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**PREDICTORS OF RISK FOR CHILD NEGLECT AMONG EXPECTANT
FIRST-TIME MOTHERS AND THEIR PARTNERS**

By

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B.A. Martin Methodist College, Pulaski, TN., 1990
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M.S.W. University of Denver, Denver, CO., 1997

Dissertation
Submitted to the Faculty of the
Graduate School of the University of Louisville
In Partial Fulfillment of the Requirements
For the Degree of

Doctor of Philosophy

Kent School of Social Work
University of Louisville
Louisville, Kentucky

and

College of Social Work
University of Kentucky
Lexington, Kentucky

May, 2010

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A Dissertation Approved on

March 31st, 2010

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DEDICATION

Dedicated to my GOD who gives me power every hour to victory for He is my strength.

To my husband, TAPIWA N. MUCHERERA who has been there with me for twenty-three years: I love you and thank you very much for your endurance and patience. To my children Shamiso Cassandra, Anesu Nicodimus, and Ruvimbo Tracy Elizabeth Mucherera who encouraged me along the way. My niece, Tisha Rufaro Makuto for being a joy along the way. My parents, Samuel Chamunoda Makuto and Elizabeth Mutanga Makuto, installed the need for education within my life. A special sister whom I have known for twenty years, ANNE REED for her dedication to helping me. Cheri Cowell for helping with this project. Lori Clem, for helping in the long process of data collecting.

Mazvita to Virginia, Geoffrey, and my other children, Simba, Kuda, and Nyasha Kagoro. Virginia made this process easier with her constant encouragement and early morning prayers. I also dedicate this dissertation to my grandfather, Amos Makuto who is my spiritual leader and whose faith has sustained me all my life. To my mother-in-law, Tracy Mucherera, whose song inspired me on those days I wanted to give up.

A special thank you is extended to the SOUTHERN REGIONAL EDUCATION BOARD (SREB) for the dedication to the education of minority students. I would not have done this without your help. Dr. Huber, thank you for encouraging me to apply for this fellowship.

ACKNOWLEDGEMENTS

I would like to thank the Chair of my Committee, Dr. Bibhuti Sar who has been wonderful in his support, reading, editing, and mentoring from miles away. I thank Dr. Ruth Huber, for her ongoing guidance and organization skills which made this process smoother. I thank Dr. Linda Bledsoe for her wonderful support with the statistics which is the bane of my existence. I think at the end there I thought I was becoming an expert in statistics – so many thanks. I thank Dr. Anita Barbee for her extensive knowledge within child welfare which has helped in the input of this document. I thank, Dr. James Holsinger for his continued support and gentle reminders to persevere.

I also give special thanks to all the couples who took the time to answer the surveys for this project. I would like to thank my husband who believed that I could do this, taking care of all the family responsibilities so I could go to school full-time. I would like to thank my children for their support, patience, and endurance when I was too busy to be with them. I would like to thank the Asbury Seminary community, friends, and faculty, whom I stayed with during my research collection period in Kentucky and some who took care of my kids during this period of study.

Many thanks to the Kent School family community, Ms. Norma Niev and others for being there with encouragement and support which I needed to get this done. SREB - the support and encouragement they provided for the five years.

ANALOGY OF PREVENTING A PROBLEM FROM OCCURRING

It is impossible for a doctor in an emergency room to try to find a cure for a car accident victim who went through a windshield, when one of the solutions is to use the seatbelt.

Are we not tired of treating the symptoms instead of attacking the problem?

(Prevention is the KEY).

ABSTRACT

PREDICTORS OF RISK FOR CHILD NEGLECT AMONG EXPECTANT FIRST-TIME MOTHERS AND THEIR PARTNERS

Bertha M. Mucherera

May 8, 2010

The study purpose was three-fold: finding a point of entry for primary prevention of child neglect, assessing for child neglect risk level for both first-time mothers and their partners, and individuals opinions about establishing and administering a multi-dimensional family assessment tool prior to birth. This study utilized a non-experimental, cross-sectional design to survey 250 first-time expectant mothers and their partners, attending Lamaze Classes at a public hospital in Lexington, Kentucky. Participants completed a 97-item questionnaire comprised of eleven different measures identifying individual personal (Attachment Theory) and situational characteristics (Ecological Theory).

