# ASSESSING THE IMPACT OF MATERNAL STRESSORS ON THE OCCURRENCE OF CHILD NEGLECT AMONG AT-RISK MOTHERS

# by

# Chereese M. Phillips

B.A., University of Washington, 2007M.S.W., University of Washington, 2009

Submitted to the Graduate Faculty of

The School of Social Work in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

University of Pittsburgh

## UNIVERSITY OF PITTSBURGH

School of Social Work

This dissertation was presented

by

Chereese M. Phillips

It was defended on

June 23<sup>rd</sup>, 2015

and approved by

Gary Koeske, PhD, Professor Emeritus, School of Social Work
Rachel Fusco, MSW, PhD, Associate Professor, School of Social Work
Willa Doswell, RN, FAAN, PhD, Associate Professor, School of Nursing
Valire Copeland, MSW, MPH, PhD, Associate Dean, School of Social Work
Dissertation Advisor: Mary Beth Rauktis, M.Ed, PhD, Research Assistant Professor, School
of Social Work

# ASSESSING THE IMPACT OF MATERNAL STRESSORS ON THE OCCURRENCE OF CHILD NEGLECT AMONG AT-RISK MOTHERS

Chereese M. Phillips, M.S.W./Ph.D.

University of Pittsburgh, 2015

Copyright © by Chereese M. Phillips

2015

#### **Abstract**

# ASSESSING THE IMPACT OF MATERNAL STRESSORS ON THE OCCURRENCE OF CHILD NEGLECT AMONG AT-RISK MOTHERS

Chereese M. Phillips, M.S.W./Ph.D.

# University of Pittsburgh, 2015

The over-arching purpose of this dissertation was to assess the way in which maternal stressors contributed to occurrences of child neglect among a sample of high risk mothers. The second aim was to examine whether maternal stressors varied based on race. The third and final aim sought to ascertain whether social support moderated the relationship between maternal stressors and child neglect. This cross-sectional study utilized data from The Longitudinal Studies of Child Abuse and Neglect (LONGSCAN). The study sample (N = 585) was predominantly comprised of impoverished African American mothers. Logistic regression analysis results revealed that maternal stressors such as substance use, employment status, marital status, and child's behavioral health concerns significantly contributed to the occurrence of child neglect. In addition, the study found maternal stressors varied based on race. There were significant differences between African American and Caucasian mothers regarding their experience of maternal stressors and their subsequent child neglect perpetration; in this high risk sample, Caucasian mothers had higher rates of child neglect perpetration. Substance use was the primary predictor of child neglect among African American mothers while child behavioral health concerns and single motherhood were the primary predictors of child neglect among Caucasian mothers. Despite previous empirical evidence, in this population social support did not moderate the relationship between child neglect and maternal stress. Implications for policy and practice are further discussed.

Keywords: maternal stress, child neglect, at-risk mothers, social support

# TABLE OF CONTENTS

1.0		INTR	ODUCTION	13		
	1.1	S	TATEMENT OF PROBLEM	15		
	1.2	SIGNIFICANCE OF STUDY				
	1.3	STUDY PURPOSE AND RESEARCH QUESTIONS				
	1.4	IMPLICATIONS FOR SOCIAL WORK				
	1.5	S	UMMARY AND REVIEW	23		
2.0		LITERATURE REVIEW				
	2.1	C	CONCEPTUAL DEFINITIONS	25		
		2.1.1	Child neglect	26		
		2.1.2	Stress	27		
		2.1.3	Stressor	28		
		2.1.4	Maternal stress	29		
		2.1.5	At-risk mother	29		
		2.1.6	Social support	29		
	2.2	I	EGISLATIVE HISTORY RELATED TO CHILD NEGLECT	30		
		2.2.1	Aid to Dependent Children-Foster Care Act of 1961	31		
		2.2.2	Public child welfare history and African American families	31		
		2.2.3	Child Abuse Prevention and Treatment Act (CAPTA) of 1974	32		
		2.2.4	The Adoption and Safe Families Act of 1997	32		
	2.3	S	UMMARY	33		
	2.4	1	AATERNAL STRESS AND CHILD NEGLECT	34		

		2.4.1 Parent-related factors and child neglect	. 36
		2.4.1.1 Parenting knowledge and child neglect	. 37
		2.4.1.2 Substance abuse and child neglect	. 38
		2.4.1.3 Co-occurring disorders	. 40
		2.4.2 Child-related stressors	. 41
		2.4.3 Summary of maternal stressors and child neglect	. 42
	2.5	AT-RISK AFRICAN AMERICAN MOTHERS IN CONTEXT	. 43
		2.5.1 Environmental context and child neglect	<b>. 4</b> 4
		2.5.2 Employment and child neglect	<b>. 4</b> 4
		2.5.3 African American mothers and child welfare involvement	. 45
	2.6	SOCIAL SUPPORT AND CHILD NEGLECT PREVENTION	. 46
	2.7	CONCLUSION	. 49
3.0		THEORY	. 53
	3.1	STRUCTURAL SOCIAL WORK THEORY	. 54
	3.2	STRESS AND COPING THEORY	. 57
	3.3	SOCIAL SUPPORT THEORY	. 59
	3.4	SUMMARY	. 62
4.0		CONCEPTUAL MODEL, RESEARCH QUESTIONS, AND HYPOTHESES.	. 65
	4.1	CONCEPTUAL MODEL	. 65
		4.1.1 Research purpose, questions, and hypotheses	. 67
5.0		METHODOLOGY	<b>. 7</b> 1
	5.1	DATA	<b>. 7</b> 1
	5.2	SAMPLE	<b>7</b> 2

		5.2.1	Meas	ures73
		5	5.2.1.1	Control variables
		5	5.2.1.2	Independent variables74
		5	5.2.1.3	Dependent variables78
6.0		RESU	JLTS	
	6.1	I	DESCR	IPTIVE RESULTS80
	6.2	I	LOGIS'	ΓIC REGRESSION 85
	6.3	S	SUMM	ARY OF RESULTS95
7.0		DISC	USSIO	N97
	7.1	I	NTRO	DUCTION97
	7.2	N	MATEI	RNAL STRESSORS AND CHILD NEGLECT: CONNECTIONS
	WI	TH PR	EVIOU	S RESEARCH97
		7.2.1	Mate	rnal substance use98
		7.2.2	Empl	oyment status99
		7.2.3	Mari	tal status99
		7.2.4	Moth	er's age 100
		7.2.5	Child	behavioral health problems100
	7.3	I	NCON	SISTENCIES WITH PREVIOUS RESEARCH 101
		7.3.1	Incon	ne-to-needs ratio101
		7.3.2	Mate	rnal physical and mental health102
		7.3.3	Educ	ational attainment103
		7.3.4	Numl	per of children 103
	7.4	I	RACE,	STRESSORS, AND NEGLECT103

		7.4.1	Overview	103
		7.4.2	Significance for social work researchers and practitioners	104
	7.5	S	OCIAL SUPPORT, STRESS, AND NEGLECT	106
	7.6	I	LIMITATIONS	107
	7.7	I	MPLICATIONS FOR PRACTICE	109
		7.7.1	Macro-level social work practice	109
		7.7.2	Micro-level social work practice	110
	7.8	I	MPLICATIONS FOR POLICY	113
	7.9	I	MPLICATIONS FOR FUTURE RESEARCH AND METHODOLOGY	115
	7.10	) (	CONCLUSION	118
APP	ENI	OIX A		121
APP	ENI	OIX B		124

# LIST OF TABLES

Table 1 Summary statistics of mothers in sample ( <i>N</i> =585)	81
Table 2 Bivariate correlation statistics for mothers at-risk for child neglect ( <i>N</i> =585)	84
Table 3 Logistic regressions: Predictors of child neglect in at-risk mothers ( <i>N</i> =585)	86
Table 4 Summary statistics of mothers by race ( <i>N</i> =585)	89
Table 5 Predictors of child neglect among at-risk African American and Caucasian more	thers
( <i>N</i> =585)	91
Table 6 The impact of low and high social support on child neglect ( <i>N</i> =585)	94

# LIST OF FIGURES

Figure 1 Maternal stressors-A framework for child neglect and at-risk mothers	21
Figure 2 Model for the interaction of maternal stressors and social support and the in	mpact on child
neglect for at-risk mothers	67

# **PREFACE**

Thank you to family, friends, and guides who supported me through this process.

#### 1.0 INTRODUCTION

Child neglect is a persistent problem in the United States. Unlike child abuse, child neglect is an act of omission: It is the failure to provide a child with adequate food, clothing, shelter, medical care, or supervision (P.L.93–274). In contrast, child abuse is an act of commission whereby an individual uses words or overt actions that cause harm, potential harm, or threat of harm. Acts of commission are deliberate and intentional (P.L.93–274). Child abuse and neglect are often used interchangeably in the common vernacular, though they are two separate and distinct phenomena with disparate risk factors. This study focuses solely on child neglect. The risk factors associated with child neglect are broadly grouped into three categories (1) environmental (e.g., poverty-related factors), (2) parent-related factors, and (3) child-related factors. However, the causes of neglect are largely embedded within the socioeconomic structure. As such, families with low socioeconomic status often live in poverty and some are unable to provide for their children's basic human needs. These needs include safe housing, proper nutrition, access to health care and education, and adequate supervision and emotional care.

Although child neglect crosses socio-economic, cultural, racial, ethnic, and religious backgrounds, reports of child neglect are more prevalent for certain subgroups, specifically those who are impoverished, young, and minority children. Children aged five and under are particularly susceptible to experiencing neglect as they account for over half of all child neglect reports (U.S.

DHHS, 2015). Eighty-seven percent of child neglect victims are comprised of the following racial/ethnic groups: African American (22%), Latino (22%), and Caucasian (43%) (U.S. DHHS, 2015). Although African American children represent 12% of the total child population in the United States (U.S. Census, 2014) they comprise nearly a quarter of all children reported as victims of neglect (U.S. DHHS, 2015). Additionally, African American children have the highest victimization rate, with 14.7 children out of every 1,000 reported as victims of child neglect compared to 6 per 1,000 Caucasian children (U.S. DHHS, 2015).

In terms of family structure, over 60% of neglected children formally involved with the child welfare system live in impoverished female-headed households (Coulton, Korbin, Su, & Chow, 1995; Pecora, 2009; Sedlak et al., 2010). In the eyes of society and the family court system, mothers are held responsible for the safety and well-being of their children. Mothers at-risk for child neglect often experience environmental stressors such as poverty, inequality, economically blighted neighborhoods, substandard or insecure housing, and social isolation (Coulton, Crampton, Irwin, Spilsbury, & Korbin, 2007). Furthermore, mothers at-risk for child neglect possess individual risk factors, which include substance use disorders, mental illness, and extensive personal trauma histories (Cash & Wilke, 2003; Harknett & Hartnett, 2011; Johnson 2011). In addition, child-related factors such as the number of children a mother is responsible for rearing and their special behavioral and/or physical health disabilities are added maternal stressors (McPherson, Lewis, Lynn, Haskett, & Behrend, 2009). The presence of numerous stressors and the absence of coping resources can result in reduced social functioning (Lazarus, 2000), parenting capacity, negative parenting behavior, and the failure to provide for their children's basic human needs (Arditti, Burton, Neeves-Botehlo, 2010; Cappa, Begle, Conger, Dumas, & Conger, 2011; Taylor, Roberts, & Jacobson, 1997).

Not all impoverished mothers neglect their children. Studies suggest that impoverished mothers who do not neglect their children possess several protective factors (DePanfilis & Dubowitz, 2005; Goldman, Salus, Wolcott, & Kennedy, 2003). Protective factors shown to help reduce the risk of child neglect include resilience, access to adequate housing, health care and social services, a safe and stable family environment, use of effective age-appropriate parenting strategies, satisfactory child monitoring, and the ability to access sufficient social and child-rearing support systems (Afifi, & MacMillan, 2011; DePanfilis, 2006; Putnam-Hornstein, Needell, King, & Rhodes, 2013).

A limitation in the existing literature is the lack of research explaining which combination of environmental, individual, and child-related stressors are associated with child neglect. Additionally, research has not determined which combination of risk and protective factors reduces the potential for, or protects against, child neglect. Understanding the determinants of child neglect is imperative due to the persistence of neglect and the serious long-term consequences for children who are neglected (cf. English, 1998; Sedlak & Broadhurst, 1996; Stoltenborgh, Bakermans-Kranenburg, & Van Ijzendoorn, 2013). Identifying the stressors mothers experience and understanding the way they work in conjunction with each other, might, in the future, inform evidence-based approaches which seek to address this complex problem.

### 1.1 **STATEMENT OF PROBLEM**

Child neglect is a prevalent social problem in the United States: nearly 2% of all children will experience neglect at some point in their childhood (U.S. DHHS, 2015). According to statistics from the U.S. Department of Health and Human Services, in 2013, over 3.1 million child

maltreatment reports were made to Child Protective Services, 65% of which were classified as neglect (U.S. DHHS, 2015). Despite the preponderance of child-neglect reports, child abuse garners more attention. Like abuse, child neglect can also be deadly; each year an estimated 1,000 children die as a result of neglect (U.S. DHHS, 2015). Thousands more children must live with the negative effects child neglect has on their physical and psychological health and development (Norman, Byambaa, Butchart, & Vos, 2012).

Child neglect is an issue of social justice as it primarily occurs in families where there is a great deal of environmental and financial stress. For instance, child neglect and subsequent child welfare involvement have been associated with a number of environmental stressors including poverty (Drake & Jonson-Reid, 2014; Pecora & Whittaker, 2009), unemployment or underemployment, housing and food insecurity, and racism (Coulton, Crampton, Irwin, Spilsbury, & Korbin, 2007). According to the National Incidence Study Harm Standard (Sedlak et al., 2010) children from households with annual incomes below \$15,000 were over 22 times more likely to experience some form of neglect or abuse than children from households with annual incomes above \$30,000 per year (U.S. DHHS, 2010). Moreover, not only does poverty contribute to neglect, it also prevents some mothers from regaining custody of their children (Brown, Melchior, Slaughter, & Huba, 2000). Economic status has broad implications for their ability to acquire the resources necessary to care for their children in a safe and unmonitored environment.

In addition to environmental factors such as poverty, neglecting children is often the consequence of individual parental risk factors such as substance use, mental illness (Panchanadeswaran & Jayasundara, 2012; Grella, Hser, & Huang, 2006), and lack of social and emotional support (Saluja, Kotch, & Lee, & 2003; Zinn, DeCoursey, Goerge, & Courtney, 2006). Mothers at-risk for neglecting their children lack sufficient resources and face disadvantages that

are not easy to overcome. They often live in unstable and stressful environments characterized by a high concentration of poverty, crime, and limited job prospects (MacKenzie, Kotch, & Lee, 2011). These environments can isolate individuals, limiting their access to important resources such as jobs, childcare, and transportation, which adversely impact their ability to successfully parent. This isolation can also be detrimental to the well-being of mothers and children (Lam, Wechsberg, & Zule, 2004). Furthermore, previous research suggests that an individual's living environment and their level of environmental stress predicts the occurrence of child neglect (Coulton, Crampton, Irwin, Spisbury, & Korbin, 2007; Elliott & Urquiza, 2006). Child neglect is a result of several intersecting stressors and risk factors.

The previously stated factors create a stressful context that makes successful parenting challenging, but not impossible. Not all women who experience environment-based stressors or have personal risk factors neglect their children. Presently, we lack sufficient understanding of the factors contributing to child neglect and the factors that may prevent it. We need to disentangle the variables contributing to, and preventing neglect, in order to effectively address this problem. In this study, social support will be explored as a possible protective factor for at-risk mothers and as a means for reducing maternal stress.

### 1.2 SIGNIFICANCE OF STUDY

Developing a greater understanding of neglect is important because of the long-term consequences it has on child development and their overall well-being (English, 1998; Stoltenborgh, Bakermans-Kranenburg, & Van Ijzendoorn, 2013). Young adults who experience neglect in their childhood are more likely to have disrupted growth and development, poor academic performance, and

behavioral and disciplinary issues (Eckenrode, Laird, & Doris, 1993; English, 1998; Hilyard & Wolfe, 2002; Stewart, Kirisci, Long, & Giancola, 2014). As a result of the emotional, physical, and psychological harm, young adults who experience neglect have high rates of major depressive disorders and Post Traumatic Stress Disorder (DePanfilis, 2006; Norman, Byambaa, Butchart, Scott, & Vos, 2012; Widom, DuMont, & Czaja, 2007). Closing the knowledge gap with regards to the correlates of child neglect can inform social policy and social work practice improvements by offering more than individualist explanations of child neglect. This study considers the way in which environmental as well as individual-level risk factors contribute to the occurrence of child neglect. Ultimately, the intent of this study is to (1) increase our understanding of the way in which maternal stressors impact the incidence of child neglect in a sample of at-risk mothers and ascertain which stress-relevant predictors predicted child neglect; (2) discover whether maternal stressors differed by race; and finally (3) explore whether social support moderates the relationship between child neglect and maternal stress.

This quantitative study used secondary data obtained from the Longitudinal Studies Consortium on Child Abuse and Neglect (LONGSCAN), which is a 25-year longitudinal study, initiated in 1990 (Dubowitz et al., 2005). LONGSCAN's nationally representative sample is comprised of mothers who are at a high risk for perpetrating child maltreatment. The goal of LONGSCAN is to increase our understanding of the factors that increase the risk of child maltreatment and its long-term consequences.

# 1.3 STUDY PURPOSE AND RESEARCH QUESTIONS

This dissertation study's purpose and research questions were informed by two theories and one paradigm. In this study, structural social work was utilized as a paradigm, or a way of viewing the problem of neglect through a focus on social structures that create the conditions in which child neglect is most likely to occur. This paradigm asserts that social and political structures create the conditions (i.e., poverty, inequality, and racism) that result in additional stress for at-risk mothers (Mullaly, 2007). While empirical research often focuses on individual parental deficiencies that correlate with child neglect (Crittenden, 1999), this dissertation considers the way in which societal structures create the conditions that make it difficult to raise children in a safe and nurturing environment. From this more structural orientation, the first research question that focuses on the concept of maternal stressors was derived. With this question, external and internal stressors are hypothesized to contribute to the occurrence of child neglect. Likewise, the second research question includes race as an antecedent variable in the conceptual model (see Figure 1) based on structural social work theories' presumption that race—more specifically, racism perpetuated by individuals and social systems in American society—create additional stress in the lives of African American mothers (Better, 2007; Pieterse, 2013).

Stress and coping theory focuses on the strategies individuals use to cope with daily life stressors (Cohen, 2000). Stress and coping theory interprets the way in which maternal stress affects personal functioning, parenting behavior, and the incidence of child neglect (Marcenko, Hook, & Romich, 2012; Marcenko, Lyons, & Courtney, 2011). Although some stressors are precipitated by disadvantages inherent within certain social structures, this theory suggests that the way in which individuals cope with stressors is most important (Kerwin, Giorgio, Steinman, & Rosenwasser, 2014; Marsh, D'Aunno, & Smith, 2002). For at-risk mothers who are unable to cope,

their stressors can ultimately manifest into neglectful parenting behavior (Slack, Berger, DuMont, & Yang, 2011; Taylor, Roberts, & Jacobs, 1997).

The third theory of social support assumes a logical process for the way in which social support can affect at-risk mothers' functioning (Taylor, Larsen-Rife, Conger, Widaman, & Conger; 2010). Social support theory's primary assumption is that having a support system to utilize in times of need is imperative (Taylor et al., 2004). In high-risk and predominantly female-headed households, mothers are instrumental to ensuring the safety and physical and emotional well-being of their children. However, the safety and well-being of children can be impacted by their mothers' level of stress as well as her resources (Arditti, Burton, & Neeves-Botelho, 2010). These resources provide social, emotional, and financial support for mothers which are an important protective factor for children, preventing or reducing the incidence of neglect (Harknett & Hartnett, 2011). Studies suggest mothers who self-report high levels of social support have less parenting stress than mothers with low levels of social support (Abidin, 1997; Arditti, Burton, & Neeves-Botelho, 2010; Chen, Hou, & Chuang, 2010; Spilsbury & Korbin, 2013).

Additionally, interventions that targeted increasing mothers' social and instrumental support were able to reduce maternal stress and incidences of child maltreatment relative to the control sample (Alpert, 2005; Bishop, 1999, Campbell-Grossman, Keating-Lefler, & Heusinkvelt, 2009; Kemp, Marcenko, Hoagwood, & Vesneski, 2009). The final research question examines the hypothesized buffering qualities of social support within the context of child-neglect prevention. Based on theory, past research findings regarding maternal stress, social support, and child neglect, this study addresses the following questions and hypotheses:

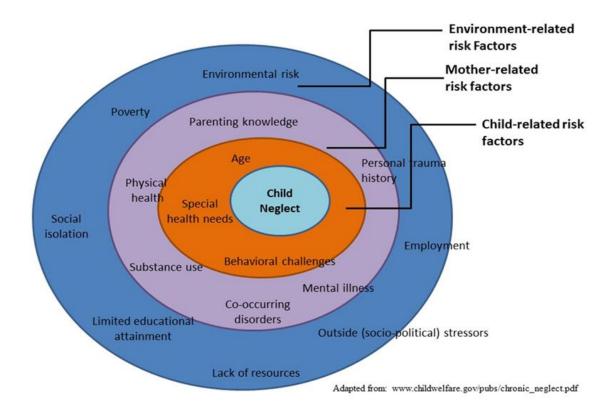


Figure 1 Maternal stressors-A framework for child neglect and at-risk mothers

# Aim One: What maternal stressors predict child neglect in an at-risk group of mothers?

- Q-1.1: Which stressors are associated with child neglect in this sample of at-risk mothers?
- Q-1.2: Which individual stress-relevant predictors explain a statistically significant amount of child neglect variance?
- H.1: The measures of stress altogether will predict the likelihood of occurrence of child neglect; some individual stressors will have greater predictive value than others.

## Aim Two: What is the relationship between race, maternal stressors, and child neglect?

- Q-2.1: In this sample of high-risk women, do African American mothers experience stress differently than their Caucasian counterparts?
- Q-2.2: In this sample of high-risk women, does the likelihood of neglect differ by race of the mother?

Aim Three: What is the relationship between social support and neglect and does support moderate the relationship between stress and neglect?

- Q-3.1: Is there a main effect of social support on the likelihood of neglect?
- Q-3.2: Does social support moderate the relationship between maternal stressors and child neglect?
  - H.2: High levels of perceived social support will predict a lower likelihood of neglect.
- H.3: Social support will moderate the relationship between stress and neglect so that under conditions of high stress and high social support, neglect will be lower; under conditions of high stress and low social support, neglect will be greater.

#### 1.4 IMPLICATIONS FOR SOCIAL WORK

Social work is one of several fields that have historically sought to mitigate child neglect. The approaches utilized to prevent neglect vary and have achieved mixed results. The robustness of the prevention efforts are often tied to federal and state funding. Therefore, when prevention funds are cut, resources are steadily shifted away from programs designed to help distressed families in need, thus limiting full implementation of prevention programs. The lack of support via government-funded prevention programs for at-risk families has had negative consequences, particularly for children, their parents, and the professionals who serve them.

Minimally funded programs typically do not target maternal stress reduction holistically by taking into account the various factors that contribute to the occurrence of child neglect. This dissertation study aimed to provide more information about maternal stressors correlated with child neglect and the protective factors mothers possess, in an effort to dissuade individualist and

incomplete explanations of child neglect. By presenting a more complete picture of child-neglect risks and protective factors, this study intended to be part of a larger body of evidence that helped present child neglect within a broader ecological framework, a framework that could help improve child neglect prevention efforts and social work practice.

#### 1.5 **SUMMARY AND REVIEW**

Child neglect is a persistent problem with broad implications in the United States because of the financial burden it has on taxpayers and the high developmental cost for the children involved. It has been estimated that nationally \$124 billion were spent on the indirect and direct costs of child maltreatment (Fang, Brown, Florence, & Mercy, 2012; Wang & Holton, 2007). Although \$124 billion spent per year is a substantial amount of money, these estimates, however, pale in comparison to the costs the children involved incur (DePanfilis, 2006). Neglect can have harmful, long-lasting effects on children. The long-term impact of experiencing neglect is more apparent as children grow older. There are many consequences associated with child neglect including impaired brain development, cognitive and motor delays, poor physical and mental health, and emotional, psychosocial, and behavioral challenges (Norman, Byambaa, Butchart, Scott, & Vos, 2012; Panchanadeswaran & Jayasundara, 2012). It is evident that child neglect is costly from a personal and societal standpoint. Therefore, this study seeks to explore the way in which maternal stressors impact the incidence of child neglect. A more nuanced understanding may be formed leading to effective and efficient prevention efforts.

This chapter highlighted the prevalence of child neglect in America. The environmental, parent-, and child-related stressors contributing to the occurrence of child neglect were outlined.

The way stressors negatively influence mothers' parenting strategies and impact the health and well-being of their children was also discussed. Lastly, the role of social support was suggested as a coping mechanism to decrease the incidence of child neglect among at-risk mothers.

This dissertation's research questions aimed to further identify the impact maternal stress has on child neglect, how social support impacts the relationship between maternal stress and child neglect, and the way in which maternal stress might be experienced differently based on the reported race of the mother. Additionally, this dissertation detailed the methodology used to examine the research questions and hypotheses.

Chapter 2 presented a review of literature related to child neglect, maternal stress, and social support. It must be noted however, within the child welfare literature, child maltreatment is the more commonly used, generic term, which includes both child abuse and neglect. In chapter 2, both child maltreatment and child neglect literature were reviewed. Information was presented to give an overarching view of the child maltreatment landscape and then distilled down to focus specifically on child neglect.

