remaining IVs (age of the child, age of the parent/caregiver,
and prior substantiated reports of abuse) and the DV. The data show there is a
likelihood that age of child, age of parent/caregiver, and prior substantiated reports of
abuse as assessed by the RPM are statistically significant in predicting incidents of
abuse and neglect. While the findings did show that gender of the child did not
significantly impact incidents of abuse as assessed by both the RPM and SPM during
the timeframes examined, all other remaining variables were shown to significantly
impact incidents of abuse.
### Table 14

**Block 1 Method = Enter - Variables in the Equation**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year(1)</td>
<td>.091</td>
<td>.028</td>
<td>11.018</td>
<td>1</td>
<td>.001</td>
<td>1.096</td>
</tr>
<tr>
<td>Prior Valids</td>
<td>.664</td>
<td>.011</td>
<td>3717.673</td>
<td>1</td>
<td>.000</td>
<td>1.942</td>
</tr>
<tr>
<td>Victim Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victim Age(1)</td>
<td>-.285</td>
<td>.035</td>
<td>66.257</td>
<td>1</td>
<td>.000</td>
<td>.752</td>
</tr>
<tr>
<td>Victim Age (2)</td>
<td>.072</td>
<td>.037</td>
<td>3.836</td>
<td>1</td>
<td>.050</td>
<td>1.074</td>
</tr>
<tr>
<td>Victim Gender(1)</td>
<td>-.041</td>
<td>.027</td>
<td>2.255</td>
<td>1</td>
<td>.133</td>
<td>.960</td>
</tr>
<tr>
<td>Perp Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perp Age (1)</td>
<td>-.183</td>
<td>.034</td>
<td>29.294</td>
<td>1</td>
<td>.000</td>
<td>.833</td>
</tr>
<tr>
<td>Perp Age (2)</td>
<td>-.320</td>
<td>.044</td>
<td>53.407</td>
<td>1</td>
<td>.000</td>
<td>.726</td>
</tr>
<tr>
<td>Perp Age (3)</td>
<td>-.316</td>
<td>.063</td>
<td>24.929</td>
<td>1</td>
<td>.000</td>
<td>.729</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.361</td>
<td>.033</td>
<td>1672.484</td>
<td>1</td>
<td>.000</td>
<td>.256</td>
</tr>
</tbody>
</table>

In logistic regression, one main assumption is that there should not be any multicollinearity or correlation between the IVs. As shown in Table 15, there is very little correlation between the IVs. There is some moderate correlation between those victims between 5-11 years of age and the perpetrator age.
Table 15

Block 1 Method= Enter - Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Constant</th>
<th>Year(1)</th>
<th>Prior Valids</th>
<th>Victim Age(1)</th>
<th>Victim Age(2)</th>
<th>Victim Gender</th>
<th>Perp Age(1)</th>
<th>Perp Age (2)</th>
<th>Perp Age (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td>Constant</td>
<td>1.000</td>
<td>-.475</td>
<td>-.289</td>
<td>-.294</td>
<td>-.178</td>
<td>-.394</td>
<td>-.320</td>
<td>-.206</td>
</tr>
<tr>
<td>Year(1)</td>
<td></td>
<td>1.000</td>
<td>.008</td>
<td>-.019</td>
<td>-.021</td>
<td>-.001</td>
<td>.017</td>
<td>-.010</td>
<td>.017</td>
</tr>
<tr>
<td>Prior Valids</td>
<td></td>
<td>1.000</td>
<td>-.071</td>
<td>-.054</td>
<td>-.004</td>
<td>-.109</td>
<td>-.121</td>
<td>-.070</td>
<td></td>
</tr>
<tr>
<td>Victim Age(1)</td>
<td></td>
<td>1.000</td>
<td>.465</td>
<td>.020</td>
<td>-.178</td>
<td>-.169</td>
<td>-.120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victim Age (2)</td>
<td></td>
<td>1.000</td>
<td>-.017</td>
<td>-.386</td>
<td>.408</td>
<td>-.300</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victim Gender(1)</td>
<td></td>
<td>1.000</td>
<td>.006</td>
<td>.003</td>
<td>-.003</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perp Age(1)</td>
<td></td>
<td>1.000</td>
<td>.498</td>
<td>.350</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perp Age (2)</td>
<td></td>
<td>1.000</td>
<td>.307</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perp Age (3)</td>
<td></td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Post Hoc Analysis

At a later point in the analysis, perpetrator gender was considered in this analysis as an additional variable. When perpetrator gender was added to the model, age of victim would become insignificant. It appears that there was a high correlation between victim age and perpetrator gender. Compounded with a moderate correlation between victim age and perp age, the victim age became insignificant. The model ran better without the perpetrator gender included. However, a chi-square was run to see if there was a difference between perpetrator gender and the report determination. There was a significant difference as the males made up 30% of the valid reports and females made up 34% of the valid reports.
Chapter Summary

My purpose in this study was to determine whether age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse could predict the probability of incidents of abuse. The study showed that reports received in 2007 utilizing the RPM were 9.6% more likely to have a valid report; likewise, every report received during the years 2007 and 2012 increases the probability of a valid report by 94.2%. The age of the victim was determined to statistically impact the DV (incidents of abuse), victims 6-10 were 25% less likely than the 0-5-year-old group; whereas the 7-11-year old group were 7% more likely to have a valid report. The probability of having a valid report decreased as age of the perpetrator increased. The study showed there was no significant difference with gender and likelihood of a valid report (serious incident of abuse).