Results indicated that this particular population was predominately White Caucasian first-time expectant mothers and partners, the partners were at greater risk of child neglect than first-time mothers. First-time mothers were at low risk of child neglect but at higher risk of being unable to recognize situations indicative of child neglect. Preoccupied first-time mothers were more likely to recognize child neglect than fearful mothers. Participants with history of depression were better able to recognize scenarios of child neglect. Partners were less likely to possess knowledge addressing child

development issues at ages 3 and 6 months. Partners, who were parented in a permissive manner exhibited more problems in identifying incidences of child neglect. The minority and non-married partners were more at-risk of child neglect. Participants were not particularly favorable regarding passage of a law mandating the assessment of child neglect prior to birth, even though they indicated they would participate if a law was enacted.

Of the 22 predictor variables, three (opinions about babies, race, and physical health) and two (race and marital status) significantly contributed to the predictive model for risk of child neglect for the first-time expectant mothers and their partners respectively. One variable (history of depression) and two (history of depression and parented father permissive) significantly contributed to the predictive model for awareness regarding recognition of child neglect for mothers and partners respectively. This research study identified some of the predictive factors that should be considered in designing and initiating preventive services to address child neglect.

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CHAPTER I

PROBLEM STATEMENT

The neglect of children has always been one of America's most pressing social problems, although it has been hard to identify, define, and prevent before it actually occurs. However, child neglect was not separately addressed in any federal laws until 1974 (U.S. Department of Health and Human Services, [DHHS], 2002) although human service providers had been dealing with it for decades. In 1962, Kempe's study about the *battered child syndrome* brought the physical and sexual abuse of children and adolescents to the public's attention. Most states then enacted laws that required mandatory reporting of child maltreatment to welfare agencies issues of child maltreatment (DHHS, 2004). In 1964, Lorentine Young differentiated child neglect from the general definition of child maltreatment and defined neglect as an act of omission in providing for a child's basic needs. Subsequently, child neglect was incorporated within the definition of child maltreatment in the enactment of the Child Abuse and Prevention Treatment Act (CAPTA) in 1974. In 1997, the enactment of the Adoption and Safe Families Act (ASFA) resulted in the separation of the definition of child neglect from the definitions of physical and sexual abuse. Child neglect was now defined as the parent's failure to act in providing for a child's needs in terms of supervision, clothing, food, education, medical care, mental health, and emotional health (Berger, 2004; Bolen, 2005; Crosson-Towers, 2002, Rose & Meezan, 1996; Young, 1964).

Each state has followed the federal government's definition in enacting its own definition of neglect. Kentucky's definition comes from a Kentucky Revised Statute (KRS). The summarized definition of child neglect as written into the statute is

a child whose health or welfare is threatened with harm when his parent, guardian, or other person exercising custodial control or supervision of the child inflicts or allows to be inflicted, creates or allows to be created, engages in patterns of conduct that render the parent incapable of caring for the immediate and ongoing needs, continuously, or repeatedly fails or refuses to provide essential parental care and protection, commits or allows to be committed acts of a sexual nature, abandons or exploits, does not provide adequate care, supervision, food, clothing, shelter, and educational or medical care for the child.