Chapters 3 and 4 outlined the study's theoretical and conceptual framework. Chapter 5 described the research design and methodology, including descriptions of instruments used to gather the data, the procedures followed, and the sample selection process. Chapter 6 reported the research results. Chapter 7 discussed the research, policy, and practice implications.

#### 2.0 LITERATURE REVIEW

This chapter presented a comprehensive review of the literature on child neglect. The first section conceptualized child neglect as it is currently understood in the field of social work. Furthermore, it provided an overview of key definitions and terms used throughout this dissertation. The second section examined historical and contemporary social policies related to child neglect in order to ascertain how child neglect is currently understood and treated in the United States. The third section reviewed research on factors associated with child neglect. These variables included: 1) environmental stressors; 2) parent-related stressors; and 3) child-related stressors. The fourth section incorporated literature on race, class, and gender and focused on the way in which these factors contributed to child neglect. The fifth section discussed low-income African American mothers and explored why they may have been at-risk to neglect their children. The sixth section examined the role of social support in moderating cases of child neglect. The final section discussed the limitations of previous research on child neglect and provided direction for future research questions in this area.

#### 2.1 **CONCEPTUAL DEFINITIONS**

Below are brief definitions for concepts integral to the conceptualization of this research. These definitions are further discussed in the research methodology chapter.

### 2.1.1 Child neglect

Child neglect is broadly identified as physical, medical, supervisory, environmental, emotional, and educational neglect (DePanfilis, 2006). This definition corresponds with the Child Abuse and Prevention Act (CAPTA) (P.L. 111-320), which defines child neglect as the failure to provide necessary food, clothing, shelter, medical care, or supervision to an individual under the age of 18. In addition to the federal definition, some states have created more in-depth definitions that mention other forms of neglect, including abandonment and child exposure to controlled substances (U.S. DHHS, 2010). Since definitions of child neglect vary considerably from state to state, the federal definition of child neglect will be presented and used in this dissertation.

Child neglect comprises more than two-thirds of all child maltreatment occurrences in the United States (U.S. DHHS, 2015). Despite the prevalence of child neglect in the United States, it is difficult to pinpoint a singular cause of child neglect and create a precise character profile of parents who neglect their children because there are many different intersecting variables that contribute to neglect. Nonetheless, there are several risk factors associated with this problem.

These risk factors are broadly grouped into four domains: 1) environmental (e.g., poverty-related factors); 2) parent factors; 3) family factors; and 4) child factors. Poverty-related factors interfere with a mother's ability to provide her children with basic human needs such as shelter, food, and adequate supervision. Parent factors are individual-level behaviors or conditions that may impact parenting decisions, such as parental substance use and mental illness. Family factors refer to the family's structure and dynamics. Child factors relate to the number of children in a family, their characteristics, and whether or not they have special physical and behavioral needs. Often child neglect is a result of the combination and interaction of these domains (Chalk & King, 1998).

Child neglect is important to address because of the adverse effects it has on families, but more importantly, it jeopardizes both the physical and psychological well-being of children (Taylor, Larsen-Rife, Conger, Widaman, & Cutrona, 2010). Neglect exposes children to undue stress and harm (Crouch, Milner, & Thomsen, 2001). Some children who experience neglect are reported to have problems adjusting as they grow older that are difficult to overcome (Appleyard, Yang, & Runyan, 2010). For example, child neglect can result in impaired brain development, cognitive and motor delays, poor physical and mental health, and emotional, psychosocial, and behavioral challenges (Norman, Byambaa, Butchart, Scott, & Vos, 2012; Panchanadeswaran & Jayasundara, 2012). Additionally, child neglect has severe consequences not only for those who experience it but also for society as it incurs the financial costs associated with supporting child neglect victims who may struggle to overcome the trauma they experienced. Child neglect is estimated to cost society 10 billion per year directly and indirectly, over 100 billion dollars per year (Fang, Brown, Florence, & Mercy, 2012).

#### **2.1.2** Stress

The term "stress" was first used within the psychological context in 1936 by Hans Selye. He defined it as "the non-specific response of the body to any demand for change" (Selye, 1978, p. 7). Selye named negative stress "distress" and positive stress "eustress" (Selye, 1978, p.7). While stress in moderation is very important and the way the body maintains homeostasis, too much stress can result in adverse effects. In the present day lexicon, stress is generally considered as being synonymous with distress and the negative qualities of stress are now highlighted. Webster's dictionary (Merriam-Webster, 2003) defines stress as "physical, mental, or emotional strain or tension" or "a condition or feeling experienced when a person perceives that demands exceed the

personal and social resources the individual is able to mobilize" (p.1113). Ultimately, stress is the response an individual has to an external stimulus or stressor.

#### 2.1.3 Stressor

A stressor is an event that provokes disequilibrium or a condition that causes stress. It may interfere in an individual's mental and physical well-being (Cohen & Wills, 1985). A stressor refers to any environmental, social, or internal demand that requires the individual to readjust their usual behavior patterns (Thoits, 1995). Four major forms of stressors exist: daily hassles, life events, chronic stressors, and multiple stressors. Daily hassles are unexpected events that occur during the course of the day and require minor behavioral readjustments (e.g., unexpected visitors, missing a bus, or misplacing paperwork). Life events require rapid behavioral readjustments (e.g., death of a spouse, birth of a child, or loss of employment). Chronic stressors include ongoing social and environmental conditions that may affect an individual's personal well-being (e.g., living in poverty, living in danger, living with a chronic illness or disability, living with feelings of discrimination based on one's race, class, gender, religion, or sexual orientation) (Lepore, Palsane, & Evans, 1991; McEwen, 2012). Multiple stressors are stressors that occur simultaneously and act in concert with one another (Lepore, Evans, Zeidner, & Moshe, 1996). The co-occurrence of multiple, multi-level, stressors (e.g., poverty, single motherhood, inadequate housing, limited access to transportation, and fractured social support networks) are reported to negatively affect physical, mental, and behavioral health (Kelley, 2002).

#### 2.1.4 Maternal stress

Maternal stress is conceptualized as the stressors a mother experiences related to her primary custodial parenting role or stress which impedes her from fulfilling her parenting duties (Abidin, 1997).

#### 2.1.5 At-risk mother

An at-risk mother is one who falls into one or more categories that are primary predictors of child maltreatment. Therefore, a mother who has one or more of the following is considered at-risk for child maltreatment: 1) low income; 2) substance use disorder or history of substance use; 3) mental illness; 4) has maltreated her children in the past. Presence in one or more of these categories indicates that an individual may need additional support and resources to provide for their children's needs and keep them from harm.

## 2.1.6 Social support

Social support refers to the availability of an informal network of support (Taylor et al., 2004). The informal support system consists of instrumental and emotional support.

*Instrumental support:* Instrumental support is considered the most concrete direct form of social support. Instrumental support encompasses help in the form of money, time, in-kind assistance, and other explicit ways people offer assistance to one another (Langford, Bowsher, Maloney, & Lillis, 2008).

*Emotional support:* Emotional support is an additional form of social support. It is the process of offering counsel, empathy, concern, affection, love, trust, acceptance, intimacy, encouragement, or caring for another person (Langford, Bowsher, Maloney, & Lillis, 2008).

#### 2.2 LEGISLATIVE HISTORY RELATED TO CHILD NEGLECT

Social policy in the United States has evolved in an effort to reduce the occurrence of neglect. The recognition of childhood as a distinct developmental stage was the precursor to the conceptualization of child neglect as a social problem. During the social reform era of the early 1900s, scholars and activists departed from the old ways of thinking about children. They felt children were to be loved and nourished, not considered as little adults, nor harshly punished as they had been in the past (Trattner, 1999). The ideological shift regarding the way children were viewed, in and out of their homes, occurred in the 20th century (Hacsi, 1995). This shift was followed by government oversight of parents' treatment of their children and taking on the responsibility for protecting and providing safe haven for neglected and abused children.

Creation of the Children's Bureau in 1912 marked the first federal response to the welfare of maltreated children and spurred the creation of foster care and government aid for mothers who needed assistance meeting their children's basic needs. To receive preventative aid, however, an applicant had to meet the newly established "fit mother" criteria. Despite their need, many mothers did not meet the "fit mother" standards and were deemed ineligible for services. Entire groups of mothers were excluded from services based on their marital status and race (Wright, 2002). Successive child welfare legislation made child neglect prevention services more widely available to mothers in need. Described in narrative form are landmark pieces of child welfare legislation

that sought to mitigate child neglect. Additional child welfare policies such as the Adoption Assistance and Child Welfare Act and the Multi-Ethnic Placement Act which influenced child welfare but are not directly related to the substantive research problem area are included in Appendix A.

## 2.2.1 Aid to Dependent Children-Foster Care Act of 1961

The Aid to Dependent Children-Foster Care Act of 1961 provided federal grants to states so they could create their own individual child welfare service system. The newly created child welfare system was responsible for ensuring the safety and well-being of maltreated children. This Act required state-run child welfare systems to either make homes safe and habitable for neglected children or place them in a safe foster or adoptive home.

#### 2.2.2 Public child welfare history and African American families

Before the passage of the Aid to Dependent Children-Foster Care Act, African American women and children in need were served primarily by mutual aid societies as they were excluded from mainstream social services due to race. When African Americans became widely eligible for public services in the early 1960s, they entered a social service and child welfare system focused on monitoring and compliance (Reisch & Andrews, 2002). Public child welfare workers were not immune to the discriminatory ethos of the time period. Unequal practices included providing African Americans with little or no prevention services and treating cases of child neglect more punitively than their Caucasian counterparts (Axinn & Stern, 2007; Billingsley & Giovannoni, 1972).

# 2.2.3 Child Abuse Prevention and Treatment Act (CAPTA) of 1974

One of the most significant policy developments for neglected children occurred in 1974 with the passage of the Child Abuse Prevention and Treatment Act (CAPTA). CAPTA required states to establish their own mandatory reporting criteria and procedures and to create guidelines for reporting child abuse and neglect, and the infrastructure to receive the reports. Additionally CAPTA provided funds to study the extent, causes, and consequences of child abuse and neglect. Prior to CAPTA, minimal national legislation existed to prevent and respond to child abuse and neglect.

# 2.2.4 The Adoption and Safe Families Act of 1997

Adoption and Safe Families Act (ASFA) was, in part, created to provide permanency for the growing number of neglected and abused children. Several social and bureaucratic factors contributed to the substantial increase in the number of neglected children entering the foster care system such as reduced government spending on social service systems, poor economic conditions, increased drug usage in impoverished communities, mandatory drug charge sentencing, and heightened maternal involvement in the criminal justice system. To illustrate this point, between 1986 and 1995, the number of maltreated children in foster care increased from 280,000 to nearly 500,000 (O'Neill & Gesiriech, 2002). The child welfare policies in place were not equipped to adequately address this influx of children. Foster care became a revolving door for many children who entered care during the 1980s and 1990s. Some children failed to achieve permanency after several years. Thus, the need to increase child safety, well-being, and permanence served as the impetus for the creation of the ASFA.

ASFA sought to establish and enforce performance standards. This was done by creating a state accountability system, whereby states would incur financial penalties if they failed to decrease child maltreatment and increase permanency (P.L. 105-89). Maltreated children were no longer allowed to remain in foster care as a permanent option (P.L. 105-89). As a result, ASFA promoted concurrent placement planning and termination of parental rights if a child had been the responsibility of the state for 15 of the previous 22 months (Young & Gardner, 2002; P.L. 105-89). In addition, ASFA promoted expedited permanency, more specifically, adoption was endorsed as a permanent placement option for maltreated children.

#### 2.3 **SUMMARY**

Child neglect is a persistent problem in the United States and its prevention remains a key goal within the field of child welfare. Federal and state legislation often drives the approach to preventing child welfare though it is not always derived from empirical evidence. Legislation has drastically changed how we view childhood and the treatment of children. Government policies created the age range for childhood, work restrictions, and education requirements that did not exist prior to the early 1900s. Parameters were created around how children were to be treated and disciplined in their home. Most notably, child maltreatment reporting through CAPTA, detection, interventions (Aid to Dependent Children), and subsequent action steps for removal (ASFA) were all based upon litigation. Government taking on the responsibility to respond to and care for maltreated children is the overarching theme here. The first ten years of ASFA led to more child removals and less child permanency. ASFA has not fully achieved its stated goals. Like most social policies, past child welfare legislation was not perfect, it addressed some of the presenting

problems and caused others. This perhaps is because laws like ASFA did not alleviate the problems that were asymptomatic of child maltreatment, they were ill conceived and had limited foresight regarding the lasting effects they would have on children and communities.

Presently, there are growing efforts to bridge the gap between child welfare policy, practice, and research. In an effort to be more purposeful and targeted in child maltreatment reduction efforts, more recently, child welfare research has attempted to understand the correlational relationships between maternal stressors and child neglect in an effort to reduce child neglect. This dissertation seeks to examine these correlations, namely the stressors at-risk mothers experience which contribute to child neglect.

#### 2.4 MATERNAL STRESS AND CHILD NEGLECT

All parents experience stress while caring for their children. Stress is normal. However, constant parenting stress can negatively influence parenting behavior. Pagliaro (2000) maintains the amount, degree, and impact of maternal stress is moderated by child characteristics, parental characteristics, and environmental characteristics. Likewise, child characteristics can create maternal stress and include variables such as the number of children, age of child(ren), their temperament, behavior, and physical disabilities (Abidin, 1997; Cappa, Begle, Conger, Dumas, & Conger, 2011). The maternal factors that influence stress include mental health status, level of social support, and self-efficacy (De Bellis et al., 2001). In addition, at-risk mothers also deal with a wide range of ecological stressors, which are a result of their relatively low socioeconomic status. These stressors include poverty, inequality, unstable housing, unemployment, and insufficient

education which also impact maternal stress (Manly; Oshri, Lynch, Herzog, & Wortel, 2013; Marsh, Smith, & Bruni, 2011).

Maternal stress can result in negative outcomes for mothers, Deater-Deckerd (2004) report that parenting stress is associated with problems in adult health. More specifically, chronic stress can adversely affect the physical health of mothers and lead to a number of illnesses such as hypertension, heart disease, type 2 diabetes, gastrointestinal problems, and autoimmune diseases (Marsland, Bachen, Cohen, Rabin, & Manuck, 2001; Williams, Yu, & Jackson, 1997). In addition to physical health problems, chronic stress affects the mental health status of mothers. For example, it can cause or exacerbate anxiety and depression, which can promote harmful parenting behaviors such as lack of warmth and use of harsh discipline (Keith & Brown, 2003; Johnson, 2011; Taylor, Larsen, Conger, Widaman, & Cutrona, 2010).

Mothers who experience multiple stressors expressed that the responsibilities associated with parenting compounded their stress (Nair, Schuler, Black, Kettinger, & Harrington, 2003). A randomized longitudinal study of 161 mothers found that those who experienced five or more stressors were more likely than those with fewer stressors to abuse or neglect their children (Nair, Schuler, Black, Kettinger, & Harrington, 2003). McPherson, Lewis, Lynn, Haskett, and Behrend's (2009) comparative study of 126 neglectful and non-neglectful mothers and Holden and Banez's study (1996) of 47 primarily impoverished parenting pairs reported that elevated levels of parenting stress were associated with increased child neglect risk (Holden & Banez, 1996). These parenting stressors included, but were not limited to the presence of mental illness (Green, Rockhill, & Furrer, 2006; Kemp, Marcenko, Hoagwood, & Vesneski, 2009), domestic violence (Herrenkohl & Herrenkohl, 2007), multiple children (Libby et al., 2006), single-parent household

(Bass, Shields, & Behreman, 2004), and homelessness or unstable housing (Coulton, Crampton, Irwin, Spisbury, & Korbin, 2007).

Despite evidence linking poverty to child neglect, some scholars adhere to a different theory regarding the relationship between poverty and child neglect. Some suggest that poverty is actually a function of parenting behavior (McSherry, 2007). Crittenden (1999), for instance, subscribes to the parental deficits model and explains child neglect by hypothesizing that a parents' deficiency of character and ineptitude lead to both poverty and neglect. While this theoretical model rightly emphasizes the importance of modifying negative parenting behaviors, this solution, however, is incomplete because both parenting re-education and resource enhancement are necessary (Marsh, Smith, & Bruni, 2011; Thomas & Zimmer-Gembeck, 2011).

Although this theory may explain some circumstances, it fails to account for the determinants of poverty that are deeply entrenched within the sociopolitical structure. An ecological framework, which considers multiple interacting factors, offers a more comprehensive understanding of the etiology of child neglect (Chaffin, Kelleher, & Hollenberg, 1996; Drake & Jonson-Reid, 2014; Erickson & Egeland, 2002; Schumacher, Slep, & Heyman, 2001).

#### 2.4.1 Parent-related factors and child neglect

In addition to environmental factors, individual mothers also possess personal risk factors. These parent-related risk factors are parenting knowledge deficits, substance abuse, mental illness, extensive personal trauma histories; and life-threatening health problems which can contribute to the incidence of child neglect (Kemp, Marcenko, Hoagwood, & Vesneski, 2009; Lee & Goerge, 1999; MacKenzie, Kotch, & Lee, 2011). Of these, the most prominent parent-related risk factors

for child neglect are mental illness and substance abuse, which will be discussed in more depth in the coming sections.

## 2.4.1.1 Parenting knowledge and child neglect

Some at-risk mothers have parenting knowledge deficits that adversely affect their parenting behavior. They often have incomplete knowledge about child development and parenting. This may be a result of never gaining it or difficulty acting on their knowledge due to substance abuse or mental illness-related impairment. Consequently, limited knowledge of child development and age-appropriate disciplinary methods can interfere with their ability to effectively parent (Carter & Myers, 2007; Goldman, Salus, Wolcott, & Kennedy, 2003).

Social work practice has revealed a multitude of solutions for helping mothers overcome parenting deficits and better manage their stress. One solution is offering support services such as parenting classes, service coordination assistance, transportation, child care, and mental health counseling to help mothers improve their ability to deal with their stress (Elliott & Urquiza, 2006; Marcenko, Hook, & Romich; 2012; Marsh, Smith, & Bruni, 2011). The empirical validity for parenting behavioral modification classes has been well established; a meta-analysis of 36 studies on parenting classes indicated that training was beneficial for both parents and their children (Harris & Hackett, 2008). With the acquisition of enhanced parenting knowledge via the Family Ecosystem Model of parenting and therapy, mothers exhibited improved parenting behavior and were two times more likely to retain custody of children than the control sample mothers who did not receive training (Nelson, Mitrani, & Szapoznik, 2000). Thomas and Zimmer-Gembeck's (2011) study of 102 at-risk mothers used parent—child interactional therapy as a parenting behavior intervention and noted the mothers who underwent the 12-week therapy showed significant signs

of improved parenting behavior, better parent-child interactions, and reduced maternal stress compared to the mothers in the control group.

## 2.4.1.2 Substance abuse and child neglect

Substance abuse increases the likelihood that parents will neglect their children. Substance Use Disorders (SUDs) frequently co-occur with child neglect (Libby et al., 2006; Putnam-Hornstein, Needell, King, & Johnson-Motoyama, 2013; Wekerle & Wolfe, 2003). SUDs affect the mothers' lives in many ways, particularly "how they live, function, interact with others, and parent their children" (U.S. DHHS, 2009, p. 7). In the context of child neglect, SUDs can impair a mothers' judgment, alter their priorities, and negatively affect the consistency of care and supervision given to their children (U.S. DHHS, 2009). Additionally, substance abuse is associated with psychosocial characteristics that place mothers at increased risk for child neglect (Blakey & Hatcher, 2013; Nair, Schuler, Black, Kettinger, & Harrington, 2003). Substance abuse is a palliative behavior some individuals use to cope with the stress and strain they encounter. Studies related to the neurobiology of addiction have found evidence that supports the hypotheses that stressors impact drug use initiation, continuation, and cravings (Goeders, 2002; Leshner, 1997; Sinha, 2008). In addition to the impact maternal stress has on continued substance abuse, it also heightens an individual's likelihood of relapse to drug use (Shaham, Erb, & Stewart, 2000; Sinha, 2001) and criminal recidivism (Kubiak, 2004). In other words, maternal stress promotes and reinforces substance abusing behavior (Cash & Wilke, 2003; Goeders, 2002) which creates a vicious cycle whereby maternal stress reinforces substance abuse and vice versa.

A mother's lack of resources and use of public services and supports renders them more likely to be reported for child neglect than those who have substantial resources, neglect their children, and abuse substances. Visibility and lack of resources partially contribute to the high prevalence of impoverished mothers involved in the child welfare system as compared to other substance-abusing parents (Drake & Zuravic, 1998). Living in poverty, they often have fractured support networks, thus are more reliant upon formal systems for support. Given their need for additional support, these mothers are more susceptible to coming into contact with and utilizing public social services that actively monitor parental aptitude (Brown & Bloom, 2009). Their visibility makes instances of child neglect and substance abuse more likely to be called to the forefront by a monitoring agency such as a public school teacher, family support worker, parole officer, or doctor (Garland, Ellis-MacLeod, Landsverk, Ganger, & Johnson, 1998). These service systems can be paternalistic and are more inclined to monitor for signs of child neglect (De'Cruz & Stagnitti, 2008). Given poor mothers' involvement with these monitoring entities, they are more likely to be reported to CPS for child neglect than someone of a higher income who does not receive social services (Garland, Ellis-MacLeod, Landsverk, Ganger, & Johnson, 1998; Ondersma, 2002).

Receipt of services from CPS does not always constitute child removal. Mothers who received services and retained custody of their children abused substances less often than mothers who lost their children (Janzen & Melrose, 2013; Lewis, 2004). Women who had their children while undergoing treatment used drugs less (Lam, 2004; Velez et al., 2004). Having their children gave some mothers the motivation to stay in treatment. This finding was corroborated in a study in which the researchers reported that the severity of the mothers' substance abuse was highly correlated with whether or not their child was in out-of-home placement (Marcenko, Kemp, & Larsen, 2000). According to Lam, Wechsberg, & Zule (2004), Lewis (2004), and Wilke (2005) women who abuse substances and lose custody of their children subsequently increase their substance use as a result of the lack of mothering responsibilities and the pain and sadness caused

by losing their children. Mothers without their children reported more frequent drug use, risky sexual practices, psychological distress, and victimization experiences (Najavits, 2009). Essentially, instead of making improvements, their child's removal adds an additional stressor and further deteriorated their condition.

Child neglect may be magnified when mothers under psychological distress abuse substances. For instance, Anderson et al., (2006) and Green, Rockhill, & Furrer (2006) report that mothers with high levels of psychological distress who also abuse substances are more likely to neglect their children. Some of these mothers have competing desires. They want to quit abusing substances but do not want to experience the negative feelings and responsibilities that surface after they quit. Often the cause of the mothers' pain is reported to be rooted in their own childhood abuse (Blakey & Hatcher, 2013; Marcenko, Kemp & Larson, 2000). Both studies found childhood sexual trauma was positively correlated with the severity of the mothers' substance abuse. Mothers who reported a history of physical or sexual abuse were significantly more likely to report symptoms of psychological distress than were mothers with no childhood experiences of abuse. Najavits (2002; 2007; & 2009) also found that early sexual trauma and substance abuse appeared to have particularly devastating effects on mothers' lives. The mothers' own personal wounds, psychological distress, and substance abuse negatively impacted their parenting behavior (Marcenko, Kemp, & Larson, 2000). Use of palliative coping strategies further reduced their ability to provide for their children's basic human needs (Marcenko, Kemp, & Larson, 2000).

## 2.4.1.3 Co-occurring disorders

Mothers with co-occurring disorders, such as mental illness and SUDs, have unique parenting challenges and stressors that may make them more susceptible to neglecting their children (De Bellis et al., 2001; Jonson-Reid et al., 2009; Mersky, Berger, Reynolds, & Gromske, 2009). As

noted in the previous section, mothers who maltreat often have their own trauma histories (Kemp, Marcenko, Hoagwood, & Vesneski, 2009). These mothers' inability to resolve previous trauma can affect their parenting and recovery from substance abuse (Green, 2006). Mothers of maltreated children exhibit a high lifetime incidence of depression and anxiety (50%) compared to similarly matched non-maltreating mothers (27%), and maltreating mothers also have markedly low rates of treatment participation (De Bellis et al., 2001). These high rates of depression and anxiety deeply impact their children and increase the odds the mothers will neglect them, which has been affirmed in multiple studies (Jonson-Reid et al., 2009; McEwen, 2012; Mersky, Berger, Reynolds, & Gromske, 2009).

Although these mothers often experienced mental distress, they did not disclose this to social workers for fear the information would be used against them (Anderson et al., 2006). Mothers acknowledged they were depressed or anxious, but expressed resentment, even indignation, at clinical labels suggesting their distress was somehow internal; rather, they believed their problems were a result of external forces beyond their control, rooted in poverty and inequality (Arditti, Burton, Neeves-Botelho, 2010; Anderson et al., 2006). As was noted, keeping their children from harm and attending to all their needs is a difficult endeavor for mothers with co-occurring disorders because of their added personal challenges and stressors.

## 2.4.2 Child-related stressors

In addition to the child's age, children four and younger are three times more likely to experience neglect than children over four years of age (Reid-Merritt, 2010; Selye, 1978). In addition to their age, a child's behavior and personal characteristics also increase their likelihood of experiencing neglect (Allen, & Green, 2008; Wang & Holton, 2007). Child behavioral problems can influence

family systems and vice versa (Cappa et al., 2011). Disruptive child behavioral problems are closely associated with high levels of parenting stress (McPherson, Lewis, Lynn, Haskett, & Behrend, 2009; Ross, Blanc, McNeil, Eyberg, & Hembree-Kigin, 1998). Likewise, children who have problematic behavior and/or special needs add to a mothers' level of stress (Marcenko, Kemp, & Larsen, 2000; Ross, Blanc, McNeil, Eyberg, & Hembree-Kigin, 1998).