I found that when utilizing both models, RPM was more viable than SPM in predicting incidents of abuse. After analyzing the data, I discovered that assessments completed using RPM provided a 94.2% likelihood for valid reports. Based on examining the variables in the study RPM is more likely at predicting incidents of abuse at a rate of 9.6% more than SPM. In Chapter 5, I will summarize the findings, interpret the findings, examine limitations of the study, examine implications for social change, and make recommendations for future policy and practice procedures at DHS.
Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

My purpose in this logistic regression study was to examine the relationship between the IVs (age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse) and the DV (incidents of abuse) as measured by the RPM and SPM at the DHS during the years 2007 and 2012. I intended to achieve this objective by conducting a quantitative study using a logistic regression model to measure the influence that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse have in predicting outcomes regarding incidents of abuse.

First, I present an overview of the study; then, I address research questions along with the corresponding null and alternate hypothesis. I then evaluate the findings and note the limitations. After, I discuss the implications for social change and the effects of incidents of abuse in relation to child welfare policy, practice, and procedures. I then reveal the conclusion.

In this study, I examined the effect of the IVs on the DV as assessed by RPM and SPM for the years 2007 and 2012. I aimed to assess the effect of practice model implementation by examining the assessment of four key variables used in both RPM and SPM and their correlation to service delivery outcomes. The results of the study can be used to develop policy, practice, and procedural guidelines in DHS to enhance service delivery outcomes in this child welfare agency. Although studies have shown a focus on the societal context in which children die from maltreatment (Douglas & McCarthy, 2011), few researchers have examined the influence of child welfare practice model
implementation regarding this issue. As emerging child welfare policies are developed to combat child abuse, continuous efforts in effective application of practice models must be used. I sought to address the concern regarding effective use of practice model implantation in determining service delivery outcomes.

**Research Questions and Hypotheses**

The analysis of the data examined for this study was organized around the following questions and hypotheses presented:

**RQ1:** To what extent, if any, does age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007?

*H₀₁:* There is no probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007.

*H₁₁:* There is a probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the RPM predict incidents of abuse during the year 2007.

**RQ2:** To what extent, if any, does age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012?

*H₀₂:* There is no probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012.

*H₁₂:* There is a probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012.
**H1.2:** There is a probability that age of child, gender of child, age of parent/caregiver, and prior substantiated reports of abuse as assessed by the SPM predict incidents of abuse during the year 2012.

I grounded my study in child protection services theory and attachment theory. The child protection services theory is guided by seven principles: child safety, building family strengths, CPS responsiveness to cultural differences, CPS agency accountability, client participation and planning, appropriate CPS intervention, and CPS timely permanency planning (HHS, 2003). To be more effective with service delivery, there must be consistent cooperative efforts between parents and CPS agencies. According to child protective service theory, researchers found that CPS efforts are more likely to succeed when clients actively participate in the service planning process (HHS, 2013). Service delivery is implemented based on the risk or safety factors associated with the four variables examined in the study. Based on the age of the child (vulnerability), age of parent/caregiver, gender of the child, and prior substantiated reports of abuse (CPS history), GPS reports are determined as substantiated or unsubstantiated and then opened for services for those deemed substantiated.

Attachment theory is guided by three main principles. Researchers found that (a) Human beings are wired to bond with each other emotionally in intimate relationships, (b) there is significant influence on a child’s development based on the way they are treated by their parents, and (c) theory of developmental pathways can explain future behavior in relationship based on earlier experiences (Snyder et al., 2012). Child welfare practitioners use the principles of this theory to measure the parent/child bond. The
assessment of this bond is crucial in determining risk or safety factors. If there is a weak parent/child bond, then abuse is more likely to occur. A study done by Rutter (2008) found a strong correlation between occurrence of abuse and one’s attachment orientation.

When reviewing both theories, I deduced that child protection services theory seems to align with the foundational principles of the SPM, whereas attachment theory aligns with the RPM. SPM primarily addresses child safety by assessing parental strengths as measured through protective capacities. RPM primarily addresses child safety by measuring the probability of future risk or maltreatment based on prior family involvement with CYD services and emotional attachment between caregiver and child. Both theories provide sound social service practice principles. Although these two theories are utilized in the development of CYD services, they cannot be deemed as a caveat to eradicate child abuse without effective service delivery implementation.

Summary of the Findings

The hypotheses presented for the study examined whether age of the child, gender of the child, age of the parent/caregiver, and prior substantiated reports of abuse were statistically significant predictors of incidents of abuse. Incidents of abuse are coded as valid or invalid at the DHS. Invalid reports were coded as 0 for this study whereas valid reports were coded as 1. Because of the dichotomous nature of the DV, incidents of abuse, a logistic regression model was used to identify predictors of incidents of abuse. Logistic regression analysis can be used in prediction problems when the goal is to determine the probability of the outcome based on values of a set of predictor variables. If the variables used to assess incidents of abuse (IVs) were effectively implemented in
quantifying such occurrences, there would be a significant decline in the amount of future valid incidents of abuse (DV). Specifically, if the RPM and SPM were implemented with precision in identifying incidents of abuse, there would not be a 94.2% more likely probability to have a valid report as the number of prior substantiated reports increase. Based on the findings, RPM is more accurate than SPM in identifying incidents of abuse when examining variables age of the child, age of the caregiver, and prior incidents of abuse.