(KRS 600.020, 1, Sections a-i)

Despite legislated definitions and guidelines, educators, legislators, researchers, practitioners, and the general public do not agree on a common definition (Bensley, Wynkoop-Simmons, Ruggles, Pitivine, Harris, Allen, & Williams 2004; Lawrence & Irvine, 2004, NAIC, 2001). Dubowitz, et al. (2005) conceptualized neglect on a continuum of 12 types of children's basic needs not being adequately met based on physical, psychological, and environmental factors. Cohen (1999) identified child neglect as consisting of seven subtypes: abandonment, education, emotion, health care, nutrition, physical, and supervision. Tromce (1996) proposed six subtypes: supervision, nutrition, clothing and hygiene, physical health care, mental health care and developmental education. Straus and Kantor (2004) suggested a definition of neglect as the caregivers'

failure to act in providing basic needs for a child, based on the culture of that particular society.

Assessing child neglect is quite complicated due to the complex issues involved in determining what actually constitutes neglect. This problem exists because it is difficult to decide whether to define neglect based on the caregiver's action or on the child's experience (Dubowitz, Pitts, Litrownik, Cox, Runyan, & Black, 2005; Slack, Holl, Altenbernd, McDaniel, & Stevens, 2003; Zuravin, 1999). Not only is child neglect difficult to define, it is also difficult to observe and quantify. Thus, individuals working with families do not have uniform tools for assessing child neglect, resulting in inadequate assessments which may lead to chronic neglect situations for children.

Magnitude of Child Neglect

The magnitude of child neglect cases in the United States is staggering. According to 2006 national statistics, 3.3 million child abuse and neglect reports were made to child welfare agencies in the United States, for a total of about 6 million children (DHHS, 2006). About 66.3% of these 6 million children were substantiated for being neglected. The younger children in this group had higher percentages of neglect maltreatment: 72.2% of children under the age of one were neglected and 72.9% of children between 1 and 3 were neglected. In 2006, the population of children under three was 12,113,299. This means that 25% of the children in the United States have reports of neglect. Table 1 shows the national and Kentucky's statistics of child maltreatment in 2006. In Kentucky, 1.7% of the total child population was substantiated as neglected as compared to 0.78% nationally – over twice the national percentage (DHHS, 2006).

Table 1**Child Maltreatment Data for Child Neglect 2006**

<i>NATIONAL Child Population</i> 73,393,682		<i>KENTUCKY Child Population</i> 999,531	
<i>905,000 victims of Maltreatment</i>		<i>19,833 victims of Maltreatment</i>	
Neglect + medical	66.3% or 567,787	Neglect + medical	87.2% or 17,299
Other maltreatment	33.7% or 477,287	Other maltreatment	12.8% or 2,534
<i>Perpetrators – Type</i>		<i>Perpetrators – Type</i>	
Parents	86.70%	Parents	82.0%
Others	13.30%	Others	18.0%
<i>Parental Perpetrators – Relationship</i>		<i>Parental Perpetrators - Relationship</i>	
Biological Parents	91.50%	Biological Parents	94.0%
Step-parents	4.20%	Step-parents	5.7%
Adoptive Parents	.07%	Adoptive Parents	0.5%
<i>National Parental Perpetrators – Gender</i>		<i>Perpetrators – Younger than 30 years</i>	
Women	57.90%	Women	45.3%
Men	42.10%	Men	35.1%
<i>Age of Victims – National</i>		<i>Age of Victims - Kentucky</i>	
0 - 1	11.40%	0 - 1	11.8%
1 - 3	19.60%	1 - 3	21.5%
4 - 7	24.20%	4 - 7	25.6%
7 - 18	44.80%	7-18	41.1%
<i>National: Abuse in relation to Child Fatalities 2006</i>		<i>Child Fatalities Rates for 0 – 3 years old</i>	
Neglect	41.10%	National	Kentucky
Medical Neglect	1.90%	2.04 per 100,000	3.6 per 100,000
Other maltreatment	57.00%	children	children

DHHS – Child Maltreatment 2006

However, a recent release by the Every Child Matters Education Fund (2009) states that according to the DHHS, in 2007 Kentucky had the highest rate of children's death from maltreatment at 4.09 per 100,000 with the next leading state being South Dakota at 4.08 per 100,000. This puts KY's children at higher risk of child abuse and neglect in the nation and brings to question what needs to be done in order to reduce these numbers.