Stress related to parenting contributes to mothers' psychological distress (Sepa, Frodi, & Ludvigsson, 2004). Mothers with their own personal challenges are often overwhelmed by a child with special behavioral, emotional, or physical needs (Cappa, Begle, Conger, Dumas, & Conger, 2011; Holden & Banez, 1996). For mothers who reported their child's temperament was troublesome, maltreatment was more likely (Harris & Hackett, 2008). Two studies found a significant interaction between parents' level of tolerance and child neglect (Gottlieb & Bergen, 2010; McPherson, Lewis, Lynn, Haskett, & Behrend, 2009). For example, the use of harsh discipline strategies and verbal aggression were more likely to be used on children who had emotional or behavioral challenges (Stith et al., 2009).

# 2.4.3 Summary of maternal stressors and child neglect

In summary, at-risk mothers encounter many life stressors that are both at the ecological and individual level. The sociopolitical structure influences the ecological context of mothers and their status within it. At-risk mothers' social status and limited access to resources can inhibit their ability to adequately parent their children. In addition to broader factors like poverty, these mothers often suffer from individual-level problems such as mental illness and substance abuse disorders. The stressors they experience affect their mental and physical health and substance use habits, which in turn negatively affect their parenting strategies and behaviors. Mothers who reported

experiencing multiple stressors are more likely to maltreat their children, though the literature did not specify the prevalence of child-neglect perpetration. This dissertation will more fully explore how maternal stressors uniquely contribute to the incidence of child neglect.

## 2.5 AT-RISK AFRICAN AMERICAN MOTHERS IN CONTEXT

As a result of the intersection between race, class, and gender, a number of African American households are poorly resourced. Poverty-related factors—single parenthood, structural inequalities, and racial discrimination—contribute to the overabundance of neglected African American children (Bass, Shields, & Behreman, 2004). For instance, when taking into consideration poverty, the primary predictor of child neglect, nationally, 15% of households are impoverished (U.S. Census Bureau, 2014) whereas 25% of African American households live below the poverty threshold (U.S. Census Bureau, 2014). Poverty is even more profound in female-headed households as half of poor children live in them (U.S. Census Bureau, 2014). Meanwhile, over 70% of African American children are raised in female-headed households and 50% of these households live below the poverty line. Single parenthood and poverty are highly correlated (Wilson, 2012). Poverty and poverty-related factors disadvantage African American mothers and increase their likelihood of receiving a child-neglect report (Roberts, 2002).

African American mothers are also reported to experience high levels of maternal and economic stress; this stress is reported to result in depression (Taylor, Braxter, Doswell & Tull, 2007), low levels of maternal warmth (Taylor, Larsen, Conger, Widaman, & Cutrona, 2010) and difficulty supervising and disciplining their children (Cooper, McLanahan, Meadows, & Brooks-Gunn, 2009). Two comparative studies note that African American mothers with economic

resources and social support display better parenting strategies than African American mothers with minimal economic resources and social support (Campbell-Grossman, Hudson, Keating-Lefler, & Heusinkvelt, 2009; Derezotes, Testa, & Poertner, 2005).

## 2.5.1 Environmental context and child neglect

The environmental contexts in which many African American mothers live contribute to creating the conditions where child neglect is more likely to occur (Roberts, 2008). These stressful environments often feature a high concentration of poverty, crime, limited jobs, and high incarceration rates (Drake & Jonson-Reid, 2014). These neighborhoods account for a high proportion of the African American children who have been neglected (Nair, Schuler, Black, Kettinger, & Harrington, 2003; Puntam-Hornstein, Needell, King, & Johnson-Motoyama, 2013). Two separate studies (Coulton, Crampton, Irwin, Spisbury, & Korbin, 2007; Elliot & Urquiza, 2006) noted environmental stress was correlated with the occurrence of child neglect.

## 2.5.2 Employment and child neglect

Unemployment, housing, and neighborhood instability, in particular, impact African American mothers' ability to provide a safe environment for their children. These structural and environmental factors make it harder for them to acquire gainful employment that will lift them out of poverty (Lewis, 2004). Finding and keeping employment is challenging. Jobs that match their educational level are generally insecure, entry-level manual labor jobs such as janitorial, retail, nursing home, or clerical work which offer minimal pay (Mackintosh, Myers, & Kennon, 2006). Limited job options, in part, have to do with spatial isolation and some of their relatively

low levels of educational attainment. Consequently, the housing options these at-risk mothers can obtain are limited, as they are often forced into unstable or unsafe neighborhoods that make the assurance of child safety and well-being challenging for them to guarantee.

#### 2.5.3 African American mothers and child welfare involvement

Race debatably influences many aspects of child-neglect reports and detection (Jonson-Reid, Drake, & Zhou, 2013). For instance, African American mothers face a greater possibility of disparate treatment when dealing with the child welfare system (Roberts, 2002). African American children are more likely to be reported for child neglect than Caucasian children (Hill, 2008). Nationally representative longitudinal studies confirm that along the child welfare continuum, African American children have the worst outcomes which in part can be attributed to biased reporting and decision making (Derezotes, Testa, & Poertner, 2005; Harris & Hackett, 2008; Marcenko, Lyons, & Courtney, 2011; Sedlak & Broadhurst, 1996). Studies note African American families are no more likely to abuse or neglect their children than Caucasian families of similar socioeconomic backgrounds (Bass et al., 2004; Roberts, 2002). However, the Fourth National Incidence Study of child abuse and neglect (NIS-4) provides evidence to the contrary (Sedlak et al., 2010), reporting that African American children are more likely to be maltreated than Caucasian children and CPS and social worker bias is not the problem. The lack of clarity regarding the correlates of child neglect in the African American community warrants further exploration into African American mothers' experience with maternal stress, as this will help determine their risks, beyond poverty, and protective factors.

In summary, in this literature review, research relating to African American mothers and child neglect was viewed from a socio-ecological perspective considering the impact stressors

have on their risk of neglecting their children. It has been previously established that African American mothers experience high levels of economic stress; this stress is reported to result in depression, low levels of maternal warmth (Taylor, Larsen, Conger, Widaman, & Cutrona, 2010) and difficulty supervising and disciplining their children (Cooper, McLanahan, Meadows, & Brooks-Gunn, 2009). In addition to these poverty-related stressors they are also confronted with constant and pervasive institutional racism that is an added stressor. We know African American mothers face many stressors (Jonson-Reid, Drake, & Kohl, 2009), however, we do not know what the stressors are or how their stressors compare to their impoverished Caucasian counterparts. Previous empirical research has not discerned what stressors, controlling for poverty, increase the likelihood of child neglect amongst African American mothers. This literature review lead to an additional research question which seeks to discover the experience African American mothers have with stressors both race-based and environmentally related.

#### 2.6 SOCIAL SUPPORT AND CHILD NEGLECT PREVENTION

Social support is a coping resource used by individuals dealing with life challenges and stressors. It is associated with improving a number of health outcomes including personal competence, health maintenance behaviors, effective coping behaviors, recognition of self-worth, positive affect, psychological well-being, and decreased anxiety and depression (Lewis, 2004). Social support also has been used as a strategy to reduce parental stress and to prevent child maltreatment (Spilsbury & Korbin, 2013; Taylor et al., 2004). This is important to note because limited parenting support has been associated with higher levels of reported stress (Resspler-Herman, Mowder, Yasik, & Shamah, 2012; Sepa, Frodi, & Ludvigsson, 2004).

Helping mothers improve their ability to deal with parenting, emotional, and environmental stress has been accomplished through enhancing support networks via peer coaches, integrated case management, and reconnection with natural supports (Harris & Hackett, 2008).

Mothers with limited economic resources rely heavily on social support to manage their stress and to assist with raising their children. Family and friends are an important source of social support for at-risk mothers as they help to care for their children when they are unable to (Casanueva, Tueller, Smith, Dolan, & Ringeisen, 2014; Bishop & Leadbeater, 1999). Mothers who reported low levels of social support were more likely to abuse or neglect their children than those who reported high levels of social support (Gottlieb & Bergen, 2010; Warren, Stein, & Grella, Hser, & Huang, 2006). As for African American mothers, comparative studies note, those with economic resources and social support display better parenting strategies than African American mothers with minimal economic resources and social support (Campbell-Grossman, Hudson, Keating-Lefler, & Heusinkvelt, 2009). The contribution of positive social support can be critical when financial resources are lacking. It is also important to note, however, there are potentially negative aspects of social support that can arise when friends or family members encourage harmful behaviors (Halpern, 2004).

Social support is important but cannot solve all of the problems associated with child neglect. Most notably, social support can be exhausted in strained communities. For instance, Coulton, Crampton, Irwin, Spisbury, & Korbin (2007) found that a high proportion of at-risk mothers involved in the child welfare system are concentrated in strained communities. This assessment is in line with Harknett and Hartnett's (2011) study, which found the neediest mothers often have fractured or strained social networks and were less likely to receive adequate social support. Thus, questions remain pertaining to how much social support at-risk mothers can

practically draw upon and if this support is sufficient enough to help them overcome their challenges.

Despite the incomplete nature of the social support literature, generally it is agreed that social support positively influences personal well-being (Cohen & Willis, 1985; Gottlieb & Bergen, 2010; Lakey & Cohen, 2000). Assistance from friends and family can be very helpful when dealing with or avoiding a crisis. Merely having individuals to rely on for financial, emotional, or child-rearing support provides a source of comfort (Halpern, 2004). Unfortunately, research specifically examining social support in preventing child neglect is not plentiful (Bishop & Leadbeater, 1999) and specifics regarding the quantity and quality of said social support are not given. This dissertation aims to provide a clearer conceptual framework for the way in which maternal stressors combine and impact the occurrence of child neglect and the moderating role social support may play.

A review of social support literature led to the final research inquiry: is there a main effect between child neglect and social support and does social support moderate the relationship between maternal stressors and child neglect? Research has established that at-risk mothers have many stressors in their lives. This stress can adversely affect their family's well-being, particularly when they do not have sufficient coping strategies and resources. The adverse outcome of interest in this study is child neglect. Social support has been used to enhance behavioral outcomes in a number of settings. As a result of these findings, social support will be analyzed for its utility in reducing reports of child neglect in this at-risk, highly stressed population.

## 2.7 **CONCLUSION**

Research on the causes of child neglect historically focused on parental deficits. However, over the past 15 years, there has been a shift from emphasizing individual pathology to considering the way in which multi-level influences impact the occurrence of child neglect (Putnam-Hornstein, Needell, & Rhodes, 2013; Stith et al., 2009). Ecological factors were analyzed in this literature review to better understand the maternal risks and stressors that contribute to the occurrence of child neglect. This study continued in the same vein as more recent empirical work, the intent being to identify multi-level factors that influence the incidence of child neglect (see Figure 2). Despite renewed research efforts in this area, a systematic review of the literature revealed the way in which maternal stressors contribute to child neglect remains a critical research problem. The literature review discovered research on child neglect is limited in six key ways.

First, previous research established the primary predictors of child neglect, specifically poverty and substance abuse, but gave limited attention to the combined impact of these and other stressors (Duva & Metzger, 2010; Derezotes, Testa, & Poertner, 2005). Additionally, few studies addressed how each stressor uniquely contributed to child neglect and whether the stressors studied were inter-related (Jonson-Reid, Drake, & Zhou, 2013; Nair, Schuler, Black, Kettinger, & Harrington, 2003; McPherson, Lewis, Lynn, Haskett, & Behrend, 2009). Given past research limitations, this dissertation analyzed several stressors in addition to poverty in an effort to discover the way in which they contribute to the occurrence of child neglect among at-risk mothers.

Second, child welfare research often has not drawn a clear distinction between child neglect and child abuse which is problematic given the predictors of child neglect are different and primarily ecologically based (Pecora & Whittaker, 2012; Stoltenborgh, Bakermans-Kranenburg, & Van Ijzendoorn, 2013). This limits conversations about the way in which at-risk mothers'

ecological context and stressors impact child neglect. Given this lack of clear differentiation between the two terms, there is limited research to reference back to in an effort to gather information regarding the causes of child neglect.

Third, the child neglect discourse has yet to advance beyond the broad explanation of poverty as the cause of child neglect. In order to do so, a goal of this dissertation was to learn more about what differentiates mothers who are impoverished and do not neglect from those who do neglect.

Fourth, an additional area that needed further consideration is the relatively high rates of child neglect among African American mothers. In a society marred by inequality, inevitably those who are at the bottom of the socio-economic ladder are more prominently featured among those who are reported for child neglect (Hill, 2008; Roberts, 2005). We know African American mothers face many stressors (Jonson-Reid, Drake, & Zhou, 2013; Pieterse, Carter, & Ray, 2013), however, we do not know what the stressors are and how their stressors compare to their impoverished Caucasian counterparts.

Fifth, over the last twenty years, studies on child maltreatment and child neglect have increased in number (Appleyard, Yang, & Runyan, 2010; Coulton, Kornin, & Su, 1999; Crouch, Milner, & Thomsen, 2001; Taylor, Larsen, Conger, Widaman, & Cutrona, 2010); however, initial papers in this area were conceptual and relied on rudimentary statistical analysis and designs (Billingsley & Giovannoni, 1972; Ladd-Taylor, 1994; Young, 2009). Anecdotal papers were followed by descriptive studies that enabled researchers to understand the scope of child neglect (Allen, 2010; Bass, 2004, Casey Family Programs, 2010; Goeders, 2002; Gregoire & Schultz, 2001; Holden & Banez, 1996; Najavits, 2006; & Rani, 2006). Recently, regression analysis has been used to draw correlations between child maltreatment and certain risk factors like poverty,

substance abuse, and mental illness (Cappa et al., 2011; Carter & Myers, 2007; Duva & Metzger, 2010; MacKenzie, Kotch, & Lee, 2011; Marcenko, Hook, Romich, & Lee, 2012; Nair, Schuler, Black, Kettinger, & Harrington, 2003; Pagliario, 2000). Until the late 1990s, studies exploring the nuances of this child neglect were mostly qualitative. The qualitative studies were informative, able to capture the mothers' voice and the complexity of child neglect. The methodologies used in the qualitative studies, however, were usually not made available and these studies were most often project developed and used convenience samples (Ards, Myers, Sugure, & Zhou, 2003; Kerwin, Giorgio, Steinman & Rosenwasser, 2014; Marsh, D'Aunno, & Smith, 2002; Marsh, Smith, & Bruni, 2011; Marts, 2008).

To resolve the methodological issues studies are starting to rely on statistical techniques beyond descriptive statistics. There has been some transition to using national longitudinal data sets like the Longitudinal Studies of Child Abuse and Neglect (LONGSCAN), the National Survey of Child and Adolescent Well-Being (NSCAW), and Child Protective Services administrative data. The transition to using longitudinal data sets is important because it allows researchers and practitioners to look at the change over time in the likelihood a child will experience neglect or will re-experience neglect.

Utilizing comparison groups has also been used in an attempt to resolve methodological problems (Casanueva et al., 2014; Marsh, D'Aunno, & Smith, 2002; Marsh, Smith, & Bruni, 2011; Manly et al., 2013; Thomas & Simmer-Gembeck, 2011). Qualitative studies of child maltreatment have improved because they are beginning to specify the methodologies used and are employing more systematic analyses to help achieve greater efficiency (Arditti, 2008; Brown, et al., 2000; Lam, Wechsberg, & Zule, 2004; Pollack, 2009). This dissertation offers insight into the correlates

of child neglect and advances research that is presently available on this subject matter by utilizing a nationally representative sample of at-risk mothers.

Sixth, while there is a plethora of evidence which supports the utility of social support as a coping resource and behavioral health moderator (Lewis, 2004; Taylor et al., 2004), limited empirical evidence consistently states that social support is beneficial to at-risk mothers when taking into account the chronicity of stress and strain in their lives. More specifically, the usefulness of social support as a mechanism to prevent child maltreatment among at-risk mothers has been debated with arguments presented for (Harris & Hackett, 2008; Gottlieb & Bergen, 2010; Grella, Hser, & Huang, 2006; Solomon, 2004; Sperry & Widom, 2013) and against (Coulton, 2007; Marcenko & Kemp, 2000; Marsh, D'Aunno, & Smith, 2002; Marsh, Smith, & Bruni, 2011) rending the results inconclusive. Thus, additional information was needed about the presence and utility of social support networks in a sample of at-risk mothers. Specificity regarding the quantity and availability of social support was also sparse. This dissertation gathered more evidence on this topic by asking whether or not social support moderated the relationship between maternal stressors and child neglect.

In summary, at-risk mothers' life stressors were considered a good indication of the larger social problems they encounter. Further, exploring what their stressors were, the way in which they interacted, and how they ultimately affected child neglect was important to advance knowledge in this area. Examining the possible moderating effect of social support captured the essence of this research project which sought to uncover protective factors present in a sample of highly stressed mothers.

#### 3.0 THEORY

This dissertation is informed by two conventional theories and one grand theory. A grand theory is a highly abstracted way of organizing concepts occurring in the social world (Elwell, 2002). Using this definition—structural social work theory—because of its focus on large social forces, is considered to be a grand theory. However, in this dissertation structural social work will be utilized as a paradigm, or a way of viewing the problem of neglect through a focus on social structures that create the conditions in which child neglect is most likely to occur. For example, although structural social work, as a grand theory, identifies the globalization of the work force as a contributing factor to poverty and, secondarily, neglect, that assertion is beyond the bounds of this study. In constraining the boundaries of this theory, or by using it as a "lens" from which to view child neglect, the focus will be on directly relevant structural factors, for example, few job opportunities for mothers of young children rather than globalization of the labor market.

Structural social work, as a paradigm gives a macro-level perspective on the way in which the socio-political structure can impact the life trajectory of individuals. Using a macro-level perspective, scholars are more likely to identify the proximal and problematic aspects of social systems that cause stress in the lives of at-risk mothers instead of simply focusing on individual deficits. Rather, this paradigm asserts that social and political institutions create the conditions that result in additional stress for at-risk mothers. While research and casework practice typically focus on individual parental deficiencies that correlate with child neglect, this dissertation considers the way in which societal structures create the conditions that make it difficult to raise children in a safe and nurturing environment.

Second, stress and coping theory is micro-oriented and focuses on the strategies individuals use to cope with daily life stressors. Stress and coping theory interprets the way in which maternal stress affects personal functioning, parenting behavior, and the incidence of child neglect. Although some stressors are precipitated by disadvantages inherent within certain social structures, this theory suggests that the way in which individuals cope with stressors is most important. Negative coping behaviors used to manage stress such as substance abuse are a grave concern in this population. For at-risk mothers who are unable to cope, their stressors can ultimately manifest into neglectful parenting behavior. The third theory of social support is mezzo-oriented and assumes a logical process for the way in which social support can affect at-risk mothers' functioning. Social support theory's essential assumption is that having a support system to utilize in times of need is imperative. Together, the paradigm and theories contextualize the scope of maternal stress' relationship with child neglect. The following discussion of these theories and the organizing paradigm will show how each informed the conception of the research problem and the creation of the study's research questions.

## 3.1 STRUCTURAL SOCIAL WORK THEORY

Structural social work theory as a paradigm asserts that the sociopolitical and socioeconomic structure contribute significantly to creating the conditions where child neglect is most likely to occur (Mullaly, 2007). This paradigm analyzes social problems like poverty, inequality, unstable neighborhoods, and child neglect from a person-in-environment and social justice perspective by delving deeply into their root causes. This paradigm assumes that social and economic inequality

render some families more at-risk for neglecting their children than others due in part to their lack of resources, access, and social capital. These ecological risk factors affect disadvantaged families in many real ways, for example, their employment prospects, their neighborhood's safety and stability, their coping behaviors, and their mental and physical health, all of which contribute to the increased presence of child neglect in this population (Brown, Cohen, Johnson, & Salzinger, 1998; Cicchiti & Valentino, 2006).

This paradigm was operationalized by Robert Mullaly and is influenced by Marxist principles that aim to eliminate societies characterized by economic exploitation, inequality, and oppression (Moreau, 1990; Mullaly, 1997). The term "structural social work" describes problems inherent within the present social order and it expresses concern for those affected by these structures. This paradigm explains the causes of inequality and oppression in the United States by describing the way in which social institutions in the United States function in such a way that they discriminate against people along lines of race, class, gender, religious affiliation, ability, and sexual orientation (Mullaly, 2007). This approach views various forms of oppression as intersecting at numerous points, creating a total system of oppression whereby individuals experience compounded subjugation and injustice (Mullaly, 2007; Better, 2007). Structural social work theory connects the person and their political environment and when used as an organizing paradigm identifies that changes need to occur within the society rather than solely at the individual level (Mullaly, 2002 & 2007; Marsiglia & Kulis, 2009). This paradigm deviates from the conventional approach which often pathologizes oppressed people by offering individualistic explanations for social problems (Reisch & Andrews, 2002).

Late 19th and early 20th century social workers such as Octavia Hill, Jane Addams, and Bertha Capen Reynolds utilized a structural social work approach as an avenue to address broad

social problems such as oppression and inequality. A number of researchers continue to apply the structural approach to study child welfare issues; their work attributes child neglect to structural problems (Coulton, Korbin, & Su, 1999; Coulton, Crampton, Irwin, Spisbury, & Korbin, 2007; Hill, 2008; Marsh, Smith, & Bruni, 2011). Poverty and neighborhood instability are the most common structural problems found to correlate with child neglect (Arditti, Burton, & Neeves-Botelho, 2010; Warren & Font, 2015) and affects its determination and substantiation (Roberts, 2005).

Structural social work outlines the deleterious effects singular and intersecting forms of oppression have on different stratum in society. The intersection of race, class, and gender is an important example to examine because together, they can increase the depth of oppression and social inequality experienced by at-risk mothers. This intersection of race, class and gender in oppressive social structures impacts at-risk mothers' daily lives via limiting their socio-economic advancement opportunities, access to resources, and social capital (Better, 2007). These forms of oppression also negatively affect the health of mothers that in turn can impact their children's well-being and safety. Using a structural social work approach to understand the problem of child neglect suggests that at-risk mothers live within a socio-political structure that marginalizes them and their children. This marginalization creates the conditions and variables of interest in this study (i.e. poverty, unstable neighborhoods, limited access to resources and support) that are associated with child neglect (Cicchetti & Valentino, 2006). These stated environment-related stressors were examined to determine their unique contribution to the occurrence of child neglect in a group of at-risk mothers.

#### 3.2 STRESS AND COPING THEORY

Stress and coping theory was created in the early 1960s, by psychologist Richard Lazarus who developed and modified the concept of stress appraisals and coping. Lazarus determined stressors are demands made by the internal or external environment that upset an individual's personal balance, thus affecting physical and psychological well-being, and requiring action to restore balance (Lazarus, 1998; 2000). Stress and coping theory is a framework for evaluating the process of coping with stressful events; its basic premise is stress and coping are reciprocals of each other. When faced with a life stressor, such as losing a job or a loved one, an individual evaluates it as stressful, positive, controllable, challenging or irrelevant. This leads them to assess what coping resources they can employ to regulate the problem; the way an individual chooses to deal with the stress being experienced is their coping mechanism (Cohen & Wills, 1985). When coping is effective, stress is usually controlled; however, when coping is ineffective, stress increases which can lead to distress, and impaired social functioning (Lazarus, 2000). The way in which one copes with stress is crucial to their physical, social, and psychological well-being.

Elevated stress levels can impact an individual's physical and mental health status (McPherson, Lewis, Lynn, Haskett, & Behrend, 2009). Stress which affects a mothers' mental and physical well-being, can subsequently affect family dynamics (McPherson, Lewis, Lynn, Haskett, & Behrend, 2009). Negative changes in mothers' psychological well-being are associated with less adequate parenting (Wekerle & Wolfe, 2003). For example, mothers' depressive symptomatology is associated with the use of harsh punishments resulting in child abuse and neglect (Taylor et al., 1997). Essentially, this is a circular interaction whereby, difficult conditions such as living in poverty or parenting a child with severe behavioral health concerns create stress; the coping skills used to manage stress can increase or decrease the stress. The ability for at-risk mothers to cope

with the stress and stressors they experience is essential, albeit challenging when social and emotional supports are not readily available, or the stress they experience is not easily manageable with individual level solutions. Stress can also have a cascading effect in the lives of at-risk mothers, in these cases, one stressful live event such as job loss, housing, or means of transportation, can disrupt their equilibrium and cause other stressors in their lives.

Stress is a normal everyday occurrence; individuals cannot live without the physiological experience of stress. Stress and coping theory is useful in this particular context because stress is a natural experience in the lives of at-risk mothers, and highlights the need for positive coping skills to lessen potentially harmful effects of the stressors they encounter. Though at-risk mothers may not be able to change their class or personal history, with assistance they can change their coping strategies. Reduction of maternal stress has been an effective intervention strategy used in studies to improve parenting behavior (Marsh, D'Aunno, & Smith, 2002; Marsh, Smith, & Bruni., 2011). Considering the success of interventions that shifted coping behavior and decreased parenting stress, this study sought to further explore the relationship between several predictors of maternal stress and child neglect.

In summary, research demonstrates that stressors are prevalent in the lives of at-risk mothers (Chen, Hou, & Chuang, 2010). Stressors can adversely impact family dynamics and parenting behavior (Taylor, Roberts, & Jacobson, 1997) and the occurrence of child maltreatment (Wekerle & Wolfe, 2003). The theoretical construct and research questions were informed by our knowledge that stressors contribute to a mothers' level of stress, and in turn, to their chosen coping strategies which can negatively impact their parenting behaviors, more specifically, neglectful parenting behavior. Social support is explored in this study as a possible protective mechanism

and coping strategy which may moderate the relationship between maternal stressors and the occurrence of child neglect.