The findings of the study provided evidence on how the age of a child, gender of the child, age of caregiver/parent, and prior substantiated reports of abuse impact the occurrence of incidents of abuse. Based on the findings, I concluded that gender of the child does not significantly impact the occurrence of incidents of abuse. The analysis revealed that reports in 2007 utilizing the RPM were 9.6% more likely than those in 2012 utilizing SPM to have a valid report of abuse, while assessing the same variables for child protection/child safety.

The findings revealed a significant correlation between the age of the child and the occurrence of incidents of abuse. Victims 6 to 10 years of age were 25% less likely than the 0- to 5-year-old group to have valid reports of abuse; conversely, those in the 7- to 11-year-old group were 7% more likely to have a valid report. The study likewise revealed that there was a significant correlation between the age of the parent/caregiver and the probability of the occurrence of incidents of abuse. As the age of the caregiver increased, the probability of the occurrence of incidents of abuse decreased. Based on the findings, older parents/caregivers are least likely to be perpetrators of abuse. Perpetrators
in the age group of 30 to 39 years were 16.7% less likely to have a valid report than the 18- to 29-year-old reference group. Perpetrators in the 40- to 49-year-old age group were 27.4% less likely to have a valid report than those in the 18- to 29-year-old reference group. The study concluded that those in the 50- to 64-year-old age group were 27.1% less likely than the 18- to 29-year-old reference group to have a valid report. Based on these findings, as a parent/caregiver gets older, the probability decreases for the occurrence of incidents of abuse.

**Interpretation of the Findings**

I sought to examine whether age of the child, gender of the child, age of the caregiver, and prior substantiated reports of abuse can predict incidents of abuse. The findings of this study confirm and extend knowledge of previous literature examined in the literature review. The findings show that age of the child, age of the caregiver, and prior substantiated reports of abuse are statistically significant predictors for incidents of abuse. The RQ1 and RQ2 support findings from Schnitzer and Ewigman (2008) that reveal a correlation between household risk factors and child abuse. Researchers found that children that were identified with multiple risk factors have higher probabilities of being victims of maltreatment (Schnitzer & Ewigman, 2008). Schnitzer and Ewigman revealed that perpetrator characteristics serve as a major determinant in child abuse. This study revealed that as age of the caregiver increased, the probability decreased. Perpetrators in the age group of 30 to 39 years were 16.7% less likely to have a valid report than the 18- to 29-year-old reference group. Perpetrators in the 40- to 49-year-old age group were 27.4% less likely to have a valid report than those in the 18- to 29-year-old reference group.
old reference group. The study concluded that those in the 50- to 64-year-old age group were 27.1% less likely than the 18- to 29-year-old reference group to have a substantiated report. Based on the findings of the research a key demographic population which demonstrated a higher risk factor were the 18- to 29-year-old reference group.

Although the age of the child was statistically significant in predicting incidents of abuse, Douglas and McCarthy (2011) revealed a correlation between the age of the child and level of violence used. While I examined age of the child in relation to incidents of abuse, the level of violence was not examined. I, however, did look at the nature and type of maltreatment in relation to perpetrator age groups. I discovered that victims 6 to 10 years of age were 25% less likely than the 0- to 5-year-old group to have valid reports of abuse; whereas those in the 7- to 11-year old group were 7% more likely to have a valid report. The findings of this study support the findings of Douglas and McCarthy (2011), which state that the correlation between age of child and violence is significant.

The analysis in Chapter 4 showed that the null hypotheses $H_{01}$ and $H_{02}$ must be retained regarding the variable gender of the child. Based on the findings, I concluded that there is no statistical significance that the gender of the child impacts the occurrence of incidents of abuse. However, the null hypothesis must be rejected for the remaining variables: age of the child, age of the parent/caregiver, and prior substantiated reports of abuse. The study shows in detail that there is a statistically significant impact on incidents of abuse and the remaining three variables in the study (age of child, age of parent/caregiver, and prior substantiated reports of abuse).
The study enhances the existing knowledge in the field of child welfare regarding child maltreatment. The findings in the study reveal that although the age of the child, age of the caregiver, and prior substantiated reports of abuse affect incidents of abuse, gender of the child has little to no effect on the DV. I examined service practice model implementation and outcomes as measured by use of the RPM and SPM at the DHS in the City of Philadelphia. Borsheim (2009) asserted that reform efforts often result as a solution to a failed child welfare system. In Philadelphia, SPM was developed after the mayor’s review panel made recommended changes due to several child fatalities which occurred during the use of the RPM.