Explanation for Child Neglect Risk Factors

The risk factors for child neglect range from individual, familial, community, to societal factors. Many practitioners and researchers are now advocating for a multiple risk factor explanation for the causes of child maltreatment/neglect. By adopting such an approach, multiple risks that might precipitate the onset of child neglect can be identified (Bethea, 1999; Hay & Jones, 1994; Mulryan, 2000).

Individual Risk Factors

Child characteristics. Individual factors that may place a child at risk for neglect include the child being born prematurely, with developmental delays or physical disabilities for which the caregivers are unable to adequately provide care (Berger, 2004; Bethea, 1999; Bolen, 2005; Crosson-Towers, 2002; Thomas, et al, 2003). These factors do not mean that the child is the cause of the neglect, but that these factors may cause the caregivers/parents to be stressed, resulting in caregivers' neglectful behaviors. With the public perception of perfection (Barbie doll beauty and built in biological drive to procreate offspring who are likely to survive), health is correlated with neonate features and beauty while lack of health is correlated with malformation, especially in the facial

area; some parents are repulsed by their child's disabilities to the extent that they subsequently fail to provide adequate care.

The failure-to-thrive syndrome that usually results from lack of education regarding proper feeding for infants may place babies at risk for being neglected. Other issues include children born with a prenatal drug addiction (stemming from parents' personal drug use) or colic - biological problems that can cause children to be disruptive, thereby causing caregivers to be stressed.

For older children, risk factors might involve behaviors that parents are unable to handle, ranging from truancy to depression. Other children might have attachment problems resulting from failure to bond with their caregivers. These issues are also exacerbated by related parental or familial factors that might result in caregivers' inability to handle stressors that might result in child neglect.

Caregiver characteristics. Similarly, caregivers' own physical and mental disabilities might constitute the risk factors which precipitate the onset of neglect (Berger, 2004; Bethea, 1999; Bolen, 2005; Crosson-Towers, 2002; Thomas, Leicht, Hughes, Madigan, & Dowell 2003). Goldman, Salus, Wolcott, and Kennedy (2003) listed parental risk factors such as low self-esteem, poor impulse control, depression, anxiety, antisocial behavior, personal history of childhood abuse/neglect, current substance abuse, young age, and limited education.

Familial Risk Factors

Familial risk factors include limited or lack of financial resources, homelessness, and ongoing domestic violence in the family (Berger, 2004; Bethea, 1999; Crosson-Towers, 2002; Hines, 2004; MacMillian, 2005; Ruggiero, McLeer, & Dixon, 2000;

Thomas, et al., 2003). It is often difficult to separate caregiver risk factors from familial risk factors since each can contribute to the other. For instance, parents with limited financial resources have problems in providing adequate housing. Perhaps, this then might result in girls and boys sharing rooms, which in turn might lead to sexual abuse incidents and would be considered an act of neglect by the parent. Financial inability to afford daycare services can result in neglectful child supervision, provided either by inadequate babysitters who abuse the child, or even altogether leaving the children unattended.

Another example is parents' depression, or substance and drug abuse issues resulting in unsanitary housing for babies (especially those with asthma or other chronic medical problems), lice, impetigo, chronic stomach problems from unhealthy food preparation, and lack of adequate healthy meals for children. Other issues involve parental mental or physical disabilities which affect their ability to provide the necessary adequate care for their children.

Finally, domestic violence sometimes perpetuates a cycle of violence, with children witnessing and later mimicking their parents' fighting. The children might actually be caught in the crossfire of domestic violence which constitutes neglect on the part of the parents.