## 3.3 **SOCIAL SUPPORT THEORY**

The strand of social support theory pertinent to this dissertation views social support as a coping resource. According to Thoits (1995), social support refers to, "the functions performed for an individual by significant others, such as family members, friends and coworkers" (p.63). Significant others can provide informational (e.g. advice and guidance), instrumental (e.g. financial assistance, babysitting, or groceries) and emotional support (e.g. understanding, validation, empathy, and encouragement) to at-risk mothers (Taylor, 2011). In this context, social support helps at-risk mothers who are experiencing stress, cope. Social support provides concrete resources that eliminate stressful events or minimize their impact by providing interpersonal resources to contextualize the stressful event. Social support theory is valuable to the study of neglect because it acknowledges that mothers need a continuous network of support to assist them.

Previous studies, which featured samples of 700 at-risk mothers, found that mothers with low levels of social support were more likely perpetrate child maltreatment in the first four years of the child's life than mothers with high levels of support (Kotch, Browne, Dufort, & Winsor, 1999; Kotch et al., 1995). There are a number of reasons why this may occur, including their relative isolation from family, friends, and social institutions (Howze, & Kotch, 1984). This increased isolation, which some researchers believe may be intentional or a circular interaction, limits their social ties and disallows the respite these ties may offer (Gracia & Musitu, 2003) and does not provide the social censure from family and community that may deter to child

maltreatment. In addition, the absence of social support networks limits interaction with individuals who may be able to model proper behavioral patterns as well as provide instrumental and emotional support. At-risk mothers who do not maltreat reportedly have more robust social support networks which help them better cope with stressful events and conditions (Bishop & Leadbeater, 1999; Marcenko, Kemp, & Larson, 2000).

While social support enables some mothers to cope with their stress, exceedingly high stress can result in negative parenting outcomes (Warren et al., 2007). Marsh, D'Aunno, & Smith (2002) acknowledge the importance of public aid and financial assistance in addition to social support as a way of reducing maternal stress. There is some controversy about the relative value of different forms of support. Lam, Wechsberg, & Zule (2004), suggests that emotional social support is slightly more important than public aid and instrumental support (i.e. financial assistance). Despite the lack of empirical clarity regarding the utility of social support within the context of child maltreatment prevention, at-risk mothers appear to value social support, deem it helpful, and desire more of it. Per a sample of 1075 child welfare service recipients, over 40% of the study participants expressed their need for enhanced parenting support (Zinn, DeCoursey, George, & Courtney, 2006). Likewise, Veistilä's, (2008), study shared a similar finding regarding the utility of social support, as at-risk mothers reported social support assisted them in their daily functioning and with their parenting responsibilities.

Having access to adequate social support is important because it is purported to increase positive parenting outcomes (Sheppard, 2009). Providing social support during times of crisis can help alleviate some of the challenges associated with parenting under stress (Marcenko, Lyons, & Courtney, 2011). The ecological model of social support notes environmental, parent, and child-related risk factors can influence the availability and adequacy of social support (Harknett &

Hartnett, 2011). Mothers with multiple risk factors such as having low socio-economic status, a mental/physical illness, a substance use disorder, or multiple children were found to have less social support than mothers who possessed none of the previously mentioned risk factors (Kotch, Browne, Dufort, & Winsor, 1999; Harknett & Hartnett, 2011; Seagull, 1987). Given the unique position at-risk mothers are in, it is important to further consider the availability and adequacy of their social support networks in this study.

The availability and adequacy of social support depends upon the strength of an individual's social support network as well as an individual's ability to offer support to others. Therefore social support is reciprocal and changing. In terms of reciprocity and its impact on the support available to mothers, Harknett and Hartnett (2011) note that mothers with limited economic resources also possess an inadequate amount of social support. They found that it was more difficult to offer support to mothers with extensive challenges since they are less able to reciprocate support. In environments where financial resources are scarce, nonfinancial means of support are important, as is reciprocity. The inability to reciprocate could alienate mothers from a potential social support network and it may also reinforce their social isolation and lack of support. In other words, the mothers who most need support may be the ones who least receive it.

In summary, conflicting findings exist regarding the importance of social support for atrisk mothers (Halpern, 2004; Harknett & Hartnett, 2011; & Marsh, D'Aunno, & Smith, 2002). Previous social support studies have established the utility of social support in a more global sense i.e. its ability to improve behavioral, mental, and physical health problems as well as its ability to buffer against the potentially damaging effects of major life events (Cohen & Wills, 1985; Gottlieb & Bergen, 2010; Lakey & Cohen, 2000; & Thoits, 1995). However, social support has not consistently demonstrated moderating effects in populations who face persistent life challenges

that are often the result of structural inequalities. In addition, studies thus far are inconclusive regarding whether or not social support helps prevent child neglect (Lam, Wechsburg, & Zule, 2004; Marsh, D'Aunno, & Smith, 2002; Warren, Stein, & Grella, 2007; & Zinn et al., 2006). Given the sparse information available regarding the benefits or lack thereof of social support, this dissertation further explored this variable to help clarify its influence on the relationship between maternal stress and child neglect.

#### 3.4 **SUMMARY**

The structural social work paradigm contextualized child neglect by positioning neglectful parenting not as the result of individual deficiencies, but due to oppressive social conditions like low socioeconomic status, unstable communities and, limited opportunities. This study of child neglect utilized a social structural lens to better understand the etiology of child neglect and, as such, the variables that were used reflect this perspective.

The first two questions and hypotheses regarding the contribution of maternal stressors to child neglect were based on structural social work theory's fundamental principle that the socio-political structure and one's environment can be significant sources of stress. These environmental stressors, such as poverty and inequality, contribute to mothers' overall risk for child neglect. This studies sample was comprised predominately of impoverished mothers; this allowed for an intragroup comparison between impoverished mothers who do neglect their children and those who do not. Additionally, structural social work theory informed the third question regarding the extent to which there are differences in the experience and perception of stress depending on the race of the responding mother. According to structural social work theory, social institutions in the United States function in such a way that they discriminate against people according to race, class, and

gender (Mullaly, 2007). Individuals who experience intersecting forms of oppression are disparately affected by the present social order. Given African American mothers in this study experience at least three forms of oppression, it was assumed that the report of stress would differ by race.

Stress and coping theory also contributed to the way the research questions were framed in this dissertation. The theory of stress and coping helped interpret the way in which maternal stress impacts the occurrence of child neglect. Stress and coping theory focuses on the way individual mothers cope with the daily life stressors they encounter. Past research noted the association between stress, negative coping strategies, and adverse outcomes like child neglect. Likewise, social support theory builds upon stress and coping theory as it explicitly outlines the way social support theory operates as a coping mechanism to counter child neglect.

Evidence maintains social support is a protective factor, coping resource, and helps individuals manage stressful situations (Gottleib & Bergen, 2010; Warren et al., 2007). This theory expresses the importance of having a support network to draw upon to help reduce parenting stress. Social support theory details the way sufficient informal supports and relationships can positively impact a mothers' personal and familial well-being. Some empirical studies found social support to be useful, however, evidence pertaining to its ability to prevent child neglect in high-risk groups, had not been fully established (Halpern, 2004; Marsh, Smith, & Bruni, 2011). Despite the lack of clarity, the commonality across research settings is that when an individual is presented with a stressor or stressors healthy coping strategies are necessary to reduce the possibility of negative outcomes.

Taken together, structural, stress and coping, and social support theories offered the rationale for examining the problem of child neglect from a more comprehensive perspective. This

approach accounted for the way in which environmental, mother-related, and child-related stressors contributed to child neglect. Given the relative lack of empirical evidence examining the complex factors contributing to child neglect and its many causes, it was appropriate to further research this problem.

## 4.0 CONCEPTUAL MODEL, RESEARCH QUESTIONS, AND HYPOTHESES

## 4.1 **CONCEPTUAL MODEL**

The theories and paradigms which inform our understanding of the impacts of maternal stress on child neglect were summarized in the previous chapter. While informative, separately these theories and paradigms— structural social work theory, stress and coping and social support theories— are insufficient as they only capture certain elements of the problem. The conceptual framework presented in this chapter combines these theories and paradigms in order to better understand the complexity and intersections of the causes of child neglect. In combining these theories and paradigms into one framework, this study offered further insight into the way in which maternal stressors and supports contribute to or moderate the incidence of child neglect.

Several assumptions derived from theory were used to inform this dissertation's conception of maternal stress. First, including race as an antecedent variable in this model (see Figure 2) was based on the assumption that individuals with racial minority status, more specially, African Americans experience disparate treatment in the United States and these experiences create stress (Better, 2007). Secondly, maternal stress can be caused by external, systemic and environmental factors (Mullaly, 2007). Thirdly, maternal stress occurs when a given situation requires more resources than are available (Lazarus, 1998, 2000). Fourthly, a mother's coping strategy of choice can be harmful or beneficial (Cohen & Willis, 1985). In this reciprocal relationship, the coping strategies an individual employs successfully or unsuccessfully either relieve or increase stress. Fifth, social support is a coping resource and can help mothers manage stress, yet having insufficient social support can impact how one responds to stress (Marsh, D'Aunno, & Smith,

2002; Marsh, Smith, & Bruni, 2011). Finally, the way an individual responds to maternal stress can influence their overall physical and mental health, behavior, and well-being (Brown & Ryan, 2003). It is suggested, the way in which at-risk mothers deal with maternal stress, may impact the health, well-being, and safety of their children which was pertinent to this research inquiry (Taylor, Roberts, & Jacobson, 1997; Wekerle & Wolfe, 2003).

Mothers help ensure the safety, physical, and emotional well-being of children. However, the safety and well-being of children can be impacted by their mothers' level of stress. Chronic parenting stress is associated with harsh discipline, social isolation, and child maltreatment (Keith & Brown, 2003; Taylor et al., 2010). Some mothers use social support to cope with their stress. Social support in some instances is an important protective factor that helps to reduce the risk of child maltreatment by connecting mothers with networks of support which offer emotional and instrumental parenting supports (Bishop & Leadbeater, 1999; Marcenko, Kemp, & Larson, 2000). Availability of sufficient social support for at-risk mothers is important as they often deal with environmental and poverty-related stressors (Harknett & Hartnett, 2011). Financial scarcity, which is experienced in resource poor communities, is correlated with the inability to provide for children's basic needs and for some, child neglect (Belsky, 1993; Chaffin, Kelleher, & Hollenberg, 1996; Erickson & Egeland, 2002; Schumacher, Slep, & Heyman, 2001). Based on these assumptions about maternal stress, social support, and child neglect, this study posed four questions.

Figure 1 presents the way the variables in this conceptual framework were thought to work together to explain the relationship between maternal stress and child neglect. Figure 2 illustrates the conceptual framework in the form of three domains of stressors which include: environment-related, child-related, and mother-related which based on previous studies and theory are

hypothesized to contribute to occurrence of child neglect. This model offers a comprehensive view of the correlates of child neglect by considering the contribution of both systems and individual level stressors. Secondly, this model depicts the expected buffering relationship between social support and child neglect; it is predicted that social support will moderate the relationship between the maternal stressors in this model and child neglect. Finally, the way in which race contributes to the experience of maternal stress is also visually displayed in the model below.

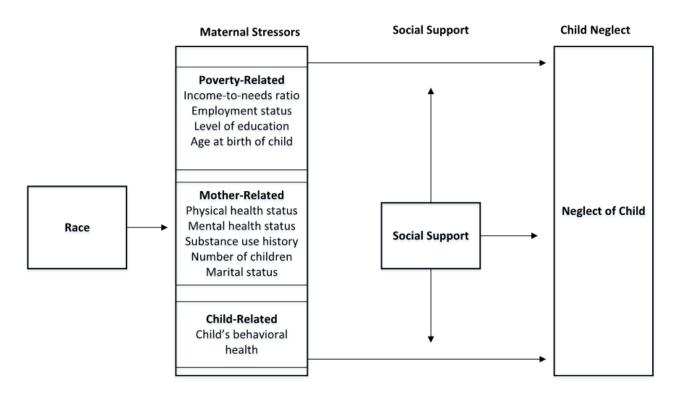


Figure 2 Model for the interaction of maternal stressors and social support and the impact on child neglect for at-risk mothers

# 4.1.1 Research purpose, questions, and hypotheses

The research questions and proposed analyses were intended to explore the conceptual framework of stress and social support in relation to child neglect for a group of mothers who were considered to be high risk. The over-arching purpose of this research study was to find out the way child

neglect is specifically impacted by maternal stress. A second purpose was to examine if stressors were reported differently based on race and if the likelihood of neglect differs the race of the mother. Lastly, the intent was to discover if the maternal stress-child neglect relationship is moderated by social support.

Aim One: Which maternal stressors predict child neglect in an at-risk group of mothers

The first aim of this dissertation study was to analyze the contribution of maternal stressors on the incidence of child neglect. This aim had two questions: (1) which stressors are associated with child neglect in this sample of at-risk mothers and (2) which individual, stress relevant, predictors explain a statistically significant amount of child neglect variance? The variables for the second sub-question included the poverty-related variable, (income-to-needs ratio). Secondly, child-related stressors included child's social competence, health/handicapping condition, and gender. Lastly, mother-related stressors were examined: physical health, mental health, substance use history, and number of children. Studies have established that poverty and substance use correlate with child neglect (Grella, Hser, & Huang, 2006; Pecora & Whittaker, 2009). Beyond poverty and substance use, it is not known which other stressors contribute significantly to child neglect.

H.1: The measures of stress altogether will predict the likelihood of occurrence of child neglect; some individual stressors will have greater predictive value than others.

Aim Two: What is the relationship between race, maternal stressors and child neglect?

The second aim of this dissertation study was to determine whether, maternal stressors were experienced differently by African American women and whether the maternal stressor models varied based on race. Research has established that African American mothers are more likely to have both child maltreatment reports and ultimately to be involved in the child welfare system (Hill, 2008). Past studies have also determined that African American mothers are more likely to

be impoverished, which, is the primary predictor for child maltreatment (Pecora & Whittaker, 2009). However, little else is reported in studies about the specific stressors they live with on a day-to-day basis and how these may specifically impact occurrences of child neglect. Research regarding at-risk African American mothers and child welfare involvement is often either conceptual, lacking empirically backing (Chipungu & Bent-Goodley, 2004; Harris & Hackett, 2008; Roberts, 2002) or outcome focused (presence of child neglect or no child neglect) (Sedlak et al., 2010). An outcome-focused approach is informative but insufficient because it does not deeply examine the many factors which contribute to the prevalence of child neglect in impoverished communities. This dissertation study sample consisted entirely of at-risk mothers, over 90% of whom were below the federal poverty line. This allowed for a comparison to examine if there were differences in experiences with child-related, parent-related and environmental stressors and whether their stressor models varied based on race.

# Aim Three: What is the relationship between social support and neglect and does support moderate the relationship between stress and neglect?

The third aim of this dissertation study was to examine whether there is a main effect of social support on the likelihood of neglect. In addition, the goal was to discern whether social support moderates the relationship between maternal stressors and child neglect? Research that examines this question offered two separate opinions regarding the utility of social support. Social support is considered useful in helping improve behavioral outcomes (Gottlieb & Bergen, 2010; Thoits, 1995). However, for highly stressed populations, questions remained regarding how much social support they may draw upon and how efficacious the social support is given their broad range of needs (Harknett & Harknett, 2011). The hypotheses provided below were in part supported theoretically in the literature (Sheppard, 2009; Warren, Stein, & Grella, 2007)

- H.2: High levels of perceived social support will predict a lower likelihood of neglect.
- H.3: Social support will moderate the relationship between stress and neglect so that under conditions of high stress and high social support, neglect will be lower; under conditions of high stress and low social support, neglect will be greater. The following chapter details the methodology used to examine these aims and related hypotheses.

## 5.0 METHODOLOGY

#### 5.1 **DATA**

Data for this dissertation came from the Longitudinal Studies Consortium on Child Abuse and Neglect (LONGSCAN), which is a 20-year longitudinal study comprised of a consortium of five smaller studies of child maltreatment (Dubowitz et al., 2005). The five studies are in different regions of the United States (Eastern, Southern, Midwestern, Northwestern, and Southwestern) in the following locations: Baltimore, North Carolina, Chicago, Seattle, and San Diego. Although each site is conducting a separate and unique research project on the causes and impacts of child maltreatment, they all share the same procedures for data collection, entry, and management (Dubowitz et al., 2005; Runyan et al., 1998). The collaborative LONGSCAN project allows for the study of child maltreatment with sufficient sample size and statistical power across multiple sections of the United States. As a result, it offers the ability to extend findings across various ethnic, social and economic subgroups (Hunter et al., 2003). Ultimately, the goal of LONGSCAN is to increase the understanding of the factors that increase the risk of child maltreatment, the longterm consequences of child maltreatment, the factors that increase resilience and positive outcomes for maltreated children, and the strengths and weaknesses associated with various interventions which seek to reduce child maltreatment.

The LONGSCAN sample includes five pooled cohort samples, each with different selection criteria representing varying levels of risk of or exposure to maltreatment. The children sampled were identified within the first years of life as maltreated or at-risk for maltreatment. The Eastern (Baltimore) sample was recruited from three pediatric clinics where the children were

diagnosed with non-organic failure-to-thrive; the Midwest (Chicago) sample was recruited via the public social service system and included children who previously had high-risk CPS reports; the Northwest (Seattle) sample was comprised of children with CPS reports that were rated moderate risk; and the southwest sample was from a suburban area in San Diego and included only children in foster care. The southern sample is statewide and included participants from urban, suburban, and rural communities in North Carolina; all the participants were high-risk as categorized by the North Carolina Health Departments infant tracking system (Runyan et al., 1998). The risks present in the Baltimore, Seattle, Chicago and North Carolina samples included extreme poverty, young maternal age, single motherhood, and low child birth weight. The San Diego site will be excluded from this dissertation study because none of the children are in the care of their birth mothers.

At all five study sites, child-caregiver pairs are interviewed several times. These pairs were interviewed from childbirth to five months old and again at child ages four, six, eight, twelve, fourteen, sixteen and young adulthood (18–24 years of age). At this point in time, data for LONGSCAN has been collected up to age 12.

#### 5.2 **SAMPLE**

This study examines child maltreatment and features a sample of child-caregiver pairs. The entire LONGSCAN data set includes 1,354 child-primary caregiver pairs. Within the data set are 585 biological mother-birth child pairs. To be included in the sample, the caregiver had to be the biological mother at the data collection point of interest, which, for this study, was the child's age of eight. The rationale for selecting age eight as the data collection time point was because it includes sufficient data to begin to conduct longitudinal analyses on factors that may contribute to

child maltreatment such as social support, the incidence of child neglect, maternal stress, and substance use history.

The majority of the participants in this subset are African American (56%), followed by Caucasian (28%), Multi-Racial (9%), Latina (6%), and lastly unidentified race or ethnicity (1%). Restricting the sample to African Americans and Caucasians eliminated approximately 96 children from other racial/ethnic groups. The final sample (N = 585) included 369 African American mother-child pairs and 216 Caucasian mother-child pairs. Children who only experienced neglect were included in this sample to avoid including children who experienced child abuse or child abuse and neglect as they may have different antecedents and predictors of maltreatment. The gender distribution of the children in this sample is almost equally distributed (49.1% male, 50.9% female). In addition, over half of the mothers had income-to-needs ratios of less than one meaning they earned less than \$15,000 in the previous year.

## 5.2.1 Measures

This section provides information on how variables were operationalized and measured in this study (Appendix B). The variables for this study were chosen based upon previous research on child neglect and maternal stress. The measurement tools were a combination of LONGSCAN developed measures and published scales.

# **5.2.1.1** Control variables

**Race.** Race was re-coded into two categorical variables: Caucasian (1) and African American (2).

Mother's age at time of childbirth. Mother's age at the time of childbirth was a continuous variable.

**Mother's educational level.** Mother's educational level was used as a dichotomous variable. Those who had less than a high school diploma were coded as (0) and those who had a high school diploma were coded as (1).

Income-to-needs ratio. Poverty level was measured by the income-to-needs ratio, a standard measure of a family's economic situation (U.S. DHHS, 2007). This was computed by taking the family income, excluding any federal aid received, and dividing this by the federal poverty threshold for that family (e.g., the federal poverty line for a family of four in the continental United States in 2011 was \$22,350). The income-to-needs-ratio was a continuous variable with scores ranging from zero to four, zero being extremely impoverished and four considered wealthy.

# **5.2.1.2 Independent variables**

Working status. The working status was coded as a dichotomous variable: unemployed (0) or employed (either present part-time or full-time employment) (1).

**Number of dependent children.** The number of children in the household is a continuous variable. In this context, the number of children a mother is responsible for can add to her stress burden.

Mother's substance use. Mother's substance abuse is a dichotomous variable that represents whether mothers were substance users (1) or non-substance users (0). In LONGSCAN, substance use was measured as part of a broader assessment of health-related behavior (Dore, Doris, & Wright, 1995) and was conceptualized broadly to include drugs such as marijuana, cocaine, hallucinogens, heroin, stimulants, and tranquilizers. In the LONSCAN study, mothers were asked whether they used substances. However, for the purposes of this study, the screening

question "have you used drugs in the past" was chosen as it is a more accurate depiction of substance use, because disclosing present substance use may have been self-incriminating or stigmatizing for the mothers (Casanueva et al., 2014).

Mental health. Mental health is a continuous variable that is derived from the subscales (GSIT score) on the Brief Symptom Inventory (BSI). The BSI consists of 53 items covering nine symptom dimensions (or subscales): somatization, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism (Derogatis & Melisaratos, 1983). BSI respondents rated each item on a 5-point scale ranging from 0 (not at all) to 4 (extremely). These responses were categorized based on the nine symptom dimensions (i.e., subscales) and an overall GSIT score was computed for each respondent. Those with a GSIT score of 50 or above are considered to have a clinically diagnosable mental illness. Reliability tests indicate that the subscales are reliable measures of the nine dimensions of mental health. For instance, test-retest reliability for the nine symptom dimensions ranges from .68 to .91 (Derogatis & Melisaratos, 1983) and scores on several BSI dimensions were found to correlate with the Minnesota Multiphasic Personality Inventory (MMPI). The BSI correlations with the MMPI were as follows: .71 for psychoticism, .85 for depression, .68 for somatization, .91 for phobic anxiety, and .99 for hostility (Boulet & Marvin, 1991).

Caregiver physical health. Caregiver physical health is a dichotomous variable that represents whether the caregiver's physical health is good (2) or poor (1). This variable was derived from one of the questions from the LONGSCAN assessment that pertained to global caregiver health status (excellent, good, fair, or poor). Fair and poor were recoded as 1 and excellent and good were recoded as 2. The full scale was reported to be a reliable measure of physical health (Krause & Jay, 1994). Past studies have documented the validity of this measure by examining the

relationship between poor physical health and mental health particularly, depression (r= .77 to .91) (Brown, Ahmed, Gary, & Milburn, 1995; Flaskerud & Tabora, 1998; Hays et al., 1997; Heidrich, 1998). Reliability and validity for the one question of interest is unknown.

**Marital status.** Marital status was re-coded as a categorical variable with two groups: married (0) and single (1).

Social support. In this study, social support was used as a moderator variable. Social support was measured using a modified version of the Duke-UNC Functional Social Support Questionnaire (FSSQ). The FSSQ was designed to measure an individual's perception of the amount and type of help, in the form of social support, an individual received. The original instrument included 14 items (Broadhead, Gehlbach, De Gruy, & Kaplan, 1988). However, the LONGSCAN study team revised the measure, retaining seven of the original items that showed good reliability and validity and adding three new items. Some sample questions from this scale include "help when I need transportation," "help with cooking and housework," "help taking care of my children," "I get love and affection," and "I get chances to talk to someone about personal and family problems". Responses to each question were scored on a one to five scale with five being high perceived support and one being low perceived support. For example, "as much as I would like" receives a score of five and "much less than I would like" receives a score of one.

Scale scores for this modified continuous interval variable were generated by summing the scores of all items to generate a combined score that ranged from 10 to 50. Higher scores suggest a high level of perceived social support received. Reliability measures indicate that these scores produce consistent outcomes. For example, Cronbach's alpha coefficients across the LONGSCAN study sites ranged from .81 to .92. The Duke-UNC Functional Social Support Questionnaire was positively correlated with the FCOPES scale (Family Coping and Strategies Scale) (.45) (Bellon

Saameno, Delgado Sanchez, Luna del Castillo, & Lardilli, 1996; Broadhead, Gehlbach, De Gruy, & Kaplan, 1988; & Williams, Williams & Griggs, 1990). It is important to note, however, this scale was modified for LONGSCAN so the validity and reliability of this version is still unknown.

Child behavioral health. Child behavioral health is a continuous variable that measures levels of child emotional disturbance. This variable is derived from the parent's report of child health on the Child Behavior Checklist (CBCL), which is one of the most commonly used measures of child emotional disturbance. The CBCL conceptualizes child behavioral difficulties into two broad categories: internalizing and externalizing problems (Achenbach, 1991). Internalizing problems combines social withdrawal, somatic complaints, anxiety, and depression.

Externalizing problems combines delinquent behavior and aggressive behavior. Items from each category are evaluated on a 3-point scale (0 = no problem, 1 = somewhat or sometimes a problem, and 2 = often a problem) and values are totaled to compute an overall score (otherwise known as a Total Problem Score/T-Score) that is representative of a child's level of emotional health. A T-score of less than 60 is considered in the normal range, 60-63 represents borderline scores, and scores greater than 63 are in the clinical range.