Although the study findings identify a correlation between the age of the child, age of the caregiver, and prior substantiated reports of abuse, Sheldon et al. (2013) revealed that reform efforts alone did not provide a significant decrease in child abuse. Although DHS shifted its practice model from a risk driven practice model to a safety driven practice model, this study findings illustrate that there was a little decrease in incidents of child abuse. These practice model tools are used at the beginning and the end of an investigation. To address this concern, DHS implemented CUAs to provide a multilevel child welfare system that incorporated family, community, religious, educational, and social safeguards to help support families and decrease incidents of abuse. Chahine and Sauders (2013) likewise examined prevention of child abuse from a multidisciplinary prospective.

My study extends prior research by examining prior incidents of abuse and its impact on child abuse. Although Scalinger (2008) examined the social and economic
hardship and its effect on child maltreatment, I examined prior incidents of abuse (which is measured by social factors such as: parental child abuse history, parental drug abuse history, parental mental health stability, and identified parental supports) as a causal factor in child maltreatment. The study revealed that for every 0.664 more reports the odds of having a valid report are 1.94 more times more likely. There is a high correlation between prior substantiated reports of abuse and incidents of child abuse.

The focal point of my study was the examination of RPM and SPM at the Department of Human Service in the City of Philadelphia in relation to incidents of abuse. Borsheim (2009) stated that a clearly defined welfare practice model is the foundation for systemic reform. Borsheim’s (2009) study revealed that for reform efforts to be successful, there must be continual methods to promote consistency while providing support. My study examined the effectiveness in practice change at the Department of Human service in relation to incidents of abuse. I revealed that cases in 2007 utilizing the RPM were 9.6% more like to have a valid report than those in 2012 utilizing an SPM. The probability of substantiated reports was higher using the old practice model. From this, the researcher can deduce that there is a significant difference in identification of incidents of abuse using RPM. However, the researcher can infer that using SPM equips child welfare practitioners to more identify family strengths based on present circumstances, thusly the child welfare practitioner is readily equipped to develop intervention strategies.

I concluded from the findings of the study that RPM, which was previously used by DHS, is better able to identify current service delivery needs based on the examination
of the IVs in relation to the DV. Like the findings in Pecora et al. (2013), which maps four familial components, the SPM focuses on measuring five safety thresholds to measure present and impending danger. Although this is considered, significant risk factors are based on past actions of families that are not considered when using SPM to determine the need for service delivery. Therefore, the measured components of RPM provide a more comprehensive measure of overall family functioning capabilities based on past actions and behaviors.

Rubin (2009) asserted that change management is the most effective tool in redesigning organizations. DHS implemented CUA agencies to shift its service delivery model to be community based to develop a multilevel support system for families in need of child welfare intervention. CUA is presently responsible for service delivery and utilizes the SPM as the basis for service delivery within the homes of clients served in the city of Philadelphia. Although RPM focused on a tool to measure impending risk or danger, SPM focuses on using a tool that measures present danger. Based on the findings of the study, I conclude that the RPM served as a better predictor for determining incidents of abuse. The principle tenets of RPM focus on past behaviors in categories such as: parenting practice, drug and alcohol addiction, prior incidents of abuse, and age level of the caregiver to determine the level of risk probabilities. Although SPM looks at present danger, RPM looks at the likelihood of occurrence based on best practices within a household.
Limitations of the Study

Chapter 1 presented a few limitations that were identified throughout the study development. The first limitation noted was the applicability of the findings. Data used in the study pertained to secondary data acquired by the DHS in the city of Philadelphia; therefore, the results cannot be generalized on a national scale. Due to the significant difference of child welfare institutions across the state and the country with varying policy, structure, and practice model guidelines, generalities cannot be simply inferred. The results of this study are only generalizable to the population of families serviced by the Philadelphia DHS.

The second limitation of the study was manual extraction of the data. Initially, at the onset of the study, the researcher encountered delays with data collection due to the data warehouse crashing. To get the necessary data, the data had to be extrapolated manually by the DHS statistician in the Policy and Planning Department at the DHS. It is assumed that the data collected and received by the researcher were comprehensive and accurate since the researcher did not personally collect the samples utilized in the study, since the data was acquired utilizing secondary data collection.

The third limitation of the study was the limited amount of resources available. While the data used for the sample was garnered from DHS case records, I also reviewed public record data provided by the Pennsylvania DPW annual child abuse reports for the years 2007 and 2012. However, only data from DHS was used for the sample size of this study, while data from DPW annual reports were referenced to provide a summation of state reported findings. This study only looked at GPS reports for 2007 and 2012 since
CPS report findings could not accurately be assessed due to state law CPS procedures in place. The CPS investigations must be determined in 30 calendar days and according to Act 127 of 1998 requires that unfounded reports be kept on file for one year from the date of the report and be destroyed within 120 days following the one-year period (DPW, 2008). Due to this limitation, a comprehensive data set for both CPS and GPS reports received could not be examined for the study. Therefore, the study solely examined GPS reports received by the DHS for 2007 and 2012.