Community/Resource Risk Factors

Community risk factors consist of conditions such as lack of adequate affordable housing and medical facilities, and limited/no health insurance. The lack of support from social services agencies and extended family support also contributes to stress of the parent(s) which might result in parents neglecting their children (Crosson-Towers, 2002;

DHHS, 2002; Lawrence & Irvine, 2004; Howarth, 2005). According to Pransky (1991) most of the problems society faces are concentrated in the “poor, high-stressed areas of our country such as large inner cities, where most of the individuals are cut off from most of the social advantages to which other citizens have ready access” (p. 231). Some of these issues include lack of adequate affordable housing, thereby forcing some families to reside in neighborhoods that are crime infested. Constant contact with this unhealthy atmosphere encourages delinquent behaviors such as truancy and criminal behavior for older children, resulting in stress for parents who, in turn, might neglect the needs of the children (Pransky, 1991). Also, inadequate housing might result as aforementioned in unsanitary living situations especially for younger children (Pransky, 1991).

Lack of access to medical facilities can result in failure to provide immunization and routine child development care, such as dental, vision, auditory, and general physical exams making it difficult for parents to prevent accidents and illness (Pransky, 1991). Lack of community services such as day care centers, after-school programs, and educational programs for parents, teen parent services, and services for drug abuse, domestic violence, and mental health care, all contribute in creating stressful situations for caregivers. The caregivers then are unable to provide adequate care for their children, especially younger children who are unable to care for themselves. The community risk factors are signs of larger societal problems that need to be addressed at the legislative and policy level to combat child neglect.

Resource risk factors include inadequate financial support for families in need, daycare access, affordable health care, housing, and employment (Pransky, 1991). Some of the resource risk factors of child neglect are tied into the societal networks and this, in

turn, defines how society observes, understands, and reacts to child neglect. Another child neglect factor includes lack of adequate financially sustainable jobs (Goldman, Salus, Wolcott & Kennedy, 2003), necessitating parents working multiple jobs to meet their financial obligations, which may result in lack of child supervision and routine meals for children. For those parents who are unemployed (Goldman et al., 2003), the available solutions, such as going on welfare (Temporary Assistance to Needy Families [TANF]) or finding their own means (sometimes criminal) to support their families, puts more stress on parents, perhaps increasing the risk for neglectful behaviors on the part of the caregivers. The resource risk factors of neglect are multiple. The high stress level of the caregivers and their reactions to care-giving roles involving their children might result in neglect, which has multiple consequences for victims, perpetrators and the general public.

Consequences of Child Neglect

Child neglect can result in devastating physical and emotional consequences for children. Some of these consequences are death, immediate physical injuries such as wounds, permanent scars and physical disabilities, depression and acute stress disorders, and reactive attachment disorders (RAD), all or some of which are chronically observed in victims of child neglect (Gaudin, 1993; Goldman, et al., 2003). Studies in attachment and bonding show that trauma in early childhood (Post Traumatic Stress Disorder) negatively affects physical and psychological development and growth, continuing through childhood and later on in life as adults (Bacon & Richardson, 2001; DHHS, 2002; Falhberg, 2000; Nelson, 2002; Thomas, Hughes, Madigan, & Dowell, 2003).

Community impacts are sustained by law enforcement, the judicial and correctional systems, and the costs of assessment, prosecuting, and housing perpetrators. Most victims of neglect/abuse are more likely themselves eventually to be arrested as juveniles or adults for committing violent crimes (Gaudin, 1993; Prevent Child Abuse & Neglect, 2000; Thomas et al., 2003). Child welfare services and any organizations providing intervention or prevention services are also widely affected in terms of related manpower and resources (Thomas, et al., 2003).

At the societal level, challenging consequences are manifested in reduced human capital investment and monetary costs of providing services for both victims and perpetrators (Freisthler, Needell, & Gruenewald, 2005; Prevent Child Abuse and Neglect, 2001). As the victims of child neglect, children have the most to lose in this abusive situation. If children do not become productive functional adults, they are not able to appropriately invest in the future workforce. They have sustained permanent damage which results in their inability to develop as functional self-sufficient adults who can profitably contribute to society. Human capital theory posits that individuals who are in potentially productive jobs enter the job market with skills, training, and experience which allows them to attain a certain income within the job market (Thompson & Gray, 1995).