This variable is continuous and the measure has high inter-rater and internal reliability as indicated by an intra-class correlation coefficient (ICC) of .96 for the problem items. Internal reliability (alpha) for the Child Behavior Checklist scales ranged from .72 to .96 (Achenbach, 1991). The CBCL was correlated with DSM-oriented scales of child problems such as somatic disorders (.76), anxiety disorders (.77), social phobia (.85) and depression (.84) and oppositional behavior (.81) and conduct indices (.86) (Nakamura, Ebesutani, Bernstein & Chorpita, 2008).

**Stressors index.** The stressors index was created by the researcher for the purposes of this dissertation study. The index counts the number of dichotomized versions of each of the following

variables: substance use (yes), employment status (unemployed), severe mental illness status (clinically mentally ill), physical health (poor physical health), marital status (single mother), and child's behavioral health status (significant behavioral health concerns). The range of scores is 0 to 6 with higher values indicating a greater level of stress for the mother.

# **5.2.1.3 Dependent variables**

Child neglect. Only child neglect cases were included in this dissertation. In LONGSCAN, child neglect is defined as a parent's failure to provide proper hygiene, shelter, supervision, medical care, clothing, or food (English, 1997). Specific forms of neglect are physical, emotional, moral, legal, and educational and parental drug/alcohol abuse (English, 1997). The LONGSCAN coordinating center developed a coding and data collection system to collect information about abuse and neglect from CPS reports in child records. Staff from the LONGSCAN coordinating center provided training to coders regarding how to identify and code child maltreatment. The coding system that was used to classify maltreatment across all LONGSCAN sites is the Modified Maltreatment Classification Scheme (MMCS). The MMCS provides definitions, examples, and severity ratings for the following subtypes of maltreatment: physical neglect (failure to provide), physical neglect (lack of supervision), emotional neglect, moral-legal and educational neglect, as well as physical and sexual abuse (Barnett, Manly, & Cicchetti, 1993):

A single CPS referral and record documentation may contain multiple allegations of maltreatment. The modified MMCS classification system provides codes for each individual allegation and provides a method for classifying each allegation by a severity level. All subtypes have five levels of severity (1 being the lowest, to 5 being highest severity), with the exception of

physical abuse that has six levels of severity (level six classifies permanent disability/disfigurement/or fatality). (Barnett et al., 1993, p. 11).

The LONGSCAN investigation team trained coders to use abstracted case records until they achieved greater than 90% agreement between trainers as to whether neglect or abuse occurred (Fusco, & Rauktis, 2011). In this study, cases which featured "child neglect only" were used. All neglect reports were coded by using a single coding system with adequate reliability, Cohen's kappa coefficient of k=.87 (Munoz & Bangdiwala, 1997). The MMCS has high agreement and classification of child maltreatment with the Second National Incidence Study maltreatment coding system (r=.83) (Runyan et al, 2005). In this study, any CPS child neglect report regardless of substantiation status, from birth to age eight was considered an indicator of neglect, since studies conducted by Leiter and Leiter & Johnsen (1994) and Jonson-Reid, Drake & Kohl (2009), found no difference between substantiated versus unsubstantiated child neglect cases, in predicting child welfare placement recidivism over 36 months. Child neglect only reports were used, they were considered as a dichotomous variable in this study: no child neglect reports were coded as 0 and reported child neglect was coded as 1.

#### 6.0 RESULTS

## 6.1 **DESCRIPTIVE RESULTS**

Table 1 displays descriptive statistics for the mothers in this sample. Less than half of the mothers were reported for child neglect (41%). The mothers in the sample were typically single mothers (72%) and their average age was 25 years old (SD = 6.51). Some mothers (61%) had a high school diploma or GED, but less than half (42%) were employed either full or part time. In regards to their income, eighty-nine percent of the mothers in this sample had an income-to-needs ratio of less than two, which means that they were impoverished and had an annual income of less than \$20,000. Despite their low income, these mothers generally felt as if they had moderate levels of social support their average perceived social support was 37.62 (SD = 9.23). As for the mothers' health and well-being, the mothers in this sample were under fairly high levels of emotional distress (T Score = 49.31, SD = 11.5)<sup>1</sup>. Surprisingly less than half of mothers (36%) reported that they were in good physical health, comparatively 90% of the general U.S. population under age 65 report they are in good physical health (U.S. Department of Health and Human Services, 2013). Over half of the mothers also had histories of substance abuse (57%). Seventy two percent of the mothers were the sole provider for four or more children. The majority of the children included in this study did not have a clinically diagnosable behavioral health issues as indicated by a CBCL score of 52.25 (SD = 11.10)<sup>2</sup>.

<sup>1</sup> The cut off score for clinically diagnosable mental illness on the BSI is 50 or above.

<sup>&</sup>lt;sup>2</sup> The cut off score for a significant behavioral health concerns is 63.

This sample of high-risk mothers experienced challenging conditions under which to raise a family. All of the women were living in poverty, and many of the mothers reported poor mental and physical health, as well as problems with illicit substance use. Despite these challenges, the perception of support was moderately high and fewer than half of the sample had a report of child neglect.

Table 1 Summary statistics of mothers in sample (N=585)

Control Variables	Mean (SD), %
Age at child birth	24.81 (6.51)
High school diploma or GED (yes)	61%
Income to needs ratio < 2 (% income below \$20,000)	89%
(% income below \$20,000)	
Independent Variables	
Marital status (unmarried)	72%
Employment status (employed)	42%
Number of children	4.2 (1.61)
Mother physical health (good physical health)	36%
Mental health – BSI score	49.31 (11.5)
Substance use (yes)	57%
Social support score	37.62 (9.23)
Child behavioral health score	52.5 (11.10)
Dependent Variable	
Child neglect (neglect report)	41%

Source: Data from the Longitudinal Consortium on Child Abuse and Neglect (Longscan)

The first aim of this dissertation study was to determine which maternal stressors predicted child neglect. This aim had two related questions: (1) which stressors are associated with child neglect in this sample of at-risk mothers and (2) which individual stress relevant predictors explain a statistically significant amount of child neglect variance?

This aim was first investigated using bivariate correlations followed by a three-step hierarchical logistic regression model, with child neglect as the dependent variable. In step one, control variables were entered: race, educational attainment, income-to-needs ratio, and mother age at birth of subject child. In step two, the following categories were added to the model: substance use, employment status, physical health, marital status, mental health status, number of children and child behavioral health challenges. Social support was entered in the final step. The variables were entered in this order so that the relationship between mother-related and child-related stressors and neglect could be estimated controlling for the contributions of class and education.

Inter-correlations between the independent variables and dependent variable were reported in Table 2. The following independent variables were positively correlated with child neglect: mother's age at time of the subject child's birth (r = .14, p < .01), physical health (r = .10, p < .05), substance use history (r = .37, p < .01), mental health (r = .18, p < .01), and child behavioral health concerns (r = .20, p < .01). In addition, child neglect was negatively correlated with mother's race (African American) and employment status (r = -.24, p < .01; r = -.13, p < .01).

Maternal substance use, poor maternal physical and mental health and child behavioral health problems were correlated with child neglect. However, income-to-needs ratio, educational attainment, marital status, and number of children were not correlated with child neglect. Finally,

results revealed that higher levels of perceived social support were correlated with the absence of neglect reports. Social support had a main effect that was significant but the correlates were small.

Several independent variables were inter-correlated. Child's behavioral health challenges were correlated with race (Caucasian children) (r =-.21, p < .01); maternal physical health (r=.17, p < .01); mental health concerns (r = .51, p < .01); substance use (r = .20, p < .01); and negatively correlated with social support (r = -.20, p < .01). Social support was also correlated with mental health (r = .34, p < .01); marriage (r = .08, p < .05); income-to-needs ratio (r = .11, p < .01); physical health (r = -.22, p < .01); and age at birth of child (r = -.11, r < .05).

High school diploma receipt was correlated with marriage (r = -.10, p < .01); employment (r = .13, p < .01); total number of children (r = -.17, p < .01); age at birth of subject child (r = .12, p < .01); and income (r = .16, p < .01). Mothers' mental health concerns were correlated with physical health (r = .21, p < .01); race (Caucasian mothers) (r = .-11 p < .01); employment (r = .80, p < .05); income (r = -.80, p < .05); and substance use (r = .16, p < .01). Likewise, substance use was correlated with race (r = -.17, p < .01) (Caucasian mothers).

Table 2 Bivariate correlation statistics for mothers at-risk for child neglect (N=585)

	Race	Age at birth	H.S. diploma	Marital status	Emplmnt status	Number children	Income	Phys health	Mental health	Substance use	Social suppor t	Child BH	Neglect
Race	1.00												
Age at birth	-0.06	1.00											
H.S. diploma	0.05	0.12**	1.00										
Marital status	0.35**	-0.09	-0.10**	1.00									
Employment	-0.01	-0.01	.13**	-0.10*	1.00								
Number of children	0.01	0.03	-0.17**	-0.14**	-0.02	1.00							
Income ratio	-0.19**	-0.06	0.16**	-0.20**	.21**	-0.08	1.00						
Physical health	-0.05	-0.05	-0.07	-0.02	0.05	.04	-0.05	1.00					
Mental health	-0.11**	0.11**	-0.06	0.07	08*	0.02	-0.08*	0.21**	1.00				
Substance use	-0.17**	$0.20^{**}$	-0.06	0.01	-0.05	0.02	0.05	0.03	0.16**	1.00			
Social support	0.06	-0.11*	-0.00	0.08*	0.02	0.03	0.11**	-0.22**	-0.34**	-0.02	1.00		
Child behav.health	-0.21**	0.03	-0.05	-0.01	-0.05	-0.01	-0.06	0.17**	0.51**	0.20**	-0.20*	1.00	
Child neglect	-0.24**	0.14**	-0.05	0.06	-0.13**	0.05	-0.02	$0.10^{*}$	0.18**	0.37**	-0.12**	0.20**	1.00

 $Source: \ Data\ from\ the\ Longitudinal\ Studies\ Consortium\ on\ Child\ Abuse\ and\ Neglect\ (LONGSCAN).\ Note.\ ^*p < .05; \ ^{**}p < .01.$ 

## 6.2 LOGISTIC REGRESSION

Aim One: What maternal stressors contribute predict child neglect in an at-risk group of mothers?

The results of the regression analyses were displayed in Table 3. The first block of control variables entered (mother's race, educational attainment, income-to-needs ratio, and mother's age at birth of child) were significantly associated with child neglect [Nagelkerke R2 = .109, p < .001]. The independent variables were entered into block two. Block two was significant [Pseudo R2 = .185, p < .001]. Results showed that maternal substance use, employment status, and marital status were significantly associated with whether they neglected their child. More specifically, mothers with substance use histories had four times the odds of neglecting their child than mothers with no reported substance use history (OR = 4.16, p = .001). In relation to employment status, employed mothers were less likely to neglect their children compared to their unemployed counterparts (OR = .562, p < .001). However, mothers' physical and mental health statuses did not significantly contribute to their odds of perpetrating child neglect. In the broader sample, child's behavioral health concerns did not contribute to their likelihood of experiencing neglect (OR = 1.01, p > .01). Finally, the addition of the stressors block resulted in an R squared change of .185 (p < .01).

Table 3 Logistic regressions: Predictors of child neglect in at-risk mothers (N=585)

Covariates	β	SE	OR	$R^2$	$\blacktriangle R^2$	β	SE	OR	$R^2$	$\triangle R^2$
Control variables- Block One	•					•				
Mother race	-1.035	.184	.355**							
High school diploma	243	.185	.784							
Income to needs ratio	194	.289	.824							
Mother's age at birth of child	.047	.014	$1.049^{**}$							
				.109**	.109**					
Independent variables- Block										
Two										
Substance use	1.427	.208	$4.168^{**}$							
Employment status	576	.203	.562**							
Physical health	.360	.204	1.434							
Marital status	.829	.248	$2.290^{**}$							
Mother mental health status	.008	.010	1.008							
Child behavioral health	.015	.010	1.015							
Number of children	.102	.060	1.107							
Social support- Block Three				.294	.185**					
Social support						015	.011	.985	.297	.003
Social support interaction -Block										
Four										
Social support x Substance use						017	.023	.984		
Social support x Employment						004	.022	.996		
Social support x Physical health						.055	.023	$1.056^{**}$		
Social support x Marital status						-0.017	.025	.983		
Social support x Mental health						.000	.000	1.000		
Social support x Child BH						.000	.001	1.000		
Social support x Number of children						.001	.007	1.001		
									.312	.015

Source: Data from the Longitudinal Studies Consortium on Child Abuse and Neglect (LONGSCAN). Note. p < .05; p < .01

# Aim Two: What is the relationship between race, maternal stressors and child neglect? Experience with Stressors Based on Race

The second aim of this dissertation was to determine in this high risk sample of high risk women do African American mothers experience stress differently than their Caucasian counterparts and whether the likelihood of neglect differed by the race of the mother. The variables of interest by maternal race can be found in Table 4. In this high risk sample, 32% of African American mothers had one or more child neglect reports compared to 57% of Caucasian mothers ( $\chi$ 2=35.06, p < .001). In reference to age, the mother's age at the time of subject child's birth, on average African American mothers were one year younger (24 years old) than Caucasian mothers (25 years old). Over 90% (93%) of African American mothers had an income-to-needs ratio of less than two or earned less than \$20,000 per year compared to 81% of Caucasian mothers ( $\chi$ 2= 20.29, p < .001). African American and Caucasian mothers were responsible for an average of four dependent children.

In this sample, 85% of the African American mothers were single parents compared to 51% of Caucasian mothers who reported being a single parent ( $\chi 2=74.84$ , p < .001). With regards to education, 63% of African American mothers attained a high school diploma or GED compared to 58% of Caucasian mothers. Less than half of all mothers were employed; 44% of Caucasian mothers were employed compared to 40% of African American mothers. In terms of physical health, a third of both African American and Caucasian mothers reported they were in good physical health. A higher percentage of Caucasian women reported using substances (68%) compared to African American women (50%) ( $\chi 2=17.30$ , p < .001). Mental health concerns differed by race, with African American mothers reporting fewer mental health problems than

Caucasian mothers (t = 2.63, p < .001). African American mothers also reported fewer behavioral health concerns in their children (t = 5.14, p < .001).

Table 4 Summary statistics of mothers by race (*N*=585)

	African American	Caucasian		
	(N=369)	( <i>N</i> =216)		
<b>Control Variables</b>	Mean (SD), %	Mean (SD), %	χ² or t value	p-value
Percent of population	63%	37%		
Age at child birth	24.51 (6.47)	25 (6.6)	t = 1.42	.438
High school diploma (yes)	63%	58%	$\chi^2 = 1.60$	.021
Income to needs ratio < 2	93%	81%	$\chi^2=20.29$	.001**
(% income below \$20,000)				
<b>Independent Variables</b>				
Marital status(unmarried)	85%	51%	$\chi^2=74.84$	.001**
Employment status (employed)	40%	44%	$\chi^{2} = .925$	.081
Number of children	4.2 (1.72)	4.2 (1.39)	t = 0.00	.404
Mother physical health (good	34%	39%	$\chi^2=1.28$	.067
physical health)				
Mental health – BSI score	48.32 (11.32)	50.93 (11.58)	t = 2.63	.009**
Substance use (yes)	50%	68%	$\chi^2 = 17.31$	.001**
Social support score	38.10 (9.2)	36.80 (9.09)	t = -1.65	.923
Child behavioral health score	50.76 (10.79)	55.52 (10.8)	t = 5.14	.001**
Dependent Variable				
Child neglect (neglect report)	32%	57%	$\chi^2 = 35.06$	.001**

Source: Data from the Longitudinal Studies Consortium on Child Abuse and Neglect (LONGSCAN). Note. p < .05 \* p < .01.

# Measuring the Difference of Child Neglect Perpetration Based on Race

The second part of this aim used logistic regression analysis to discern whether the child neglect differed by the race of the mother. The results are displayed in Table 5. The control variable block which included high school diploma receipt, income-to-needs ratio, and mother's age at birth of subject child was significantly associated with child neglect for African American mothers,

[Nagelkerke R2 = .040, p < .001] however, the control block was not significantly associated with child neglect amongst Caucasian mothers [Nagelkerke R2 = .031, p > .05].

The addition of the independent variables in the second step resulted in significant increase in the R-squared change values for both African American [Pseudo R2 = .197 p < .001] and Caucasian women [Pseudo R2 = .264, p < .001]. Although substance use was a significant predictor of neglect for both groups of women, African American women who reported substance use were five times more likely to have a child neglect report (OR = 5.19, p < .01) compared to African American mothers who reported no history of substance use; Caucasian mothers with a history of substance use were three times more likely to neglect than Caucasian mothers with no reported history of substance use (OR = 3.02, p < .01). In addition, physical health (OR = .558, p < .05) predicted child neglect among African American mothers. For Caucasian mothers, after controlling for education, income, and age at birth of subject child, single motherhood (OR = .905, p < .01), and child's behavioral health concerns (OR = .049, p < .01) were predictors of child neglect. Social support did not have any main effects for either group.

Table 5 Predictors of child neglect among at-risk African American and Caucasian mothers (N=585)

Covariates	Afri	can Ame	rican	$R^2$	$\blacktriangle R^2$		Caucasian			$\triangle R^2$
	β	SE	OR			β	SE	OR		_
Control variables- Block One										
High school diploma	093	.235	.911			436	.315	.647		
Income to needs ratio	024	.467	.976			219	.370	.553		
Mother's age at birth of child	.056	.018	1.05			.039	.023	1.04		
				.040	040**				.031	.031
Independent variables- Block Two										
Substance use	1.64**	.270	5.19			1.10**	.352	3.02	1.64**	.270
Physical health	.558*	.261	1.74			036	.343	.964	.558*	.261
Employment status	496	.265	.609			537	.334	.584	496	.265
Marital status	.752	.382	2.12*			.905**	.335	2.47	.752	.382
Mother mental health	.002	.013	1.02			.016	.017	1.01	.002	.013
Child behavioral health	001	.013	.999			.049**	.019	1.05	001	.013
Number of children	.123	.072	1.13			.046	.119	1.04		
Social support Block Three				.227	.197**				.295	.264**
Social support	013	.014	.987			013	.020	.987		
				.239	.002				.297	.002

Source: Data from the Longitudinal Studies Consortium on Child Abuse and Neglect (LONGSCAN). Note. \*p < .05; \*p < .01.

# Aim Three: What is the relationship between social support and child neglect?

The third aim of this dissertation study was to examine whether there was a direct relationship between social support and neglect and whether social support moderated the relationship between maternal stressors and neglect. Moderated regression analysis including interaction terms were used to test the two accompanying hypotheses below:

(H.2): High levels of perceived social support will predict a lower likelihood of child neglect.

(H.3): Social support will moderate the relationship between stress and neglect so that under conditions of high stress and high social support, neglect will be lower; under conditions of high stress and low social support, neglect will be greater.

These hypotheses are partially supported theoretically and empirically in the literature (Sheppard, 2009; Warren, Stein, & Grella, 2007). Referring back to Table 3, the addition of social support in block three had a non-significant main effect on neglect [Nagelkerke R2 = .297, p > .05], minimal shift was noted in the R-square change [Pseudo R2 = .003, p > .05]. The inclusion of the block of interaction terms did not significantly increase or change the value of the R-squared [Pseudo R2 = .015, p > .05]. Social support appeared to moderate the relationship between physical health and neglect (OR = 1.056, p < .01), however, this finding does not yield for post-hoc interpretation as the effect may have been random. Some scholars (Aiken & West, 1991; Champoux & Peters, 1987; & Hartman & Moers, 1999) believe that testing for interaction in logistic regression can be problematic. Therefore the sample of women was also split into two groups: those with high social support scores and those with low social support scores and the same blocks of variables were entered in the same order into the regression equation. The results

are displayed in Table 6. The addition of the control block was significant under both conditions of low [Nagelkerke R2 = .195, p < .01] and high social support [Nagelkerke R2 = .083, p < .01]. Entry of the stressors block, significantly increased the R squared for the low social support group [Pseudo R2 = .178, p < .01] and for the high social support group [Pseudo R2 = .189, p < .01]. Race (Caucasian) (OR = -1.480, p < .01), substance use (OR = 1.717, p < .01), marital status (OR = 1.097, p < .05), and unemployment (OR = -.751, p < .05) were significant predictors of child neglect for the women who reported having lower social support. Likewise, race (OR = -.717, p < .01), physical health (OR = .644, p < .01), marital status (OR = .701, p < .05), and substance use (OR = 1.355, p < .01), predicted child neglect for mothers who reported high perceived social support. Although substance use was a significant predictor under both conditions, it had greater significance under conditions of low social support. Women reporting high social support and poor physical health were surprisingly more likely to neglect than mothers with poor physical support and low social support.

Table 6 The impact of low and high social support on child neglect (N=585)

Covariates	Low So	cial Suppo	ort (N=213)	$R^2$	$\blacktriangle R^2$	High S	ocial Suppo	ort (N=372)	$R^2$	$\blacktriangle$ $R^2$
	В	SE	OR			В	SE	OR		
Control variables- Block One										
Mother's race	-1.48**	.309	.228			717**	.238	.488		
High school diploma	.387	.312	1.42			623**	.235	.536		
Income to needs ratio	.579	.651	1.78			198	.343	.821		
Mother's age at birth of child	.046*	.023	1.04			.046**	.018	1.04		
Independent variables- Block Two				.195**	.195**				.083**	.083**
Substance use	1.71**	.360	5.54			1.35**	.271	3.86		
Employment status	751*	.356	.472			431	.257	.650		
Physical health	227	.339	.797			.644**	.271	1.90		
Marital status	1.09*	.495	2.98			.701*	.304	2.9		
Mother mental health	019	.018	.981			.014	.013	1.01		
status Child behavioral health challenges	.029	.017	1.02			.011	.013	1.011		
Number of children	.198	.116	1.21	.373**	178**	.058	.074	.430	.272**	.189**

Source: Data from the Longitudinal Studies Consortium on Child Abuse and Neglect (LONGSCAN). Note. \*p < .05; \*\*p < .01.

## 6.3 **SUMMARY OF RESULTS**

The results revealed that maternal stressors contributed to occurrence of child neglect. Maternal race, substance use history, employment and marital status were correlated with child neglect. Substance use specifically was highly predictive. Mothers who reported a history of substance use were four times more likely to neglect their children. The logistic regression analysis also revealed that stressors differed based on the race of the mother as did the perpetuation of child neglect. For African American mothers their substance use history and poor physical health predicted child neglect. Comparatively, Caucasian mothers were more likely to be married, however, the small portion of unmarried Caucasian mothers had a greater likelihood of neglecting their children. Their children's behavioral health concerns were associated with increased likelihood of child neglect perpetration. Unlike past studies, Caucasian mothers in this study were more likely to neglect their children than their African American counterparts. The difference in the mothers' experience with maternal stressors and child neglect perpetration has broad implications for the way in which child neglect preventative efforts are constructed for mothers and families. Recommendations for improved policy and practice are outlined in the next chapter.

Finally, the results showed, there was no direct effect of social support on child neglect. In addition, the indirect social support buffering hypothesis was not supported, which means that social support did not moderate the relationship between maternal stress and child neglect. However, there is some indication that when mothers have higher levels of social support, substance abuse still predicts neglect but to a lesser degree then when there are low levels of support. The high levels of social support finding needs to be further explored to be certain of its validity.

The stressors examined in this study captured some but not all of the potential stressors that mothers experience. The findings relative to maternal stressors, race, and child neglect were informative. Although social support did not mitigate child neglect as anticipated, it would be helpful to learn more about the protective factors at-risk mothers possess that may help reduce occurrences of child neglect.

The results reported in this study revealed that several maternal stressors were strongly correlated with the occurrence of child neglect. Moreover, the results showed that stressors and the incidence of child neglect varied as a function of the mother's race. At the same time, however, there was no evidence to support the social support buffering hypothesis, which means that social support did not moderate the relationship between maternal stress and child neglect. The goal of this section of the dissertation is to situate these results within the broader context of social work theory and practice.

## 7.0 DISCUSSION

## 7.1 **INTRODUCTION**

The results reported in this study revealed that several maternal stressors were strongly correlated with the occurrence of child neglect. Moreover, the results showed that stressors and the incidence of child neglect varied as a function of the mother's race. At the same time, however, there was no evidence to support the social support buffering hypothesis, which means that social support did not moderate the relationship between maternal stress and child neglect. The goal of this section of the dissertation is to situate these results within the broader context of social work theory and practice.

# 7.2 MATERNAL STRESSORS AND CHILD NEGLECT: CONNECTIONS WITH PREVIOUS RESEARCH

The initial research questions were supported, maternal stressors contributed to and predicted the occurrence of child neglect. At the bivariate level, a number of common stressors such as maternal substance use, maternal physical and mental health and child behavioral health problems were correlated with child neglect which is consistent with previous studies (Bagner, Sheinkopf, & Loncar, 2009; Blakey & Hatcher, 2013; Manly, Oshri, Lynch; & Herzog, 2013; Nair, Schuler, Black & Kettinger, 2003; Ondersma, 2002; Slack, Berger, DuMont, & Yang, 2011). The logistic regression results of this study were partially consistent with the bivariate results and previous

research on child neglect. The following variables predicted increased likelihood of child neglect: maternal substance use, employment status, and race (Bagner, Sheinkopf, & Loncar, 2009; Blakey & Hatcher, 2013; Manly, Oshri, Lynch; & Herzog, 2013; Nair, Schuler, Black & Kettinger, 2003; Ondersma, 2002). The variables consistent with past studies on child neglect will be discussed in greater detail below.