Implications for Social Change

Service delivery practice models are utilized as a tool to eradicate future incidents of child abuse. For service delivery to be effective, the practice models utilized must be appropriately carried out to effect change. While child welfare practitioners use key assessment tools, it is imperative that parents/caregivers are fully cooperating with services provided. Child welfare administrators and child welfare practitioners must develop policies and implement practice models that adequately address the issue of recurrence in child protection. Recurrence is considered problematic for children if it indicates chronic or repeated maltreatment, as well as their families who may experience repeated child protection intervention without necessarily receiving adequate services (Jenkins, Tilbury, Mazerolle, & Hayes, 2017). It is also problematic for the government, firstly because recurrence may signal problems with risk assessments and services, and secondly because repeated investigations and other interventions consume a substantial amount of public resources (Jenkins et al., 2017). Child welfare administrators must closely monitor, measure, and weigh service delivery outcomes to determine if services
are effective. Relationships between child protection recurrence, child maltreatment, and the services designed to address maltreatment are not understood (Bae, Solomon et al., 2010), and explanations for often observed correlates of child protection recurrence are piecemeal and at times contradictory.

The DHS shifted its practice model from RPM to SPM to address growing concerns over child maltreatment. Since shifting to SPM, a conglomeration of child welfare agencies (community umbrella agencies) have been utilized as the primary source of service delivery. The CUA’s are housed within the community and provide direct services to families that have been identified as being at risk. The purpose of the shift to the CUA was to change both policy and practice procedures by providing a more community centered practice modality. Under the prior service delivery model services were primarily delivered and carried out by state certified CPS practitioners that worked at DHS.

Since the shift in practice model, the CUA case managers have become the primary entity responsible for service delivery. Since implementation of this policy change, a service delivery team has been implemented to provide a broader range of oversight. The service delivery team consists of a practice coach (DHS Social Service Supervisor), a practice specialist (DHS Social Worker Service Manager), and a CUA case manager. CUA agencies utilize both formal and informal networks identified in the specific community where the family resides to provide resources, supports, and services. The CUA agencies engage drug and alcohol treatment facilities, mental health treatment facilities, school staff, family members, and religious institutions to wrap services around
the family. The comprehensive team building approach serves to ensure that families have several types of services available to help ensure parents can effectively cope with the responsibilities, stresses, and expectations of parenthood which in turn could enhance a parents’ protective capacities, potentially leading to diminished incidents of abuse.

Policy changes govern how service delivery is implemented at the DHS in Philadelphia. For a practice model to be changed, policy reform must occur. To address the concern raised by the Mayor of Philadelphia following the death of Portia Bennet, a panel was held to examine social service practices being used at DHS. The outcome of the Mayor’s review panel made recommendations for needed changes at DHS to help ensure a greater level of accountability of service delivery, which was suggested to have a direct impact on child safety.

As mentioned previously in the study while both RPM and SPM are based on tenants that impact child safety, solely using either tool would seem to provide a gap in service delivery. Child welfare administrators and policymakers need to examine developing a tool that incorporates using both safety measures and risk measures concurrently. While data regarding gender of the child was examined in the study, the findings revealed it provided no significant effect on incidents of abuse therefore, this data does not need to be included in the assessment tool.

The administrators and policymakers at DHS should develop a higher level of direct service for families that have prior substantiated reports of abuse. To ensure appropriate levels of intervention, families that have prior involvement in the child welfare system should receive a level of care that provides services on weekly basis in
the home. In such cases, parents would be assigned a parent partner in the community whom have successfully completed this type of CYD services. This type of service would mirror wrap around services that are provided by the behavioral health system, which “wraps around” supports for those in need in the home and community.

**Recommendations**

**Practical Implications in Child Welfare**

The scope of the study focused on variables used in the RPM and SPM to determine the occurrence of incidents of abuse in the city of Philadelphia at the DHS. While the scope of the study examined factors used in the assessment of incidents of abuse via RPM and SPM, it would be remiss for future researchers not to examine the effectiveness of practice models regarding implementation of service delivery. Future researchers can study service delivery outcomes and analyze child welfare agencies across the state to ascertain the feasibility of a comprehensive practice model which can be duplicated in similar urban areas across the country. I would like to recommend the following topics:

Examine the effectiveness of service delivery in relation to the phenomenon of recurrence. While the results of this study might only be applicable in Philadelphia, the phenomenon of recurrence is an issue that is encountered by child welfare agencies across the United States. Over the last two decades, recurrence studies using administrative data have been conducted on repeated reports and notifications (Way et al., 2001), investigations (Connell et al., 2007), and substantiations (Bae et al., 2009). The findings in my study concluded that the greatest probability for incidents of abuse
occurred in cases that had prior substantiated reports of abuse. Those specific findings would lend to further research regarding factors that affect recurrence in families receiving CYD services. To address this concern, CYD agencies must broaden the scope of inquiry to include decision making, implications for policy makers relating to how to allocate services, and implications for practitioners who make decisions at the front line, often with the assistance of recurrence-based assessment tools (Jenkins, Tilbury, Mazerolle, & Hayes, 2017).