The lack of agreement in society on what constitutes child neglect also perpetuates the chronic neglect of children. Practitioners working with neglectful families also lose in this situation because they do not have a universal tool or program with which to address the problem of child neglect, thereby making it difficult for them to develop empirically tested programs to intervene with families and children.

Another loss is felt in terms of monetary funds for programs that are beneficial for families and children, such as day care services, preventive health care, and educational programs. Large financial and time commitments are made by societal institutions in providing services ranging from court, medical, educational, housing, mental health, and law enforcement, to child welfare and working with both the victims and perpetrators of child neglect (Prevent Child Abuse America, 2002). In 2001, the public cost for child welfare agencies and maltreatment *intervention* programs versus child maltreatment *prevention* services was \$400 million and \$2 million per year respectively (Leventhal, 2001; Prevent Child Abuse & Neglect, 2001). On a larger scale, involving all costs for child services, not just child welfare agencies, but the societal level, Prevent Child Abuse America (2001) calculated that the actual direct cost in terms of child services (hospitalization, chronic health problems, mental health care system, child welfare system, law enforcement, and judicial system) was over \$24 billion. The indirect cost (special education, mental health and health care, juvenile delinquency, lost productivity to society, and adult criminality) was almost \$70 billion. These costs total \$94 billion for child abuse and neglect within the United States (Fromm, 2001). This is for all services involved in children's lives—billions of dollars—with the indirect costs of child maltreatment three times more than the direct costs.

Purpose of the Study

Research on child neglect has been diverse, although sparse as compared to research on other types of child maltreatment. The purposes of this study are (a) finding a point of entry for primary *prevention* services of child neglect, (b) assessing child neglect risk level for both first-time expectant mothers and their partners, and (c) analyzing

individuals' opinions about multi-dimensional family assessment before birth for the purpose of providing practitioners with a comprehensive child neglect assessment tool with the goal of reducing child neglect.

Finding a Point of Entry for Primary Prevention Services of Child Neglect

There is insufficient research to assess for the potential of neglect within the general U.S. population to prevent child neglect from occurring in the first place. One avenue of resolution for child neglect is to begin at the point of first contact with the potential victims and perpetrators, contact which often occurs with the physicians in prenatal care or at birth (Bethea, 1999). Healthcare personnel should be qualified to assess parental skills and make appropriate proactive referrals, as they are already in a position to assess for risk of harm to children. This would be from the time the parent receives prenatal care, when the child is born, and during the periodic routine immunization check-ups until the age of four (Bethea, 1999; Mulryan, 2000). By implementing this process throughout the general population, preventive services might be enacted before the child is put at-risk or actually becomes neglected. Thus, this study focused on individuals who are taking Lamaze classes; to narrow the field more, it focused on expectant first-time parents and their spouses/partners. The proposed study attempted to fill this gap within child neglect research literature by assessing the potential for child neglect among individuals expecting their first child.

This study was initiated to learn (a) whether indicators of first-time mothers and their partners neglecting their children can be identified, and (b) the extent to which soon-to-be first-time parents from the general population might be open to being assessed for predictive risk factors. This study also increases knowledge for those in positions to

provide early family multi-dimensional assessments and suggest how, if administered routinely, each implementation can potentially reduce child neglect (Pransky, 1991). The concept here is not unlike other tests and screenings that currently (a) prevent diseases such as smallpox and tuberculosis, or (b) protect the public such as driving tests (Pransky, 1991).

Child neglect should first be considered as a disease of the perpetrator, rather than solely therapeutically treating victims who might never fully recover from the effects of the neglect. If intervention programs do not adequately address the issue of child neglect, prevention measures must be subsequently undertaken. It is incumbent upon society to be certain that no children are being put into positions of disadvantage, ranging from the prenatal period until they are able to take care of themselves.