#### 7.2.1 Maternal substance use

Mothers with substance use histories were more likely to neglect their child than mothers with no reported substance use history. This finding was consistent with a number of previous studies (Hiersteiner, 2004; Kerwin, Giorgio, Steinman, & Rosenwasser, 2014; Lam, 2004; Panchanadeswaran, & Jayasundara; 2012; Velez et al 2004; & Wilke, Kamata & Cash, 2005). This study added new knowledge because it was able to ascertain the extent to which the odds of child neglect increased, which past studies were unable to do. African American mothers with substance use histories were five times more likely to neglect their children than non-substance using African American mothers. Likewise, Caucasian mothers with substance use histories were three times more likely to neglect their children than those who had no substance use history. The percentage of mothers who used substances in this sample (60%) is consistent with national research which notes that between 60-80% of mothers involved with the child welfare system have substance use disorders (Young, 2002).

# 7.2.2 Employment status

Employment served as a protective factor in previous studies and was likely the case in this study as well (Berger, Font, Slack & Waldfogel, 2013; Fang, Brown, Florence, & Mercy, 2012; & Slack, Holl, McDaniel & Yoo, 2004). Employed mothers were less likely to neglect their children compared with their unemployed counterparts. Though all the mothers were impoverished, the employed mothers may have had added resources and were able to function in a work environment.

## 7.2.3 Marital status

Single-motherhood historically has been associated with a number of child neglect risk factors such as poverty and unemployment (Bass, Shields, & Behreman, 2004). In this study, marriage protected against child neglect in this sample for Caucasian mothers, it did not however, reduce the risk of child neglect among African American mothers this may be due in part to the lack of range. It is important to note, nearly 90% of the African American mothers were unmarried in this sample and the majority of them did not neglect, it is most likely that the binary single/married designation does not fully represent their household composition or relationship status. It may also be the case for African American mothers that single motherhood is not in and of itself a stressor that would lend one to neglect.

## 7.2.4 Mother's age

The standing literature maintains that younger mothers' limited knowledge of child development and age appropriate disciplinary methods interfere with their ability to effectively parent and contribute to child neglect (Carter & Myers, 2007; Goldman, Salus, Wolcott, & Kennedy, 2003). In this study age did contribute to child neglect, however the inverse direction occurred, older mothers were more likely to neglect than younger mothers. In the United States the median age at first child birth is 26 (National Center for Health Statistics, 2014), comparatively the median age for mothers in the sample was lower (25 years of age) and they had on average four children at the time of sampling. Because this sample did not capture the birth order of the children, their other children may indeed have been born to the mother when she was a teen. As time elapses the children are exposed to more risk and the mothers experience additional stressors that may have contributed to the occurrence of child neglect among the relatively older mothers.

# 7.2.5 Child behavioral health problems

Child's behavioral health concerns did contribute to the likelihood of experiencing neglect among Caucasian children. Children with special behavioral concerns presented an added stressor that was difficult for some of the mothers to safely manage. As was the case in past studies, the child's behavior may have caused additional parenting stress, strain and disequilibrium within the family (Cappa, Begle, Conger, Dumas, & Conger, 2011; Neece, Green and Baker, 2012).

## 7.3 INCONSISTENCIES WITH PREVIOUS RESEARCH

Although commonly accepted as the primary determinants of neglect, in this sample, income-to-needs ratio, educational attainment, marital status, and number of children, were not correlated with child neglect. These findings were inconsistent and not in alignment with past studies (Hubowitz, 2007; McSherry, 2004; MacKenzie, Kotch, & Lee, 2011; Rogosch, Dackis, & Cichetti, 2011; & Slack, Holl, McDaniel, & Yoo, 2004). The sample was consciously selected to be comprised of mothers who possess many of the characteristics which lend one to be more at-risk for child neglect. As a result, these variables may not have been correlated because there was not enough variance in the sample; all the mothers were impoverished, most of them were single, and had approximately four children which suggests additional underlying factors beyond those named played a role in the occurrence of child neglect.

#### 7.3.1 Income-to-needs ratio

The primary purpose of this dissertation was to expand the dialogue regarding child neglect beyond poverty or the mothers' income-to-needs ratio. Relying on poverty as the primary and sole explanatory factor of child neglect seemed insufficient given many impoverished mothers do not maltreat. Unlike many previous studies, this study was comprised of an entirely impoverished sample, and the results showed their level of economic need was not a determinant of child neglect. This is a very important distinction as it allowed for other risk factors to be examined beyond poverty.

## 7.3.2 Maternal physical and mental health

In public child welfare, a sizable portion of child neglect cases are attributed to the parents' deteriorated physical health (Putnam-Hornstein, Needell, & Rhodes, 2013), therefore it was unexpected that it did not contribute to occurrences of child neglect despite over half of the mothers self-reporting they were in poor health. Given the median age for the mothers in this sample was rather young (25 years of age), perhaps the real cumulative effects of aging and chronic illness over time were not accounted for in this sample. Past research on kin care givers notes the way in which health and age plays a role in their caregiving capacity (Casanueva, Tueller, Smith, & Dolan, 2014). Going forward, looking at the older biological mother cohort would offer greater understanding of their needs and if their physical health status contributed to the occurrence of child neglect. Also, it is important to note, the physical health measure was rather crude, and a more thorough physical health assessment would be more objective and insightful.

Although mothers' mental health status was significantly correlated with child neglect, there was no evidence that mothers' mental health status contributed to their odds of perpetrating neglect. This result is inconsistent with previous research (Evans, Steel, & DiLillo, 2013; Grote, 2007, Henderson, 2009, Johnson, 2011; & White, 2007) and may be explained by the co-occurrence of both substance use and mental illness. The impact of substance use was likely more identifiable and superseded the symptoms of mental illness given most of the mothers in this sample were close to a having a clinical mental health diagnosis based on their BSI T-score.

The mental illness also may have been episodic and contributed to the substance use. Due to the cross-sectional nature of this data analysis it would be difficult to know the full extent of the

mothers' mental health status. Further examination of the mental health variable would be helpful. Perhaps disaggregating the T-score and looking at the individual mental health diagnosis which comprise the T-score like anxiety, depression, schizophrenia etc. would be informative.

#### 7.3.3 Educational attainment

Past literature noted low educational attainment and poverty based hypothesis regarding child neglect perpetration (Mackintosh, Myers, & Kennon, 2006). Despite the mothers' educational attainment level, it did not predict, nor was it correlated with their likelihood of perpetrating child neglect.

## 7.3.4 Number of children

A child-related factor previously thought to contribute to child neglect was the number of children the mother was responsible for rearing (McPherson et al, 2009). Although, the number of children was considered to be a stressor, it was not correlated or associated with child neglect.

# 7.4 RACE, STRESSORS, AND NEGLECT

#### 7.4.1 Overview

Research about African American mothers and whether or not they were more neglectful than Caucasian mothers is inconsistent. Some studies found increased poverty rates amongst African American mothers was the reason for child neglect (Jonson-Reid, Drake, & Zhou, 2013; Pecora &

Whittaker, 2012; Coulton, Crampton, Irwin, Spisbury, & Korbin, 2007). Another hypothesis was that the increased risk or risk factors in African American households led to the neglect (Bartholet, Wulczyn, Barth, & Lederman, 2011; & Sedlak, McPherson & Das, 2010). The third explanation inferred that biased decision making by mandatory reporters and child welfare caseworkers contributed to the high rates of substantiated child neglect amongst African American mothers (Harris, 2014; Hill, 2008; & Roberts, 2006). The framework of this study offered an alternate perspective and contended that maternal stressors contributed greatly to child neglect.

In this study, African American mothers were less likely to have child neglect reports when compared to Caucasian mothers after controlling for other influencing variables. This discovery is in direct contrast to past studies about child neglect which show that African American mothers are more likely to maltreat their children than other races (Bartholet, 2009; Sedlak, Mettenburg, Basena, Petta, McPherson, Greene, & Li, 2010).

# 7.4.2 Significance for social work researchers and practitioners

In terms of planning, the information learned pertaining to race, stressors and child neglect is useful because it enables researchers and practitioners to think in a more informed and targeted way about the prevention and intervention services offered to mothers. The field of child welfare is moving toward using the research methodology, predictive analytics to inform child welfare practice and investigation. More specifically, predictive analytics will help practitioners use data to determine which parents are more likely to neglect and which interventions would work best with a parent who has certain presenting challenges. In this context, the mothers are faced with varying stressors and hence they could benefit from receiving preventative or intervention services that are better

suited to their needs. Ideally, the mother's needs would be identified and an evidence-based practice would be used to assist them.

This study found that for African American mothers, an important predictor of child neglect was maternal substance use. While one factor alone does not account for all child neglect, it is important to ensure child welfare systems and workers are adequately equipped with the clinical expertise required to assist mothers who have substance use disorders. In addition, it is important to note, access to treatment is imperative. For at-risk mothers there are many barriers to treatment; treatment is often unavailable or is not culturally sensitive. To better assist African American mothers with substance use disorders, the treatment must be timely, accessible for uninsured and underinsured mothers, culturally and experientially congruent, and able to accommodate the mothers' children if necessary. Not considering the aforementioned factors can create deterrents for receiving proper treatment.

A predictor of neglect seen for the Caucasian mothers were the behavioral health challenges of their children. These behavioral health challenges can destabilize family systems. There may have been bi-directionality in the child-parent interactions; the child responds to the parents' behavior by misbehaving and the parent responds, creating a toxic or explosive environment in which child maltreatment may occur (Cappa, Begle, Conger, Dumas, & Conger, 2011; Gelles & Perlman, 2012; Lengua & Kovacs, 2005; Neece, Green and Baker, 2012& Slominski, 2010). In this scenario, it is imperative for child welfare practitioners to assist mothers in developing appropriate responses to their child's behaviors. Conversely, it is also important to help some of the mothers to modify their behaviors so they do not provoke negative responses from the child.

In terms of the system level response, these families of children with behavioral and emotional problems, may need extra supports from both the child welfare and the behavioral health systems. With no other resources to manage the behaviors, child welfare involvement in some capacity may occur because the family has nowhere else to turn for help or because the parent is reported for maltreatment (Hildyard & Wolfe, 2002). Given these possibilities it appears these mothers may need additional support to manage their children's behavioral health needs, ideally through evidence based therapeutic modalities.

# 7.5 SOCIAL SUPPORT, STRESS, AND NEGLECT

Social support influences many aspects of a family's well-being. Under the auspices of the health promotion model, social support is reported to help improve many outcomes such as medicine maintenance, physical and psychological functioning, weight loss, and stress reduction (Gottlieb & Bergen, 2010; Thoits, 2011). Beyond the health benefits, social support improves educational attainment and enhances social capital (Arber, Fee, & Ginn, 1999; Scott & Carrington, 2011). In all these instances, the strength and quality of these relationships are key components of successful social support (Solomon, 2004).

Assisting families build self-efficacy and acquire quality social support networks is a primary goal in the helping professions. In the field, child welfare professionals are often confronted with fractured or isolated families. In this context, the child welfare profession seeks to improve families' social support systems as a way to lessen the parenting burden, reduce stress, and decrease occurrences of child maltreatment. In practice this is a common strategy, however,

few empirically validated studies note that social support positively influences a high risk behavior like child neglect (Harknett & Hartnett, 2011; Marcenko, Lyons, & Courtney, 2011). The results of the current study are consistent with a subset of past research in that social support was not able to moderate the relationship between maternal stressors and child neglect despite the respondents reporting higher than average social support. In this case, a high amount of social support was received but it had low impact on child neglect.

Some of the study findings were intuitive while others were not. First, this dissertation found that maternal stressors contributed to child neglect, even when controlling for poverty which is traditionally considered to be the primary cause of child neglect. Second, the maternal stressor models varied based on race. African American and Caucasian mothers reported experiencing stressors differently. When examining impoverished mothers only, impoverished Caucasian mothers had higher occurrences of child neglect than African American mothers. Finally, this study did not find social support to have the expected moderating effects, this most likely occurred either because negative social support was present or the mothers' needs were more concrete and profound than social support could manage.

#### 7.6 **LIMITATIONS**

There were many benefits associated with using this national data set (e.g., it adhered to rigorous data collection criteria) although it is also important to recognize the constraints of this data set. For example, given variables were selected by the developer and the operationalization of the stressors was done within the confines of the available stress indicators. The mothers undoubtedly

faced more stressors, like unsafe neighborhoods, substandard housing, and domestic violence, however, these factors were not measured in the initial data collection phase nor were they measured at successive data points.

The fact that these data were the product of secondary data analysis is also a limitation of the study. Because the data were a product of secondary data analysis, not all of the same measures were taken at the same time. Therefore, the comparison of the variables at multiple time points was not possible. Investigating these phenomena over time would have allowed for a different methodology, one that would have allowed for a more causal conversation and a more rigorous statistical analyses.

Another limitation related to the cross-sectional nature of this data is, social support and child neglect were measured at the same time, thus two-way causation is possible. This means that the social support/child neglect relationship may be inaccurate because the level of social support at the time of data collection could have been qualitatively different than the level of social support at the time when child neglect was reported. With regard to the child's behavioral health concerns it is possible that the relationship is bi-directional in the sense that parenting stress and negative parenting behavior impacts the development of child behavioral problems. Also the child's behavioral health concern could cause the neglect and vis-versa however it is not possible to know given the analysis was cross sectional.

The variables themselves could also be potential limitations for the study. For instance there were issues with the structure of physical health measure as it was crude and consisted of one question. In addition, the social support variable was modified by the LONGSCAN developers meaning the initial validity of the variable does not apply.

This study delved more deeply into the nuances of child neglect, however, to more fully understand this study's findings additional exploration is needed to learn more about the underlying mechanisms and implications. One option would be to use alternate samples and data analysis strategies which could either corroborate or dispel this study's findings. Conducting more studies on this topic would give further insight into the stressors experienced by at-risk mothers as well as their protective factors which would ideally inform child welfare policy and practice improvement efforts.

Based on this study's findings special consideration should be given to the varying needs, stressors, and challenges faced by mothers. Though the primary predictor of child neglect is poverty, for African American mothers the field of child welfare is in a precarious position. Among impoverished African American mothers, this study was unable to accurately differentiate neglectful from non-neglectful mothers that is very problematic as child welfare is predicated upon predicting, determining, and managing risk. Despite the potential limitations, this study has several implications for policy and practice that relate to helping at-risk mothers cope with maternal stressors and mitigate the occurrence of child neglect.

#### 7.7 IMPLICATIONS FOR PRACTICE

### 7.7.1 Macro-level social work practice

To improve macro-level social work practice, a paradigm shift is necessary. Social work practitioners need to transition from the traditional view of child neglect, which focuses primarily

on the "act" of child neglect not the antecedents. A more solution-oriented view of child neglect which acknowledges the existence and complexity of the stressors at-risk mothers face on a day-to-day basis is imperative. Such a viewpoint would allow practitioners to think more broadly about the way in which social problems impact families' ecological context, stressors, and overall well-being. Having an informed perspective would better equip social workers with the knowledge and skills to address many of the core issues that drive mothers to neglect their children.

This dissertation provides a good staging-point for helping social workers understand the way in which maternal stressors influence child neglect; however, there is much that can be learned about maternal stressors from related fields such as nursing, psychology, neuroscience, Africana studies, and public health. Researchers in these fields have developed bodies of work which note the negative consequences that occur as result of issues like racism, toxic stress, chronic stress, allostatic load, and trauma (McEwen, 2012; Rogosch, Dackis, & Cicchetti, 2011).

By incorporating these other bodies of work we can advance our ability to deal with the complex nature of maternal stress and child neglect by constructing services and service systems which deal with the antecedents of child neglect.

### 7.7.2 Micro-level social work practice

Evidence-based practices which align with client needs are crucial for micro-level social work practice improvement; yet, few child welfare professionals have the requisite training and experience to implement these practices into their day-to-day work with clients. This is especially true for child welfare professionals who work with families with multifaceted behavioral health challenges such as substance abuse, mental illness, and extensive trauma histories (Blakey &

Hatcher, 2013; Johnson, 2011). These professionals need additional expertise to adequately deal with the sub-clinical and clinical psychological needs of their clients (Hair, 2012; Leathers, 2013). Giving child welfare workers more skills in these areas will increase their ability to better serve families, namely at-risk mothers with behavioral health concerns. Emphasizing the development of clinical skills shifts the field away from status quo compliance-based case management and gives case workers the skills to better engage families. There is evidence which suggests that social workers who received enhanced clinical training in Cognitive Behavioral Therapy, Motivational Interviewing, and Trauma Informed Care were able to enhance their clients' participation in services, resilience, and safe closure of child welfare cases (Dorsey et al, 2014; Unger, Lienbenberg, & Ikeda, 2012). With enhanced clinical and engagement skills, case workers should be able to better address the mothers' stressors and needs, and assist them in finding resources to change their immediate circumstances.

Another rather large practice issue identified in this dissertation involved children with special behavioral health needs. In this study, children with behavioral concerns were more likely to experience child neglect. At times, at-risk mothers with no other resources turn to public child welfare for help with their child, in other instances they are reported to child welfare for neglecting their child's needs. In either case, to effectively assist families who have a child with a behavioral health concerns a robust, structured intervention is often needed to stabilize the family. There are several evidence-based-practices like Multi-Systemic Therapy, Parent-Child Interactional Therapy, Brief Strategic Therapy and Homebuilders that help parents who have particularly challenging family dynamics cope. These interventions, which are provided by highly training professionals, focus on improving the interactions between the parent and the child, enhancing the families emotional and communication skill development, and broadening social support networks

of the parents. Research shows that successful parent training and education interventions like those previously mentioned help parents acquire and internalize the parenting and problem-solving skills necessary to build a healthy family and reduce the risk of child neglect amongst at-risk African American and Caucasian mothers (Thomas & Zimmer, 2011; Lundahl & Harris, 2006; Wilke, Kamata, & Cash; 2005).

Finally, given the disparate needs and stressors of mothers by race it is important not only to use evidence-based practices that have been validated on diverse populations but also to consider expressly culturally competent practices. Culturally competent practices fully consider the specific cultural, linguistic, social and economic nuances of particular people and families. Given African American mothers comprise a large portion of child welfare involved parents nationally it is important for child welfare practice to fully consider their context and stressors.

This study found the stressor which contributed greatly to child neglect was substance use. For child welfare to attend to their stressor and needs, referring and contracting with culturally competent providers, particularly substance use providers is imperative. African American mothers have expressed in past research the importance of working with staff that are diverse and respectful of their religious beliefs (Brome, Owens, Allen, & Vevaina, 2000), in addition they preferred receiving treatment in facilities that allow them to bring their children with them as it helped increase motivation and adherence to treatment (Schuler, Nair, & Black, 2002).

### 7.8 IMPLICATIONS FOR POLICY

The results of this study clearly support the notion that child neglect is a complex, persistent, multidimensional problem. Therefore, it requires policies that reflect this complexity. More globally, legislation is needed to address issues like poverty and inequality that contribute to maternal stress and limited resources. Given the fact that social justice-oriented legislation is a far off ideal, more immediate legislation is needed to deal with the environmental, maternal, and child-related stressors that perpetuate child neglect. The stressors found to be most predominant and highly correlated with child neglect are indicators of areas for targeted policy initiatives. In this dissertation, mothers faced distinctly different challenges based on their own individual characteristics and living situations. Nonetheless, there were a few re-occurring stressors among most of the mothers such as child behavioral health concerns and maternal substance abuse which were predominant in most instances of child neglect. Policies that address these two areas would likely go a long way in helping mothers who are at-risk for neglecting their children.

There are several policies that are already in place that could be expanded to help address two of the key risk factors for child neglect found in this dissertation, child behavioral health concerns and maternal substance abuse. One possible solution is to expand flexible funding in child welfare beyond the select few who participate in the Child Welfare Waiver Demonstrations. A flexible funding structure would give jurisdictions the latitude to use federal and state dollars to address the demonstrated needs amongst at-risk mothers on the individual and systemic level. For example, child welfare systems could use flexible funds to contract with substance use providers who are skilled in working with child welfare involved mothers (Fluke, 2008). Illinois, a Child Welfare Waiver Demonstration used their cost savings to provide recovery coaches and supportive

services to at-risk mothers, this reduced CPS recidivism among the mothers with substance use disorders (Bell, 2013). Another way to address the specified behavioral health concerns is through the expansion of Regional Partnership Grants that are present in 53 jurisdictions for the purposes of improving efforts to serve parents with substance use disorders. These grants are offered through the National Center on Substance Abuse and Child Welfare. They give child welfare systems funding to build infrastructure and partnerships between the child welfare, mental health and substance abuse systems so they can better address the unique needs of at-risk families involved in two, if not more, social service systems (GAO, 2005; Young, 2002).

Lastly, policies that focus on integrating and consolidating child and parent welfare systems could go a long way to help mothers who are at-risk for neglecting their children. Through integration, the task of supporting mothers and their children is shared across social service systems, which provides mothers with a wider-range of support resources. This idea has already been implemented with great success in Los Angeles County, Cook County, Miami-Dade County, Monroe County, and three counties in East Texas. These counties achieved great success by linking family serving systems like child welfare, drug and alcohol, TANF, and public health together. In these seven counties, they were able to: 1). reduce child welfare involvement, 2). increase at-risk mothers' drug abstinence rates, and 3). decrease child welfare recidivism (Marsh, 2011; Marsh, 2012; Marcenko, 2010). Another key issue that these counties were able to address through system integration efforts was giving mothers with substance use disorders timely and priority access to drug treatment. As we know from this dissertation and past research on child neglect, substance abuse is a major contributor to neglect and policies that address this issue head-on could have a big impact on mothers who are at-risk to neglect their children.

Success of these interventions suggests that revision of present policies is needed to reflect a more comprehensive, solution-based approach to prevent child neglect. In Pennsylvania, for instance, policies are still evolving to develop more integrated social welfare systems. The social welfare centers in Indiana County and Allegheny County are at various stages of integrating their social services systems to be more attentive to the needs of mothers. Allegheny County, for example, is in year ten. They have integrated funding streams and shared data systems. However, integrating practice across systems is still a work in progress. Examining the results of Allegheny and Indiana County going forward will offer evidence as to whether or not additional policies promoting the system integration approach should be created.

### 7.9 IMPLICATIONS FOR FUTURE RESEARCH AND METHODOLOGY

The findings presented in this dissertation are an important first-step in understanding the complexity of the relationship between child neglect and maternal stressors. However, there are still many questions that need to be addressed in future research on this topic and there are a number of methodological limitations that need to be overcome before these questions can be addressed.

1. Using predictive analytics is an avenue to more accurately identify mothers who are legitimately at-risk for neglect (Vaithianathan, Maloney, Putnam-Hornstein, & Jiang, 2013) and being reported to child protective series (Putnam-Hornstein & Needell, 2011). Predictive analytics is an approach whereby researchers extract information from existing data in order to determine patterns and predict future outcomes, trends, and behaviors (O'Brien, 2015). Using past and

current data in a predictive manner would help inform outreach and interventions tailored toward decreasing risk among those mothers who are more likely to neglect.

- 2. Another way to gather insight would be to interview mothers to get firsthand accounts of their experiences parenting under great stress. These interviews could further illustrate some of the strengths, challenges, and needs that are present within these families. For example the interview could ask mothers about their lived experiences and stressors not considered or included in this study which may impact their ability to safely care for their children. The insights gleaned from these interviews regarding maternal stressors and maternal child welfare experiences could be very informative for improving existing interventions aimed at preventing child neglect.
- 3. Improving the consistency and transparency of the methodology used in qualitative studies that explore child neglect would be beneficial. Presently, studies do not offer clarity or information regarding their processes for constructing the study and what theories or assumptions informed their studies. By using grounded theory and community participatory research, these studies will help gather richer data about the lived experiences of mothers who are currently involved or at risk of being involved in the child welfare system.
- 4. Employing a mixed-method design would better capture the complexity of this issue by combining qualitative, quantitative data, administrative and survey data. An issue like child neglect is multi-dimensional and difficult to understand with a singular methodology. Qualitative data paints the picture in broad strokes, but quantitative data offers greater detail. Combining both data forms will present a fuller picture of maternal stressors, child neglects antecedents and the factors that protect against child neglect perpetration.
- 5. Future research in this area needs to further explore the impact of maternal protective factors. Based on this dissertation and studies conducted before it, we know at-risk mothers have

innumerable risk factors like maternal depression, substance abuse, family violence, and persistent poverty. These factors increase their chances for negative outcomes, including child neglect. Conversely, they also possess protective factors and strengths, which most likely helped 60% of the at-risk mothers in this sample not perpetuate child neglect. Hence, it is imperative that future research works to identify these strengths and build upon mothers' protective factors like religion, spirituality, and peer supports.

In this sample, social support did not make significant a difference in terms of reducing child neglect perpetration. In order to move forward, other protective factors possessed by at-risk mothers need to be explored. Developing a broader understanding of maternal protective factors could have far-reaching implications for intervention programs that seek to mitigate incidences of child neglect. More specifically, if intervention programs reinforce maternal strengths while helping mothers cope with their day-to-day stressors, they may be able to greatly reduce incidences of child neglect. Discovering the unique protective factors at-risk mothers who did not neglect possess is important. Replicating the protective factors for at-risk mothers and determining whether they buffer against child neglect perpetration would be the optimal next step in research.