Child welfare administrators must address four key influences of recurrence: conflating child protection system contact with maltreatment, re-report or re-substantiation, common causal factors associated with recurrence, and appropriate assessment of service delivery need to impact change. Research, policy, and risk assessments tend to conflate child protection system contact with maltreatment, assuming that a report, notification, or investigation is indicative of abuse or neglect (Jenkins et al., 2017). Child welfare practitioners must be able to investigate reports primarily based on the merits of the report received, excluding one’s prior CYD encounters to remove bias from investigation decision outcomes. To some extent, factors associated with repeated reports must be related to over-reporting of cases that do not involve maltreatment, rather than indicating genuine ongoing risk or need, because, like re-substantiation, some re-reporting is a function of imperfect decision making in child protection system (Jenkins et al., 2017). Families that receive CYD services in the home are under constant scrutiny by child welfare practitioners, which in turn can be a cause of an inflated and increase number of CYD reports. It has been claimed that post-investigative services involve
changes in the surveillance of families, thereby increasing rates of recurrence even when 
services achieve their intended therapeutic aim. For change to be effective, family 
engagement must be enhanced. While DHS partners with CUA to service families, 
progress based on service engagement is inconsistent and at times dismal. 
Recommendations for policy and practice include engaging better with families (Fuller & 
Nieto, 2013) and increasing access to support services (Johnson-Reid, Chung, Way, & 
Jolley, 2010) both as early intervention and after case closure (Helie, Laurier, Pineau-
Villeneuve, & Royer, 2013).

Recurrence is understood as a function of ongoing need or risk inherent in 
children, rather than the product of an interaction between the child and the system’s 
response to perceive risk and the need (Jenkins et al., 2017). When child protection 
services are provided to families, yet there continues to be an increase in the number of 
substantiated reports received, child welfare administrators must be willing to look at all 
aspects of service delivery, inclusive of staffing issues and adequate training. 
Practitioners should be sensitive to the limitations of child protection recurrence as a 
measure of risk or need (Jenkins et al., 2017).

I recognize that there are several socioeconomic factors which likewise can be 
examined to better understand the cause of child abuse within the home. Previous 
research has regarded child maltreatment (Scalinger, 2008) examined the implications 
that both social and economic hardships had on child maltreatment. The outcome 
determined that when families were unable to provide safeguards for children, they were 
deemed to be at greater risk of maltreatment both in and outside of the home. I believe
that further research needs to be done measuring the impact of drug addiction, mental health diagnosis, and unemployment in the home and the probable impact on child maltreatment.

**Academic Implications in Child Welfare**

Researchers should hold focus groups with families receiving CYD services to determine the most effective family engagement methods. A study of this nature would provide insight as to what type of service delivery is most effective in providing sustainable long-term change. While the strengthening families model focuses on family engagement through strength building, often CYD family service plans are developed by child welfare practitioners based on identification of areas of weakness. Child welfare practitioners often utilize cookie cutter methodology to provide services to families.

The strengthening families approach is grounded in the belief that all families possess and can use strengths according to the Center for the Study of Social Policy. The outcome of the study would help child welfare practitioners develop service delivery models that are tailored to the specific issues identified by those being serviced. To develop sustainable methods of child protection outside of the realm of CYD agency intervention, child welfare administrators must be willing to acknowledge and utilize the family supports and strengths that are available within the community.

Researchers should conduct a comprehensive study to measure the rate of recurrence at DHS under the auspices of the CUAs. The study should be followed by a three-year post release time frame to further assess the outcome of service delivery, implementation and family re-engaged in CYD services. The study should examine the
number of CYD reports that reoccur once families are engaged in services in the home, the type and nature of new maltreatment reports after services are implemented, and the number of out of home placements that subsequently occur while CUA services are in the home. While CUA has been implemented to provide direct service to families with CYD oversight, there appears to be minimal oversight to measure the sustainability of family units after implementation of CUA services. Likewise, a study should be done to measure the success of families that are engaged in court mandated services and the timeframe that it takes for successful reunification to occur in instances where children are removed from homes based on CYD investigation outcomes.

To develop a broader understanding of factors that impact child abuse, further research can be done to examine the socioeconomic matters that families encounter. Research can be done to examine mental health status, drug addiction/usage, housing conditions, and employment stability of parents and caregivers of children who are victims of abuse. While these factors alone may not be the sole indicators of child abuse, the presence of such can create high levels of stress which in turn may affect incidents of abuse. While the presence of one or more of these listed variables can impact family stability, a comprehensive understanding of these matters in relation to family dynamics is paramount in tailoring service delivery to address such problems.

Considering the findings of the study, I suggest that rather than giving one tool preeminence over the other in determining service outcome delivery, a tool needs to be developed that provides equal weight to both tools. While RPM looks at measuring the probability of future risked based on best practices of family, SPM measures the
probability based on present dangers identified. The information obtained in the study leads me to believe that a comprehensive approach that utilizes the strength of both the RPM and SPM will provide a better tool to deter incidents of abuse.

The history of child welfare shows that there are many factors that impact incidents of abuse. While family dynamics and history are a significant factor that influences such incidents, there are socioeconomic factors that likewise can affect such occurrences. Child welfare practitioners must be diligent in developing practice models that address the ever-changing societal factors that impact stress factors within family systems. Child welfare administrators must likewise address service delivery with optimal training that enhances precision, understanding, and accuracy of tool implementation to ensure appropriate assessment of child safety and family functioning.