Assessing Child Neglect Risk Levels for both First-time Expectant Mothers and their Partners

Another purpose of this study was to assess risk levels for neglecting children in the general population. By identifying into which category of risk level (low, medium, and high) first-time expectant parents and their partners enrolled in Lamaze classes (child-birth preparation) fall, risk factors which have been identified in previous studies as predictive for neglect can be assessed for proactive intervention services. Multiple studies have been conducted with at-risk populations such as teens, (Dubowitz, et al., 2004; Lounds, Borkowski, & Whitman, 2006; Muir, et al., 1989; Zelenko, Huffman, Lock, Kennedy, & Steiner, 2001; Zelenko, Huffman, Brown, Daniels, Lock, Kennedy, & Steiner, 2001), as well as high risk factors such as low socioeconomic status, (Berger, 2004; Freisthler, Needell, & Gruenewald, 2005), domestic violence, (Bolen, 2005;

Sternberg, Lamb, Guterman, Abbott, & Dowud-Noursi, 2005), smoking, and substance abuse (Zelenko, Huffman, Brown, et al, 2001). Previous assessment tools have focused on individuals with identified high or at-risk behaviors (Harrington, Zuravin, DePanfilis, Ting, & Dubowitz, 2002; Slack, et al., 2005) who are being assessed for the severity or risk of re-occurrence of neglect (Dubowitz, et al., 2004; 2005; Lounds, et al., 2004; Tromce, 1996). This study included all individuals without discriminating for the above-mentioned risk factors. Everyone attending Lamaze classes in the target hospital and their childbirth partners were invited to participate.

Most child neglect studies have focused on the mothers' relationships to their children without assessing the mothers' partners who are involved in the children's lives. (Lounds, et al., 2006; Zelenko, Huffman, Brown, et al., 2001; Zelenko, Huffman, Lock, et al., 2001). Statistically, approximately 42.2% of the parental perpetrators of child neglect are men (DHHS, 2004), - a large population percentage being ignored by child neglect research. Also, 61% of parents (both biological mothers and fathers) committed neglect versus 10.9% and 7.7% for physical and sexual abuse respectively. Thus, it is more appropriate to focus on biological parents in regards to neglect issues. And, primary prevention services should be targeted to these individuals in addition to friends or neighbors who only comprise approximately 9.9% of neglect perpetrators.

Of greater importance is the need to identify how much child development knowledge the individual parents possess before they have children. It is assumed that if individuals possess more knowledge about infant and child development, they will be better prepared to handle an infant and thus less likely to neglect their children.

To accurately assess expectant parents for risk for potential neglect, existing measures were identified, assessed for their relevance, and modified for use in this study. Due to the lack of consensus on a definition of child neglect, it was difficult to construct a comprehensive assessment tool with which to measure the potential for child neglect. It is easier to quantify child maltreatment such as physical or sexual abuse, than acts of omission (neglect) that are not visible (Stowman & Donohue, 2004). Slack, Holl, Altenbernd, McDaniel, and Stevens, (2005) advocated for an assessment tool that could be utilized prior to caregivers' involvement with child welfare agencies, thereby providing a better exploration of risk factors. Some tools have focused on the children/victims and their experiences of neglect as well as the consequences of neglect (Kantor, Holt, Straus, Drach, Ricci, MacAllum & Brown, 2004).