6. Future work in this topical area needs to consider using more advanced research designs such as Structural Equation Modeling (SEM). Employing rigorous statistical techniques and gathering larger, more representative samples will enhance the evidence base. Moreover, evaluating the interventions already created by using a longitudinal design will help better assess causation. SEM is an advanced statistical technique that can be used to test a causal model. SEM can help extend prior scholarship beyond descriptive statistics about the mothers' characteristics by gaining greater understanding of how risk factors interact and impact maternal stress and child

neglect. As such, it could give insight into the different pathways that lead to the occurrence of child neglect. Additionally, SEM could be used to test a causal model focused on protective factors.

7. Finally, research related to the relationship between race and child neglect has shifted in recent years. Past research used either a socioecological or a racial disproportionality lens; presently race and poverty-based factors are considered the primary drivers of child neglect. Given the unique conceptual framework of this study and the findings, if it were replicated and validated there would be several policy and practice implications. Next steps in research would be to re-test the findings with a different sample of at-risk mothers. Further examining the stressors of Caucasian and African American mothers is necessary, there were a number stressors like interpersonal violence, insecure housing, and spatial isolation that were not included in this study. More information is needed for interventions to be designed based on the mothers' needs. The interventions must also undergo continuous evaluation to discover whether or not the intervention helped to reduce the occurrence of child neglect in at-risk mothers by race.

#### 7.10 CONCLUSION

This project framed child neglect as more than simply maternal deficiencies, but rather as a multitiered and complicated amalgamation of many different factors. The study showed mothers at-risk for child neglect within their broader ecological context, a context which contributed to maternal stressors and ultimately child neglect. Additionally, this study provided more information about the maternal stressors correlated with child neglect in order to dissuade individualist and incomplete explanations of child neglect.

This study developed a fuller picture of the stressors at-risk mothers experienced and a more nuanced understanding of the underlying factors beyond poverty. Through this study, several pieces of important knowledge were uncovered regarding at-risk mothers. The mothers 'stressors, as they related to child neglect, were disaggregated and showed that certain subsets of mothers experience stressors differently, more frequently, and intensely. The starkest difference in terms of experience of stressors and child neglect perpetration occurred along racial lines. African American mothers were less likely to neglect than Caucasian mothers, this finding has broad implications for whether or not child welfare is equitably capturing the full spectrum of maltreating families, both black and white. Objective identification of risk present within families is imperative and this study demonstrated it is very challenging to accurately identify which African American mothers are at risk for and will ultimately neglect their children. This finding indicates more information is needed to better differentiate between neglect and non-neglectful African American families. The use of predictive modeling may help create better profiles of risk in the African American community and differentiate between mothers who may legitimately neglect their children from those who will not. This dissertation also discovered that African American mothers' child neglect risk is primarily associated with substance use which notes the need for addition focus on offering them culturally competent treatment that meets their needs.

Past literature has not offered much insight into Caucasian mothers who neglected their children. This study found, the primary predictor of neglect among the Caucasian mothers was their child's behavioral health concerns and their single motherhood status. This finding suggests Caucasian mothers' stressors were family structure and behavior oriented and the interventions designed to assist them must be cognizant of their family systems and stressors.

Although, in the field of child welfare promotes the utility of social support, findings in this study implores professionals to think more critically about whether or not intervention strategies should focus primarily on building social support for at-risk mothers, when their needs center around concrete goods, and treatment for their children and/or themselves. While social support may not have been as much of a protective factor for the mothers in this sample as anticipated, further examining their protective factors is necessary. Examining these mothers from a strengths-based-perspective in which the mothers who were able to navigate seemingly deleterious conditions and provide a safe and nurturing environment to their children will better inform child welfare policy and practice. Learning this information will offer new insight and evidence for practitioners to target their prevention efforts at the situations that are causing the most distress. In doing so, the hope is that these targeted maternal stress reduction efforts can help reduce the risk for and occurrence of child neglect.

## APPENDIX A

## ADDITIONAL SOCIAL POLICIES

Policy	Year	Purpose	Outcome	References
Aid to Dependent Children- Foster Care	1961	Provide aid to abused, neglected, or dependent children.	Added foster care component to the Aid to Dependent Children Act included funding to either make homes safe and habitable for children or place them in a safe foster or adoptive home Created federal grants to provide the financial incentive to states to create their own individual child welfare service systems. This act created the infrastructure for the foster care system but neglected to address child safety and well-being.	P.L. 87-31
The Child Abuse Prevention and	1974 Amended - 1996	Goal was to raise awareness regarding the causes and consequences of child abuse and neglect. Create consistent	Established mandatory reporting, created guidelines for reporting child abuse and neglect, and the infrastructure to receive the reports. A	P.L. 93-274 P.L. 104-235

Policy	Year	Purpose	Outcome	References
Treatment Act (CAPTA)		messaging and legislation to help circumvent the problem.	marked reduction of child maltreatment was not achieved.	
The Adoption Assistance and Child Welfare Act	1980	Sought to create a structure to expedite permanency for abused and neglected children, formalize case plans, and create more structure and guidance for social workers.	Unable to curtail the exponential increase of children entering foster care. The policy did not feature adequate guidelines to ensure permanency for children.	P.L. 96-272
Anti-Drug Abuse Laws	1986 & 1988	Created a policy agenda for a "drug free America". Criminalized drug use. Enacted mandatory minimum sentences for individuals who were caught abusing drugs.	Dramatically increased the number of impoverished mothers involved in the criminal justice and child welfare systems. Additionally the amount of children entering foster care between 1986 and 1994 increased tenfold. This increase has in part been attributed to the rise in incarceration of mothers, strained family structures, and prevalence of drug use in certain communities.	P.L. 99-570 P.L. 100-690
Family Preservation and Support Services Program Act	1993 Amended- 2001 & 2010	Series of policies intended to promote safe and stable families while maintaining child safety and well-being as the paramount concern.	First and second iteration of policy were not fully funded or enforced which undermined child neglect prevention efforts. This policy also failed to expeditiously increase permanency for many maltreated children Outcomes of third iteration have not been fully evaluated at this point.	P.L. 103-66 P.L. 107-133 P.L. 112-34
The Multi-Ethnic Placement Act	1994 Amended- 1996	Eliminate racial preference matching practices. Increase the number of adoptions of African American children.	This legislation marginally increased the number of inter-racial adoptions of African American children.	P.L. 103-382 P.L.104-188
Adoption and Safe Families Act	1997	Expedite permanency for children. Promote concurrent planning. Increase adoptions of children in foster care.	Stated goals have partially been achieved. The number of children entering foster care has decreased steadily for the last ten years, however,	P.L. 105-89

Policy	Year	Purpose	Outcome	References
		not proportionally for children of color and older		
			children.	

# APPENDIX B

### OPERATIONALIZATION OF STUDY VARIABLES

Indicator	LONGSCAN codename	Codes/Ranges
Race	Mthr_race	1 = Caucasian
		2 = African American
Age at time of child birth	Age_B	13-53 years
Marital status	Mar_status	0 = married
		1 = unmarried
Working status	Employment_status	0 = unemployed
		1 = employed
High school diploma	Respondent_high_diploma	0 = No
		1 = Yes
Income to needs ratio	Ratio	1 = income less than  10,000
		2 = income less than  20,000
		3 = income less than  30,000
		4 = income  \$ 40,000  or more
Physical health problems	Phys_health	1 = poor physical health
		2 = good physical health
Mental health	BSI_score	0-63 (50 or greater=clinical range)
Illicit substance use	Ever_use	0 = no
		1 = yes
Social support	Soc_suppt	10-50 (30 or greater= high social support)
Dependent children	Total_hshld	2-15
Child behavioral health concerns	Child_behav_SCI_TOTT	23-100 (63 or greater = clinical range)
Stressors index	Stressors_index_final	0-6
Child neglect	Child_neglect_reports	0= no
		1= yes

### **BIBLIOGRAPHY**

- Abidin, R.R. (1997). Parenting Stress Index: A measure of the parent-child system. In C. P. Zalaquett and R. J. Woods (Eds.), Evaluating Stress. Lathan, MD: University Press of America.
- Achenbach, T. M. (1991). Manual for child behavior checklist. Burlington, VT: University of Vermont, Department of Psychiatry.
- Afifi, T. O., & MacMillan, H. L. (2011). Resilience following child maltreatment: A review of protective factors. Canadian journal of psychiatry. *Revue Canadienne De Psychiatrie*, 56(5), 266-272.
- Allen, S. (2010). Throwaway moms: Maternal incarceration and the criminalization of female poverty. *Affilia*, 25(2),160-171.
- Alpert, L.T. (2005). Research Review: Parents' service experience a missing element in research on foster care case outcomes. *Child & Family Social Work, 10*(4), 361-366.
- Anderson, C. M., Robins, C. S., Greeno, C. G., Cahalane, H., Copeland, V. C., & Andrews, R. M. (2006). Why lower income mothers do not engage with the formal mental health care system: Perceived barriers to care. *Qualitative Health Research*, 16(7), 926-943.
- Appleyard, K., Yang, C., & Runyan, D.K. (2010). Delineating the maladaptive pathways of child maltreatment: A mediated moderation analysis of the roles of self-perception and social support. *Development and Psychopathology*, 22(2), 337-352.
- Arditti, J., Burton, L., & Neeves-Botelho, S. (2010). Maternal distress and parenting in the context of cumulative disadvantage. *Family Process*, 49(2), 142-164.
- Ards, S., Myers, S., Sugrue, E., & Zhou, L. (2003). Racial disproportionality in reported and substantiated child abuse and neglect: An examination of systematic bias. *Children and Youth Services Review*, 25(5), 375-392.
- Axinn, J., & Stern, M. J. (2007). Social welfare: A history of the American response to need: Boston, MA: Allyn and Bacon.
- Bagner, D. M., Sheinkopf, S. J., Miller-Loncar, C., LaGasse, L. L., Lester, B. M., Liu, J., & Das, A. (2009). The effect of parenting stress on child behavior problems in high-risk children with prenatal drug exposure. *Child Psychiatry and Human Development*, 40(1), 73-84.

- Bartholet, E. (2009). Racial disproportionality movement in child welfare: False facts and dangerous directions. *The Arizona Law Review*, *51*, 871.
- Bartholet, E., Wulczyn, F., Barth, R. P., & Lederman, C. (2011). *Race and Child Welfare*. Chapin Hall Issue Brief, June, 11-27.
- Bass, S, Shields, M. K., & Behrman, R. E. (2004). Children, families, and foster Care: Analysis and recommendations. *The Future of Children*, *14*(1), 5-29.
- Bell, J. (2013). *Profiles of the Child Welfare Demonstration Waiver Projects*. Volume II: Demonstrations Active As of Fiscal Year 2014. Retrieved from http://www.acf.hhs.gov/sites/default/files/cb/waiver\_profiles\_vol2.pdf
- Belsky, J. (1993). Etiology of child maltreatment: A developmental ecological analysis. *Psychological Bulletin*, 114(3), 413.
- Better, S. (2007). Institutional Racism. New York: Rowman & Littlefield.
- Billingsley, A. & Giovannoni, J. (1972). *Children of the storm: Black children and American child welfare*. New York: Harcourt, Brace and Jovanovich.
- Bishop, S.J., & Leadbeater, B. J. (1999). Maternal social support patterns and child maltreatment: Comparison of maltreating and nonmaltreating mothers. *American Journal of Orthopsychiatry*, 69(2), 172-181.
- Bradley, K. A., Boyd-Wickizer, J., Powell, S. H., & Burman, M. L. (1998). Alcohol screening questionnaires in women: A critical review. *Journal of the American Medical Association*, 280(2), 166-170.
- Broadhead, W. E., Gehlbach, S. H., De Gruy, F. V., & Kaplan, B. H. (1988). The Duke-UNC functional social support questionnaire: Measurement of social support in family medicine patients. *Medical Care*, 26(7), 709-723.
- Brown, J., Cohen, P., Johnson, J., & Salzinger, S. (1998). A longitudinal analysis of risk factors for child maltreatment: Findings of a 17-year prospective study of officially recorded and self-reported child abuse and neglect. *Child Abuse and Neglect*, 22(11), 1065-1078.
- Blakey, J. M., & Hatcher, S. S. (2013). Trauma and substance abuse among child welfare involved African American mothers: A case study. *Journal of Public Child Welfare*, 7(2), 194-216.
- Brown, D. R., & Keith, V. (Eds.). (2003). *In and out of our right minds: The mental health of African American women*. New York: Columbia University Press.

- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822-848.
- Brown, M., & Bloom, B. (2009). Reentry and renegotiating motherhood: Maternal identity and success on Parole. *Crime & Delinquency*, 55(2), 313-336.
- Brown, V. B., Melchior, L. A., Panter, A. T., Slaughter, R., & Huba, G. J. (2000). Women's steps of change and entry into drug abuse treatment: A multidimensional stages of change model. *Journal of Substance Abuse Treatment*, 18(3), 231-240.
- Brown, V. B., Melchior, L. A., Slaughter, R., & Huba, G. J. (2005). Stages of multiple behavior change as a function of readiness for substance abuse treatment among women at risk. *Journal of Addictions Nursing*, 16(1-2), 23-29.
- Campbell-Grossman, C. K., Hudson, D. B., Keating-Lefler, R., & Heusinkvelt, S. (2009). New mothers network: The provision of social support to single, low-income, African American Mothers via e-mail messages. *Journal of Family Nursing*, 15(2), 220-236.
- Cappa, K. A., Begle, A. M., Conger, J. C., Dumas, J. E., & Conger, A. J. (2011). Bidirectional relationships between parenting stress and child coping competence: Findings from the PACE study. *Journal of Child and Family Studies*, 20(3), 334-342.
- Carlson, B. E. (2006). Best practices in the treatment of substance-abusing women in the child welfare system. *Journal of Social Work Practice in the Addictions*, 6(3), 97-115.
- Carter, V., & Myers, M. R. (2007). Exploring the risks of substantiated physical neglect related to poverty and parental characteristics: A national sample. *Children and Youth Services Review*, 29(1), 110-121.
- Casanueva, C., Tueller, S., Smith, K., Dolan, M., Ringeisen (2014). *NSCAW II Wave 3: OPRE Report 43*. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Casey Family Programs. (2010). Ensuring safe, nurturing and permanent families for children: the need to reauthorize and expand Title IVE Waivers. Author: Seattle, WA. Retrieved from www.casey.org/Resources/Publications/pdf/NeedForWaivers.pdf.
- Cash, S. J., & Wilke, D. J. (2003). An ecological model of maternal substance abuse and child neglect: issues, analyses, and recommendations. *American Journal of Orthopsychiatry*, 73(4), 392.
- Chaffin, M., Kelleher, K., & Hollenberg, J. (1996). Onset of physical abuse and neglect: Psychiatric substance abuse and social risk factors from prospective community data. *Child Abuse & Neglect*, 20(3), 191-203.

- Chalk, R. A., & King, P. (1998). Violence in families: Assessing prevention and treatment programs. Washington, D.C.: National Academies Press.
- Chen, H.Y., Hou, T.W., & Chuang, C.H. (2010). Applying data mining to explore the risk factors of parenting stress. *Expert Systems with Applications*, *37*(1), 598-601.
- Child Welfare Information Gateway. (2014). *Protective Factors: Approaches In Child Welfare*. Washington, DC: U.S. Department of Health and Human Services.
- Child Welfare Information Gateway. (2013). Parent Education: Strengthen Families and Reduce The Risk Of Maltreatment. Washington, DC: U.S. Department of Health and Human Services, Children's Bureau.
- Chipungu, S. S., & Bent-Goodley, T. B. (2004). Meeting the challenges of contemporary foster care. *The Future of Children*, *14*(1), 75-93.
- Cicchetti, D., & Valentino, K. (2006). An ecological transactional perspective on child maltreatment: Failure of the average expectable environment and its influence upon child development. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental Psychopathology (2nd ed.): Risk, Disorder, and Adaptation, Vol. 3* (pp. 129-201). New York, New York: Wiley.
- Cohen, S., & Wills, T.A. (1985). Stress, social support, and the buffering hypothesis. *Psychological bulletin*, *98*(2), 310-357.
- Connell-Carrick, K. (2003). A critical review of the empirical literature: Identifying correlates of child neglect. *Child and Adolescent Social Work Journal*, 20(5), 389-425.
- Cooper, C. E., McLanahan, S. S., Meadows, S. O., & Brooks-Gunn, J. (2009). Family Structure Transitions and Maternal Parenting Stress. *Journal of Marriage and Family*, 71(3), 558-574.
- Coulton, C. J., Crampton, D. S., Irwin, M., Spilsbury, J. C., & Korbin, J. E. (2007). How neighborhoods influence child maltreatment: A review of the literature and alternative pathways. *Child Abuse and Neglect*, *31*(11–12), 1117-1142.
- Coulton, C. J., Korbin, J. E., & Su, M. (1999). Neighborhoods and child maltreatment: A multi-level study. *Child Abuse & Neglect*, 23(11), 1019.
- Coulton, C. J., Korbin, J. E., Su, M., & Chow, J. (1995). Community level factors and child maltreatment rates. *Child Development*, 66(5), 1262-1276.
- Crittenden, P.M. (1999). *Child neglect: Causes and contributers*. Thousand Oaks: Sage Publications.

- Crouch, J. L., Milner, J. S., & Thomsen, C. (2001). Childhood physical abuse, early social support, and risk for maltreatment: Current social support as a mediator of risk for child physical abuse. *Child Abuse & Neglect*, 25(1), 93-107.
- D'Cruz, H., & Stagnitti, K. (2008). Reconstructing child welfare through participatory and child-centered professional practice: A conceptual approach. *Child & Family Social Work*, *13*(2), 156-165.
- Deater-Deckard, K. D. (2004). Parenting stress. New Haven, CT: Yale University Press.
- De Bellis, M. D., Broussard, E. R., Herring, D. J., Wexler, S., Moritz, G., & Benitez, J. G. (2001). Psychiatric co-morbidity in caregivers and children involved in maltreatment: A pilot research study with policy implications. *Child Abuse and Neglect*, 25(7), 923-944.
- Debnam, K., Holt, C. L., Clark, E. M., Roth, D. L., & Southward, P. (2012). Relationship between religious social support and general social support with health behaviors in a national sample of African Americans. *Journal of behavioral medicine*, 35(2), 179-189.
- DePanfilis, D. (2006). *Child neglect: A guide for prevention, assessment, and intervention*. U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau, Office on Child Abuse and Neglect.
- DePanfilis, D., & Dubowitz, H. (2005). Family connections: A program for preventing child neglect. *Child Maltreatment*, 10(2), 108-123.
- Derezotes, D., Testa, M., & Poertner, J. (2005). Race matters in child welfare: The overrepresentation of African American children in the system. Washington D.C.: Child Welfare League of America.
- Derogatis, L. R., & Melisaratos, N. (1983). The Brief Symptom Inventory: An introductory report. *Psychological Medicine*, *13*(3), 595-605.
- DeVooght, K., Allen, T., & Geen, R. (2008). Federal, state, and local spending to address child abuse and neglect in fiscal year 2006. Washington D.C.: Child Trends.
- Dore, M. M., Doris, J. M., & Wright, P. (1995). Identifying substance abuse in maltreating families: A child welfare challenge. *Child Abuse & Neglect*, 19(5), 531-543.
- Dorsey, S., Pullmann, M. D., Berliner, L., Koschmann, E., McKay, M., & Deblinger, E. (2014). Engaging foster parents in treatment: A randomized trial of supplementing Traumafocused Cognitive Behavioral Therapy with evidence-based engagement strategies. *Child abuse & neglect*, 38(9), 1508-1520.

- Drake, B., & Jonson-Reid, M. (2014). *Poverty and child maltreatment*. In Handbook of Child Maltreatment (pp. 131-148). Springer Netherlands.
- Drake, B., & Zuravin, S. (1998). Bias in child maltreatment reporting. *American Journal of Orthopsychiatry*, 68(2), 295-304.
- Dubowitz, H., Newton, R., Litrownik, A., Lewis, T., Briggs, E., Thompson, R., & Feerick, M. (2005). Examination of a conceptual model of child neglect. *Child Maltreatment*, 10(2), 173-189.
- Duva, J., & Metzger, S. (2010). Addressing poverty as a major risk factor in child neglect: Promising policy and practice. *Protecting Children*, 25(1), 63-74.
- Eckenrode, J. Laird, M. & Doris, J. (1993). School performance and disciplinary problems among abused and neglected children. *Developmental Psychology*, 29(1), 53-62.
- Elliott, K., & Urquiza, A. (2006). Ethnicity, culture, and child maltreatment. *Journal of Social Issues*, 62(4), 787-809.
- Elwell, F. W. (2002). *The Sociology of C. Wright Mills*, Retrieved September, 4, 2013, http://www.faculty.rsu.edu/~felwell/Theorists/Mills/index.html.
- English, D. J. (1997). Modified Maltreatment Classification System (MMCS). Retrieved from http://www.iprc.unc.edu/longscan/
- English, D. J., (1998). The extent and consequences of child maltreatment. *The Future of Children*, 8(1), 39-53.
- English, D. J., Thompson, R., Graham, J. C., & Briggs, E. C. (2005). Toward a definition of neglect in young children. *Child Maltreatment*, *10*(2), 190-206.
- Erickson, M. F., & Egeland, B. (2002). Child neglect. In J. Briere, L. Berliner, C. T. Hendrix, C. Jenny, & T. Reid (Eds.), *The APSAC Handbook on Child Maltreatment*, 2nd ed. (pp. 3-20). Thousand Oaks, CA: Sage Publications.
- Ewing, J. A. (1984). Detecting alcoholism: The CAGE Questionnaire. *The Journal of the American Medical Association*, 252, 1905-1907.
- Evans, S. E., Steel, A. L., & DiLillo, D. (2013). Child maltreatment severity and adult trauma symptoms: Does perceived social support play a buffering role?. *Child Abuse & Neglect*, *37(11)*, 934-943.
- Fang, X., Brown, D., Florence, C., & Mercy, J. (2012). The economic burden of child maltreatment in the United States and implications for prevention. *Child Abuse and Neglect*, *36*(2), 156-165.

- Fluke, J.D. (2008). Child protective services re-reporting and recurrence--context and considerations regarding research. *Child Abuse Neglect*, *32*(8):749-51.
- Fong, R. (2003). Children of neglect: When no one cares. London: Routledge.
- Fusco, R., & Rauktis, M.B. (2011). *Transracial mothering and maternal risk: Are mothers of biracial children different?* Unpublished manuscript, School of Social Work, University of Pittsburgh, Pittsburgh, Pennsylvania.
- Garland, A. F., Ellis-MacLeod, E., Landsverk, J. A., Ganger, W., & Johnson, I. (1998). Minority populations in the child welfare system. *American Journal of Orthopsychiatry*, 68(1), 142-146.
- Goeders, N. E. (2002). Stress and cocaine addiction. *Journal of Pharmacology and Experimental Therapeutics*, 301(3), 785-789.
- Goldman, J., Salus, M., Wolcott, D., & Kennedy, K. Y. (2003). A coordinated response to child abuse and neglect: The foundation for practice. Retrieved from https://www.childwelfare.gov/pubs/usermanuals/foundation/foundatione.cfm
- Gottlieb, B.H., & Bergen, A. E. (2010). Social support concepts and measures. *Journal of Psychosomatic Research*, 69(5), 511-520.
- Gracia, E. & Musitu, G. (2003). Social isolation from communities and child maltreatment a cross-cultural comparison. *Child Abuse & Neglect*, 27(2), 153-168.
- Green, B. L., Rockhill, A., & Furrer, C. (2006). Understanding patterns of substance abuse treatment for women involved with child welfare: The influence of the Adoption and Safe Families Act (ASFA). *American Journal of Drug and Alcohol Abuse*, 32(2), 149-176.
- Gregoire, K. A., & Schultz, D. J. (2001). Substance-abusing child welfare parents: treatment and child placement outcomes. *Child Welfare*, 80(4), 433-452.
- Grella, C. E., Hser, Y., & Huang, Y. (2006). Mothers in substance abuse treatment: Differences in characteristics based on involvement with child welfare services. *Child Abuse and Neglect*, 30(1), 55-73.
- Hacsi, T. (1995). From indenture to family foster care: A brief history of child placing. *Child Welfare* 74(1), 162-180.
- Hair, H. J. (2012). The purpose and duration of supervision, and the training and discipline of supervisors: What social workers say they need to provide effective services. *British Journal of Social Work*, 71, 12-23.