**Conclusion**

The focus of this study examined factors that impact incidents of abuse at the DHS. While four primary factors were examined in this study, I was aware that there are other socioeconomic conditions, such as poor or inadequate housing, poverty, drug use, employment stability, and mental health prognosis, which can affect incidents of abuse. I provided insight based on the findings of the study for further areas of research which can be examined to mitigate the problem of child abuse. I discussed the basis of the study, provided a summary of the findings, interpreted the findings, explored limitations associated with the study, discussed implications for social change, and provided recommendations for future research.
I examined the RPM and the SPM at the DHS for the years 2007 and 2012, respectively. I examined age of the child, gender of the child, age of the caregiver, and prior incidents of abuse in relation to the DV incidents of abuse. My purpose in the study was to determine whether a predictive likelihood exists between the identified IVs and incidents of abuse. The findings of my study revealed that there is a significant likelihood between the age of the child, age of the caregiver, and prior substantiated reports of abuse in relation to incidents of abuse; however, the study findings determined that there is no significant likelihood between the gender of the child and incidents of abuse.

The key findings of this study revealed that cases in 2007 were 9.6% more likely to have a valid GPS report than those in 2012. The study revealed that a caregiver is 94.2% more likely to have a substantiated GPS report as the amount of prior substantiated reports increase. The data examined revealed that children in the age group of 6-10 were 25% less likely than that of those in the control group of age 0-5 to have a valid GPS report. Likewise, those children in the age group of 11-17 were 7% more likely than those in the 0-5 age group to have a valid GPS report. The study findings revealed that as the age of perpetrator increases, the likelihood of a valid report of abuse decreases.

I examined the effectiveness of policy and practice change from a Risk Driven Practice Model to a Safety Driven Practice Model at the DHS. To measure the effectiveness of such policies, the researcher examined both practice models based on the IVs age of the child, gender of the child, age of the caregiver, and prior substantiated reports of abuse as they impact incidents of abuse. The outcome data revealed that age of
child, age of the caregiver, and prior substantiated reports of abuse significantly impact incidents of abuse. However, the gender of the child has little to no impact on incidents of abuse. I concluded that both practice models adequately identify serious incidents of abuse based on the variables examined; however, I note that there are other causal factors which were not examined in this study.

While these factors were examined in this study, there are other socioeconomic factors that further could be examined. I note that drug addiction, inadequate housing, mental illness, poverty, and unemployment are other factors which may have a significant impact on incidents of abuse. I believe that further investigation surrounding these phenomena could lend itself to future intervention strategies. While child maltreatment is an issue that plagues both rural and urban areas across the country, there are a myriad of factors that influence the occurrence of abuse. To mitigate this problem, further research can be done regarding the multifaceted dimensions that influence such heinous behaviors in the home.

Child welfare reform continues to be an area that is challenging. While politicians, child welfare practitioners, and community partners try to provide adequate supports to families identified as being at risk, there must be a greater level of partnership forged between families and child welfare systems. For success to occur, families must be able to identify supports, resources, and services already available to them prior to CYD intervention. Child welfare practitioners must move past the point of service delivery to the development of family partnership for families to buy in, own, and participate in the process of effective and safe parenting.
References


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http://www.hhs.gov/


http: //www.hhs.gov/


Reports from the States to the National Child Abuse and Neglect Data Systems-

Reports from the States to the National Child Abuse and Neglect Data Systems.

Reports from the States to the National Child Abuse and Neglect Data Systems.

Reports from the States to the National Child Abuse and Neglect Data Systems.


Appendix A: Risk Assessment Form

<table>
<thead>
<tr>
<th>ASSESSMENT CODES</th>
<th>2. NO RISK</th>
<th>1. LOW RISK</th>
<th>3. MODERATE RISK</th>
<th>4. HIGH RISK</th>
<th>X. UNABLE TO ASSESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASE NOTE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**A. CHILD FACTORS**

<table>
<thead>
<tr>
<th>NAME</th>
<th>AGE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| VULNERABILITY | | | | | |
| | | | | | |

| SEVERITY FREQUENCY | | | | | |
| | | | | | |

| PROXIMITY | | | | | |
| | | | | | |

**B. CAREGIVER, FAMILY MEMBER, PERPETRATOR**

<table>
<thead>
<tr>
<th>NAME</th>
<th>AGE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| AGE, PHYSICAL, INTELLECTUAL OR EMOTIONAL STATUS | | | | | |
| | | | | | |

| COOPERATION | | | | | |
| | | | | | |

| PARENTING SKILLS | | | | | |
| | | | | | |

| ALCOHOL-SUBSTANCE ABUSE | | | | | |
| | | | | | |

| ACCESS TO CHILDREN | | | | | |
| | | | | | |

| PROXIMITY | | | | | |
| | | | | | |

| RELATIONSHIP WITH CHILDREN | | | | | |
| | | | | | |

**C. FAMILY ENVIRONMENT**

| | | | | | |
| | | | | | |

| VIOLATION | | | | | |
| | | | | | |

| CONDITION OF THE HOME | | | | | |
| | | | | | |

| FAMILY SUPPORTS | | | | | |
| | | | | | |

| STRESSORS | | | | | |
| | | | | | |

**D. PLEASE USE BACK OF PAGE FOR NARRATIVE**

<table>
<thead>
<tr>
<th>WORKER</th>
<th>DATE</th>
<th>OVERALL SEVERITY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SUPERVISOR</th>
<th>DATE</th>
<th>OVERALL RISK</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RISK-SEVERITY ASSESSMENT SUMMARY FORM

D. Note specific evidence supporting High Risk and Moderate Risk conclusions and justify all "Unable to Assess" ratings. You must provide conclusions regarding Overall Severity/Risk based on the interaction of all factors. Attach extra pages if needed.
## Appendix B: Safety Assessment Worksheet

<table>
<thead>
<tr>
<th>Date of Safety Assessment</th>
<th>Type of Assessment</th>
<th>Click here to select type</th>
</tr>
</thead>
</table>

**II. Identify Safety Threats Below**

- List each child by name or suffix in the column. Note: only select Yes if the safety threshold was met.
- Explain how safety threshold was met: not met (Safety Threshold: vulnerable child, specific out-of-control, imminent, and serious harm likely).