- Hall, L. (1983). *Social supports, everyday stressors, and maternal mental health*. Unpublished doctoral dissertation. University of North Carolina at Chapel Hill.
- Hall, L., Williams, C. A., & Greenber, R.S. (1985). Supports, stressors, and depressive symptoms in mothers of young children. *American Journal of Public Health*, 75(1), 518-521.
- Halpern, D. (2004). Social capital. Cambridge: Polity Press.
- Harknett, K. S., & Hartnett, C. S. (2011). Who lacks support and why? An examination of mothers' personal safety nets. *Journal of Marriage and Family*, 73(4), 861-875.
- Harris, M. S. (2014). *Racial disproportionality in child welfare*. New York: Columbia University Press.
- Harris, M. S., & Hackett, W. (2008). Decision points in child welfare: An action research model to address disproportionality. *Children and Youth Services Review*, 30(2), 199-215.
- Herrenkohl, T., & Herrenkohl, R. (2007). Examining the overlap and prediction of multiple forms of child maltreatment, stressors, and socioeconomic status: A longitudinal analysis of youth outcomes. *Journal of Family Violence*, 22(7), 553-562.
- Hiersteiner, C. (2004). Narratives of low-income mothers in addiction recovery centers: Motherhood and the treatment experience. *Journal of Social Work Practice in the Addictions*, 4(2), 51-64.
- Hill, R. B. (2008). An analysis of racial/ethnic disproportionality and disparity at the national, state, and county levels. *Seattle, WA: Casey-CSSP Alliance for Racial Equity in Child Welfare*.
- Hilyard, K. & Wolfe, D. (2002). Child neglect: Developmental issues and outcomes. *Child Abuse and Neglect*, 26(6-7), 679-695.
- Holden, E. W., & Banez, G. A. (1996). Child abuse potential and parenting stress within maltreating families. *Journal of Family Violence*, 11(1), 1-12.
- Howze, D. & Kotch, J. (1984). Disentangling life events, stress, and social support: Implications for the primary preventio of child abuse and neglect. *Child Abuse & Neglect*, 8(4), 401-409.
- Hunter, W. M., Cox, C. E., Teagle, S., Johnson, R. M., Mathew, R., Knight, E.D., Leeb, R.T., & Smith, J. B. (2003). Measures for Assessment of Functioning and Outcomes in Longitudinal Research on Child Abuse. Volume 2: Middle Childhood. Retrieved October, 12, 2010, http://www.iprc.unc.edu/longscan/

- Janzen, K. J., & Melrose, S. (2013). When the worst imaginable becomes reality: The experience of child custody loss in mothers recovering from addictions. *Janus Head*, 13(1), 172-213.
- Johnson, P. J. (2011). *Maternal History of Childhood Trauma, Parenting Stress and Home Environment Provided For Children* (Doctoral dissertation, Case Western Reserve University). Retrieved from file:///C:/Users/Downloads/case1291237005.pdf
- Jonson-Reid, M., Drake, B., & Kohl, P. L. (2009). Is the overrepresentation of the poor in child welfare caseloads due to bias or need? *Children and Youth Services Review*, 31(3), 422-427.
- Jonson-Reid, M., Drake, B., & Zhou, P. (2013). Neglect subtypes, race, and poverty individual, family, and service characteristics. *Child Maltreatment*, 18(1), 30-41.
- Kelley, S. J. (2002). Child maltreatment in the context of substance abuse. In J. E. B. Myers (Eds.). *The APSAC handbook on child maltreatment*, (2<sup>nd</sup> ed., pp. 105-117). Thousand Oaks, CA: Sage.
- Kemp, S. P., Marcenko, M. O., Hoagwood, K., & Vesneski, W. (2009). Engaging parents in child welfare services: Bridging family needs and child welfare mandates. *Child Welfare*, 88(1), 101-126.
- Kerwin, M. E., Giorgio, J., Steinman, R., & Rosenwasser, B. (2014). In their own voice: Mothers in drug treatment and their views on parenting, behavioral parent training, and barriers to engagement. *Journal of Social Work Practice in the Addictions*, 14(4), 338-358.
- Kotch, J. B., Browne, D. C., Dufort, V., & Winsor, J. (1999). Predicting child maltreatment in the first four years of life from characteristics assessed in the neonatal period. *Child Abuse & Neglect*, 23(4), 305-19.
- Kotch, J. B., Browne, D. C., Ringwalt, C. L., Stewart, P. W., Ruina, E., Holt, K., & Jung, J. W. (1995). Risk of child abuse or neglect in a cohort of low-income children. *Child Abuse & Neglect*, *19*(9), 1115-1130.
- Kotch, J.B., Smith, J., Margolis, B., Black, M.M., English, D., Thompson, R., Lee, L.-C., Taneja, G., & Bangdiwala, S.I. (2014). Does social capital protect against the adverse behavioral outcomes of child neglect? *Child Abuse Review*, 23(4), 246-261.
- Krause, N., & Jay, G. (1994). What do global health items measure? *Medical Care*, 9(7), 930-942.
- Kubiak, S. P. (2004). The effects of PTSD on treatment adherence, drug relapse, and criminal recidivism in a sample of incarcerated men and women. *Research on Social Work Practice*, 14(6), 424-433.

- Kutner, M. H., Nachtsheim, C. J., Neter, J., & Li, W. (2005). *Applied Linear Statistical Models* (5<sup>th</sup> ed). New York: McGraw Hill.
- Ladd-Taylor, M. (1994). *Mother-work: Women, child welfare, and the state, 1890-1930.* Champaign: University of Illinois Press.
- Lakey, B., & Cohen, S. (2000). Social support theory and measurement. *Social support measurement and intervention: A guide for health and social scientists*. New York: Oxford.
- Lam, W. K, Wechsberg, W., & Zule, W. (2004). African–American women who use crack cocaine: A comparison of mothers who live with and have been separated from their children. *Child Abuse and Neglect*, 28(11), 1229-1247.
- Langford, C. P., Bowsher, J., Maloney, J. P., & Lillis, P. P. (2008). Social support: A conceptual analysis. *Journal of Advanced Nursing*, 25(1), 95-100.
- Lapore, S., Evans, G., & Schneider, M. (1991). Dynamic role of social support in the link between chronic stress and psychological distress. *Journal of Personality and Social Psychology*, 61(6), 899-909.
- Lazarus, R. S. (1998). Fifty years of the research and theory of RS Lazarus: An analysis of historical and perennial Issues. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc, Publishers.
- Lazarus, R. S. (2000). Toward better research on stress and coping. *American Psychologist*, 55(6), 665-673.
- Lee, B. J., & Goerge, R. M. (1999). Poverty, early childbearing, and child maltreatment: A multinomial analysis. *Children and Youth Services Review*, 21(9), 755-780.
- Leiter, J., & Johnsen, M. C. (1994). Child maltreatment and school performance. *American Journal of Education*, (102)2, 154-189.
- Lepore, S. J., Evans, G. W., & Zeidner, M. (1996). *Handbook of coping: Theory, research, applications*. Oxford, England: John Wiley & Sons.
- Leshner, A. I. (1997). Addiction is a brain disease, and it matters. *Science*, 278(5335), 45-47.
- Lewis, L. M. (2004). Culturally appropriate substance abuse treatment for parenting African American women. *Issues in Mental Health Nursing*, 25(5), 451-472.
- Libby, A. M., Orton, H. D., Barth, R. P., Webb, M. B., Burns, B. J., Wood, P., & Spicer, P. (2006). Alcohol, drug, and mental health specialty treatment services and race/ethnicity: A national study of children and families involved with child welfare. *American Journal of Public Health*, 96(4), 628-631.

- Lindsey, M.A., Gilreath, T.D., Thompson, R., Graham, J.C., Hawley, K.M., Weisbart, C., Browne, D., & Kotch, J.B. (2012). Influence of caregiver network support and caregiver psychopathology on child mental health need and service use in the LONGSCAN study. *Children and Youth Services Review, 34*(5), 924-932.
- MacKenzie, M. J., Kotch, J. B., & Lee, L. C. (2011). Toward a cumulative ecological risk model for the etiology of child maltreatment. *Children and youth services review*, *33*(9), 1638-1647.
- Mackintosh, V. H., Myers, B. J., & Kennon, S. S. (2006). Children of incarcerated mothers and their caregivers: Factors affecting the quality of their relationship. *Journal of Child and Family Studies*, 15(5), 579-594.
- Manly, J. T., Oshri, A., Lynch, M., Herzog, M., & Wortel, S. (2013). Child neglect and the development of externalizing behavior problems associations with maternal drug dependence and neighborhood crime. *Child maltreatment*, 18(1), 17-29.
- Marcenko, M. O., Hook, J. L., Romich, J. L., & Lee, J. S. (2012). Multiple jeopardy: Poor, economically disconnected, and child welfare involved. *Child Maltreatment*, 17(3), 195-206.
- Marcenko, M. O., Kemp, S. P., & Larson, N. C. (2000). Childhood experiences of abuse, later substance use, and parenting outcomes among low-income mothers. *American Journal of Orthopsychiatry*, 70(3), 316-326.
- Marcenko, M. O., Lyons, S. J., & Courtney, M. (2011). Mothers' experiences, resources and needs: The context for reunification. *Children and Youth Services Review*, 33(3), 431-438.
- Marsh, J. C., D'Aunno, T. A., & Smith, B. D. (2002). Increasing access and providing social services to improve drug abuse treatment for women with children. *Addiction*, 95(8), 1237-1247.
- Marsh, J. C., Smith, B. D., & Bruni, M. (2011). Integrated substance abuse and child welfare services for women: A progress review. *Children and Youth Services Review*, 33(3), 466-472.
- Marsiglia, F. F. & Kulis, S. (2009). Diversity, oppression, and change. Chicago: Lyceum.
- Marsland, A. L., Bachen, E. A., Cohen, S., & Manuck, S. B. (2001). *Handbook of Health Psychology*. New Jersey: Erlbaum.
- Marts, E. J., Lee, E. K. O., McRoy, R., & McCroskey, J. (2008). Point of engagement: Reducing disproportionality and improving child and family outcomes. *Child Welfare*, 87(2), 335-358.

- McEwen, B. S. (2012). Brain on stress: How the social environment gets under the skin. *Proceedings of the National Academy of Sciences, 109*(Supplement 2), 1180-1185.
- McPherson, A. V., Lewis, K. M., Lynn, A. E., Haskett, M. E., & Behrend, T. S. (2009). Predictors of parenting stress for abusive and nonabusive mothers. *Journal of Child and Family Studies*, 18(1), 61-69.
- McSherry, D. (2007). Understanding and addressing the "neglect of neglect": Why are we making a mole-hill out of a mountain. *Child Abuse & Neglect*, *31*(6), 607-614.
- Merriam-Webster, Inc. (2003). Merriam-Webster's collegiate dictionary: Merriam-Webster.
- Mersky, J. P., Berger, L. M., Reynolds, A. J., & Gromoske, A. N. (2009). Risk factors for child and adolescent maltreatment a longitudinal investigation of a cohort of inner-city youth. *Child Maltreatment*, *14*(1), 73-88.
- Moreau, M. J. (1990). Empowerment through advocacy and consciousness-raising: Implications of a structural approach to social work. *Journal of Social Welfare*, 17, 53.
- Mullaly, R. P. (1997). *Structural social work: ideology, theory, and practice*. London: Oxford University Press.
- Mullaly, R. P. (2002). *Challenging oppression: A critical social work approach*. London: Oxford University Press.
- Mullaly, R. P. (2007). *The new structural social work: Ideology, theory, practice*. London: Oxford University Press.
- Nair, P., Schuler, M. E., Black, M. M., Kettinger, L., & Harrington, D. (2003). Cumulative environmental risk in substance abusing women: early intervention, parenting stress, child abuse potential and child development. *Child Abuse & Neglect*, 27(9), 993.
- Najavits, L. M. (2002). Seeking safety: A treatment manual for PTSD and substance abuse. New York: Guilford Press.
- Najavits, L. M. (2007). Seeking Safety: An evidence-based model for substance abuse and trauma. Therapist's guide to evidence based relapse prevention: Practical resources for the mental health professional, 141-167.
- Najavits, L. M. (2009). Psychotherapies for trauma and substance abuse in women review and policy implications. *Trauma, Violence, & Abuse, 10*(3), 290-298.
- Nelson, R. H., Mitrani, V. B., & Szapocznik, J. (2000). Applying a family-ecosystemic model to reunite a family separated due to child abuse: A case study. *Contemporary Family Therapy*,

- 22(2), 125-146.
- Newacheck, P. W., & Stoddard, J. J. (1994). Prevalence and impact of multiple childhood chronic illnesses. *Journal of Pediatrics*, 124(1), 40-47.
- Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J., & Vos, T. (2012). The long-term health consequences of child physical abuse, emotional abuse, and neglect: a systematic review and meta-analysis. *PLOS Medicine*, *9*(11), 101-134.
- Ondersma, S. J. (2002). Predictors of neglect within low-SES families: the importance of substance abuse. *American Journal of Orthopsychiatry*, 72(3), 383.
- O'Neill Murray, K., & Gesiriech, S. (2004). A brief legislative history of the child welfare system: A Pew Commission on Children in Foster Care research report. Retrieved 10/12/10 from http://pewfostercare.org/research/docs/Legislative.pdf on May 5, 2004.
- Pagliaro, L. (2000). Substance use among women: A reference and resource guide. London: Routledge.
- Panchanadeswaran, S., & Jayasundara, D. (2012). Experiences of drug use and parenting among women in substance abuse treatment: An exploratory study. *Journal of Human Behavior in the Social Environment*, 22(8), 971-987.
- Pecora, P. J. (2000). *The child welfare challenge: Policy, practice, and research.* New York: Aldine de Gruyter.
- Pecora, P. J., & Whittaker, J. K. (2009). *The Child Welfare Challenge: Policy, Practice, and Research*. New York: Aldine de Gruyter.
- Pieterse, A. L., Carter, R. T., & Ray, K. V. (2013). Racism-Related Stress, General Life Stress, and Psychological Functioning Among Black American Women. *Journal of Multicultural Counseling and Development*, 41(1), 36-46.
- P.L.93-247. Child Abuse Prevention Act and Treatment Act. Legislative History of Public Law 93-247. (Enacted).
- P.L.96-272. Adoption Assistance and Child Welfare Act of 1980. Legislative History of Public Law 96-272. (Enacted).
- P.L.99-570. Anti-Drug Abuse Act Legislative History of Public Law 99-570. (Enacted).
- P.L.105-89 105th Congress: The Adoption and Safe Families Act of 1997. Legislative History of Public Law 105-89. (Enacted).
- P.L.112-34. Family Preservation and Support Services Program Act Legislative History of

- Public Law 112-34. (Enacted).
- Pollack, S. (2009). "You can't have it both ways": Punishment and treatment of imprisoned women. *Journal of Progressive Human Services*, 20, 112-128.
- Putnam-Hornstein, E., Needell, B., King, B., & Johnson-Motoyama, M. (2013). Racial and ethnic disparities: A population-based examination of risk factors for involvement with child protective services. *Child Abuse & Neglect*, *37*(1), 33-46.
- Putnam-Hornstein, E., Needell, B., & Rhodes, A. E. (2013). Understanding risk and protective factors for child maltreatment: The value of integrated, population-based data. *Child Abuse & Neglect*, 37(2), 116-119.
- Rani, N. I. (2006). Child care by poor single mothers: Study of mother-headed families in India. *Journal of Comparative Family Studies*, *37*(1), 75.
- Reid-Merritt, P. (2010). Righteous self determination: The Black social work movement in America. Baltimore, MD: Inprint Editions.
- Reisch, M. (2002). The road not taken: A history of radical social work in the United States. New York: Routledge.
- Respler-Herman, M., Mowder, B. A., Yasik, A. E., & Shamah, R. (2012). Parenting beliefs, parental stress, and social support relationships. *Journal of Child and Family Studies*, 21(2), 190-198.
- Roberts, D. (2002). Shattered bonds: The color of child welfare. *Children and Youth Services Review*, 24(11), 877-880.
- Roberts, D. E. (2008). The racial geography of child welfare: Toward a new research paradigm. *Child Welfare*, 87(2), 125-150.
- Rogosch, F. A., Dackis, M. N., & Cicchetti, D. (2011). Child maltreatment and allostatic load: Consequences for physical and mental health in children from low-income families. *Development and Psychopathology*, 23(4), 1107-1124.
- Ross, C. N., Blanc, H. M., McNeil, C. B., Eyberg, S. M., & Hembree-Kigin, T. L. (1998). Parenting stress in mothers of young children with oppositional defiant disorder and other severe behavior problems. *Child Study Journal*, *28*(2), 93-110.
- Runyan, D. K., Curtis, P. A., Hunter, W. M., Black, M. M., Kotch, J. B., Bangdiwala, S., & Landsverk, J. (1998). Longscan: A consortium for longitudinal studies of maltreatment and the life course of children. *Aggression and Violent Behavior*, *3*(3), 275-285.

- Saluja, G., Kotch, J. & Lee, L. (2003). Effects of child abuse and neglect: Does social capital really matter? *Archives of Pediatrics & Adolescent Medicine*, 157(7), 681-686.
- Schumacher, J., Slep, A., & Heyman, R. (2001). Risk factors for child neglect. *Aggression and Violent Behavior*, 6(2), 231-254.
- Sedlak, A.J., & Broadhurst, D.D. (1996). *Executive summary of the third national incidence study of child abuse and neglect (NIS-3)*. U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth, and Families, National Center on Child Abuse and Neglect.
- Sedlak, A.J., Mettenburg, J., Basena, M., Peta, I., McPherson, K., & Greene, A. (2010). *Fourth national incidence study of child abuse and neglect (NIS-4)*. Washington, DC: US Department of Health and Human Services. Retrieved from http://www.acf.hhs.gov/sites/default/files/opre/nis4\_report\_congress\_full\_pdf\_jan2010.pdf.
- Seagull, E. (1987). Social support and child maltreatment: A review of the evidence. *Child Abuse and Neglect*, 11(1), 41-52.
- Selye, H. (1978). On the real benefits of eustress. *Psychology Today*, 11, 60-70.
- Sepa, A., Frodi, A., & Ludvigsson, J. (2004). Psychosocial correlates of parenting stress, lack of support and lack of confidence and security. *Scandinavian Journal of Psychology*, 45(2), 169-179.
- Shaham, Y., Erb, S., & Stewart, J. (2000). Stress-induced relapse to heroin and cocaine seeking in rats: A review. *Brain Research Reviews*, *33*(1), 13-33.
- Sheppard, M. (2009). Social support use as a parental coping strategy: Its impact on the outcome of child and parenting problems: A six-month follow-Up. *British Journal of Social Work*, 39(8), 1427-1446.
- Sinha, R. (2001). How does stress increase risk of drug abuse and relapse? *Psychopharmacology*, 158(4), 343-359.
- Sinha, R. (2008). Chronic stress, drug use, and vulnerability to addiction. *Annals of the New York Academy of Sciences*, 1141(1), 105-130.
- Slack, K. S., Kim, B., Yang, M. Y., & Berger, L. M. (2014). The economic safety net for low-income families with children. *Children and Youth Services Review*, 46(9), 213-219.
- Solomon, P. (2004). Peer support/peer provided services underlying processes, benefits, and critical ingredients. *Psychiatric Rehabilitation Journal*, 27(4), 392.

- Sperry, D. M., & Widom, C. S. (2013). Child abuse and neglect, social support, and psychopathology in adulthood: A prospective investigation. *Child Abuse & Neglect*, *37*(6), 415-425.
- Spilsbury, J. C., & Korbin, J. E. (2013). Social networks and informal social support in protecting children from abuse and neglect: community ties and supports promote children's safety. *Child Abuse & Neglect*, *37*, 8.
- Stewart, C., Kirisci, L., Long, A. L., & Giancola, P. R. (2014). Development and psychometric evaluation of the Child Neglect Questionnaire. *Journal of Interpersonal Violence*, 21, 1552-1570.
- Stith, S. M., Liu, T., Davies, L. C., Boykin, E. L., Alder, M. C., Harris, J. M., & Dees, J. (2009). Risk factors in child maltreatment: A meta-analytic review of the literature. *Aggression and Violent Behavior*, 14(1), 13-29.
- Stoltenborgh, M., Bakermans-Kranenburg, M. J., & van Ijzendoorn, M. H. (2013). The neglect of child neglect: a meta-analytic review of the prevalence of neglect. *Social Psychiatry and Psychiatric Epidemiology*, 48(3), 345-355.
- Taylor, J., Braxter, B., Doswell, W. & Tull, E. (2007). Holistic theory of palliative risk in persons of African ancestry. Unpublished manuscript, Department of Africana Studies, Department of Nursing, University of Pittsburgh, Pittsburgh, PA.
- Taylor, R. D., Roberts, D., & Jacobson, L. (1997). Stressful life events, psychological well-being, and parenting in African American mothers. *Journal of Family Psychology*, 11(4), 436.
- Taylor, S. E., Sherman, D. K., Kim, H. S., Jarcho, J., Takagi, K., & Dunagan, M. S. (2004). Culture and social support: Who seeks it and why? *Journal of Personality and Social Psychology*, 87(3), 354.
- Taylor, Z. E., Larsen-Rife, D., Conger, R., Widaman, K. F., & Cutrona, C. E. (2010). Life stress, maternal optimism, and adolescent competence in single mother, African American families. *Journal of Family Psychology*, 24(4), 468-477.
- Taylor, S. E. (2011). Social support: A Review. In M.S. Friedman. *The Handbook of Health Psychology*. New York: NY: Oxford University Press. pp. 189–214.
- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior*, 52(2), 145-161.
- Thoits, P. (1995). Stress, coping, and social support processes: Where are we? What next? *Journal of Health and Social Behavior*, *35*, 53-79.

- Thompson, R.A. (1995). Preventing child maltreatment through social support: A critical analysis. Thousand Oaks: Sage Publications, Inc.
- Thompson, R. (2010). Maltreatment and mental health care: Focusing on neglect. *Psychiatric Services*, 61, 96.
- Thomas, R., & Zimmer-Gembeck, M. J. (2011). Accumulating evidence for parent—child interaction therapy in the prevention of child maltreatment. *Child Development*, 82(1), 177-192.
- Trattner, W. (1999). From poor law to welfare state: A history of social welfare in America. 6<sup>th</sup> edition. New York: Free Press.
- Trochim, W. M. (2006). Time in research. *Research Methods Knowledge Base*. Retrieved from http://www.socialresearchmethods.net/kb/timedim.php
- Ungar, M., Liebenberg, L., & Ikeda, J. (2012). Young people with complex needs: Designing coordinated interventions to promote resilience across child welfare, juvenile corrections, mental health and education services. *British Journal of Social Work*, 44(3), 675-693.
- U.S. Census Bureau. (2014). Demographic profiles. Retrieved from http://2014.census.gov/2014census/data/index.php
- U.S. Department of Health and Human Services Administration for Children and Families. (2007). *Child maltreatment summary*. Retrieved from http://www.childwelfare.gov/pubs/factsheets/canstats.cfm
- U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2015). *Child maltreatment 2013*. Retrieved from http://www.acf.hhs.gov/programs/cb/research-datatechnology/statistics-research/child-maltreatment.
- U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families. (2015). *Preliminary estimates for fiscal year 2013*. Washington D.C.: Author. Retrieved from www.acf.hhs.gov/programs/cb.
- U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families. (2010). *Preliminary estimates for fiscal year 2009*. Washington D.C.: Author. Retrieved from www.acf.hhs.gov/programs/cb.
- U.S. Department of Health and Human Services, Administration for Children and Families. (2009). *Protecting children in families affected by Substance Use Disorders*. Washington D.C.: Author. Retrieved from http://www.childwelfare.gov/pubs/fusermanuals/substanceuse/substanceuse.pdf.

- U.S. Department of Health and Human Services Administration for Children and Families. (2009). *Study of the National Incidence and Prevalence of Child Abuse and Neglect (NIS-4)*. Washington D.C.: Author.
- U.S. Department of Health and Human Services. Children's Bureau, Office on Child Abuse and Neglect. (2009). *The role of Child Protective Services when Substance Use Disorders are identified*. Author. Washington D.C. Retrieved from http://www.childwelfare.gov/pubs/usermanuals/substanceuse/chaptersix.cfm.
- U.S. Department of Health and Human Services. (2013). Office of Disease Prevention and Health. Promotion Health People 2020. Retrieved from https://www.healthypeople.gov/.
- Vaithianathan, R., Maloney, T., Putnam-Hornstein, E., & Jiang, N. (2013). Children in the public benefit system at risk of maltreatment: Identification via predictive modeling. *American Journal of Preventive Medicine*, 45(3), 354-359.
- Veistilä, M. (2008). Substance-abusing mothers, their children and child protection. Narratives and reflections. *Helda*, *132*(1), 4770-4790.
- Velez, M. L., Jansson, L. M., Montoya, I. D., Schweitzer, W., Golden, A., & Svikis, D. (2004). Parenting knowledge among substance abusing women in treatment. *Journal of Substance Abuse Treatment*, 27(3), 215-222.
- Wang, C. T., & Holton, J. (2007). *Total estimated cost of child abuse and neglect in the United States*. Chicago: Prevent Child Abuse America.
- Warren, J. I., Stein, J. A., & Grella, C. E. (2007). Role of social support and self-efficacy in treatment outcomes among clients with co-occurring disorders. *Drug and Alcohol Dependence*, 89(2-3), 267-274.
- Wekerle, C., & Wolfe, D. A. (2003). Child maltreatment. New York: Guilford Press.
- Widom, C., DuMont, K., & Czaja, S. (2007). A prospective investigation of major depressive disorder and comorbidity in abused and neglected children grown up. *Journal of General Psychiatry*, 64(1), 49-56.
- Wilke, D. J., Kamata, A., & Cash, S. J. (2005). Modeling treatment motivation in substance-abusing women with children. *Child Abuse & Neglect*, 29(11), 1313-1323.
- Williams D.R., Collins C. (1995). U.S. Socioeconomic and racial differences in health: Patterns and explanations. *Annual Social Work Review*, 21(1). 349-386
- Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health socio-economic status, stress and discrimination. *Journal of Health Psychology*, 2(3), 335-351.

- Wilson, W. J. (2012). *The truly disadvantaged: The inner city, the underclass, and public policy, second edition*. Chicago: University of Chicago Press.
- Workers, N. A. (2008). NASW Code of Ethics (Guide to the Everyday Professional Conduct of Social Workers). *Washington, DC: NASW*.
- Wright, M. (2002). *More voice, new stories: King County, Washington's first 150 years.* Seattle, WA: University of Washington Press.
- Young, I. M. (2009). Five faces of oppression. New York: Routledge.
- Young, N. Gardner, S. (2002). Navigating the Pathways: Lessons and Promising Practices in Linking Alcohol and Drug Services with Child Welfare. SAMHSA Publication No. SMA 02-3752. Rockville, MD: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration.
- Zinn, A., DeCoursey, J., Goerge, R., & Courtney, M. (2006). A study of placement stability in *Illinois*. Chicago: Chapin Hall Center for Children.