<table>
<thead>
<tr>
<th>Date of Face to Face Contact</th>
<th>Y</th>
<th>N</th>
<th>~</th>
<th>~</th>
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<th>~</th>
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<th>~</th>
<th>~</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Caregiver(s) intend to cause serious physical harm to the child</td>
<td>Y</td>
<td>N</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
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<td>~</td>
</tr>
<tr>
<td>2. Caregiver(s) are threatening to severely harm a child or are fearful that they will maltreat the child</td>
<td>Y</td>
<td>N</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
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</tr>
<tr>
<td>3. Caregiver(s) cannot or will not explain the injuries to a child</td>
<td>Y</td>
<td>N</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
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</tr>
<tr>
<td>4. Child sexual abuse is suspected, has occurred, and/or circumstances suggest abuse is likely to occur</td>
<td>Y</td>
<td>N</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>5. Caregiver(s) are violent and/or acting dangerously</td>
<td>Y</td>
<td>N</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>6. Caregiver(s) cannot or will not explain their behavior</td>
<td>Y</td>
<td>N</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
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</tr>
<tr>
<td>7. Caregiver(s) react dangerously to child’s serious emotional symptoms, lack of behavioral control, and/or self-destructive behavior</td>
<td>Y</td>
<td>N</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
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</tr>
<tr>
<td>8. Caregiver(s) cannot or will not meet the child’s special physical, emotional, medical, and/or behavioral needs</td>
<td>Y</td>
<td>N</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>9. Caregiver(s) in the home are not performing duties and responsibilities that assure child safety</td>
<td>Y</td>
<td>N</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
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<td>~</td>
</tr>
<tr>
<td>10. Caregiver(s) lack of parenting knowledge, skills, and/or motivation presents an immediate threat of serious harm to a child</td>
<td>Y</td>
<td>N</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>11. Caregiver(s) do not have or do not use resources necessary to meet the child’s immediate basic needs which presents an immediate threat of serious harm to a child</td>
<td>Y</td>
<td>N</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>12. Caregiver(s) perceive child in extremely negative terms</td>
<td>Y</td>
<td>N</td>
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<td>13. Caregiver(s) overly rejects GPS/GPS intervention; refuses access to a child; and/or there is some indication that the caregiver will flee</td>
<td>Y</td>
<td>N</td>
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<td>14. Child is fearful of the home situation, including people living in or having access to the home</td>
<td>Y</td>
<td>N</td>
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### SAFETY ASSESSMENT WORKSHEET – IN HOME

#### III. Are Safety Threats Present? Yes? No? If Yes, complete the following:

**Discussion Protective Capacities:** A protective capacity is a specific quality that can be observed and understood to be part of the way a caregiver thinks, feels, and acts that makes him or her protective. The purpose of determining whether or not a caregiver has protective capacities is to: 1) determine if the child can be safe with that caregiver; 2) to determine if a child will be safely returned to the home, and/or 3) to determine if the case can be closed. Protective Capacities can be absent, enhanced, or diminished. Consider each environment safety threat. What protective capacity must be enhanced, and in what manner to mitigate the threat? For enhanced protective capacities, describe specifically how protective capacity would prevent the safety threat from escalating in the near future.

<table>
<thead>
<tr>
<th>Caregiver Name</th>
<th>Safety String</th>
<th>Child Suffix</th>
<th>List the Caregiver Protective Capacities which, when enhanced AND used, would mitigate the Safety Threat</th>
<th>Indicate if the Protective Capacity is enhanced, diminished or absent.</th>
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#### IV. Safety Analysis: As part of your analysis, respond to the following four questions:

- Can the caregiver adequately manage the child’s safety needs at any time?
- Does the caregiver plan an appropriate response?
- What safety responses, services, and providers can be deployed in a home that will adequately control and manage safety risks?

**Dissertation Proposal.docx (92.5KB)**

#### V. Children Who Were Not Seen: Every effort must be made to locate and bring the child in the home (if child is not seen, include child’s age, parent’s name, and provide justification as to why they were not seen, how long it has been since someone has seen the child and the plan identified to locate the child and to assess that the child’s safety.

<table>
<thead>
<tr>
<th>Child Name</th>
<th>Age</th>
<th>Justification</th>
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#### VI. Safety Decision -

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<thead>
<tr>
<th>Decision Date:</th>
<th>List each child by name or suffix</th>
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#### VII. Signatures of Approval (Requires Supervisory Discussion)

<table>
<thead>
<tr>
<th>Case Worker Name</th>
<th>Signature</th>
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<tr>
<th>Supervisor Name</th>
<th>Signature</th>
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