Standardized measures for child neglect - assessment tools that have been adapted for measuring child neglect by many child protection services (CPS) agencies, do not have established validity and are not culturally sensitive (Stowman & Donohue, 2004). In their assessment, Stowman & Donohue also noted that most of the tools were general child maltreatment measurement instruments (such as the Washington State Risk Assessment Matrix [Palmrer, 1988]), with a section on child neglect incorporated into the tool. Of the few tools that specifically measure child neglect, most targeted certain populations, e.g. teen mothers, caregivers, and sometimes the children themselves who had already come to the attention of child welfare for neglect. The tools were assessing for the severity of the neglect or prediction of reoccurrence of the neglect: The Child Endangerment Risk Assessment Protocol (Illinois Department of Children and Family Services, 1994); Child Well-Being Scales (CWBS; Magura & Moses, 1986); The Ontario

Child Neglect Index (CNI; Trocme, 1996); and the Child at Risk Field System (Holder & Corey, 1989). Also of importance is that the tools targeted certain characteristics, e.g. medical, education, emotional, supervisory, or environmental neglect (Home Accident Prevention Inventory (Tertinger, Greene, & Lutzker, 1984); and Checklist for Living Environments to Assess Neglect (Watson-Perczel, Lutzker, Greene, & McGimpsey, 1988) without a comprehensive assessment of all types of neglect.

Most importantly, all these tools assessed individuals or caregivers who already had children; for example, the self-report instruments such as the Child Abuse Potential Inventory (CAPI; Milner, 1986); and the Conflict Tactics Scale, Parent to Child Version (Straus, Hamby, Finkelhor, Moore & Runyan, 1998). Furthermore, some of the instruments were devised such that practitioners observed the families and children and rated them on scales such as the Child Abuse and Neglect Interview Schedule (Ammerman, Hersen, & Van Hasselt, 1988); and the Childhood Level of Living Scale (Polansky, Chalmers, Bittenwieser & Williams, (1981). These instruments, although measuring for neglect, are neither reliable nor valid for answering the current research questions.

Analyzing Individuals' Opinions about Multi-dimensional Family Assessments

Before Birth

The final purpose of this study is to discover whether individuals would approve the implementation of an assessment tool to assess for their potential to be neglectful prior to the births of their children. Public opinion is sought to find out whether this concept of policy mandated preparation of birth would be acceptable. The assessment tool will be utilized, not to report the prospective parents to child welfare, but to offer

services to those identified as exhibiting potential risk factors for child neglect. By predicting those who might be potentially neglectful of their children, everyone would benefit, including the children, the parents, communities, and society in general. Other studies have shown that preventive services targeted to perpetrators have more favorable outcomes in reducing abuse (Farber & Miller-Cribbs, 2002; Morales, 1998). Many professionals are already working with families in various prevention capacities, assessing for risk of harm and providing intervention programs for child maltreatment. Records show that most abuse reports originate from professionals working in counseling, schools, social services, and healthcare (DHHS, 2002).

States might benefit from one-stop child neglect assessment centers with a variety of professionals working together to achieve the same goal—proactive protection of children. For example, the Healthy Families Program uses a 17-item checklist, and if three characteristics are checked as being present, it is indicative of being at high risk of child abuse (Leventhal, 2001). In another program, the 10-item Kempe Family Stress Inventory is administered to the family, and a score of 25 qualifies the family to receive services (Leventhal, 2001). In the Olds' Model, first-time mothers are eligible if any 1 of the 3 factors that predispose children to abuse or neglect exist: (a) less than 12 years of education, (b) unmarried, and (c) low socioeconomic status (Leventhal, 2001). Thus, from conception, the same standards for primary prevention assessment should be utilized. Most states have started using a standardized risk assessment tool with certain factors or scoring guidelines to determine the risk of neglect (Gaudin, 1993), but this is utilized only for investigative and intervention purposes, not primary preventive purposes.

Thus, this study screened prospective parents/caregivers and their partners before childbirth, in order to explore whether it would be more effective to provide primary prevention services before and after the child is born to prevent future child neglect. Caregivers should be equipped to become successful parents. However, there are complications to justifying mandatory screening of all parents, even though this opportunity might be a last resort for preventing further neglect of children, our society's most valuable future resource. This foresight (child neglect prevention services) might well result in reduced monetary costs of intervention and rehabilitation services for victims and perpetrators respectively and at the same time reduction in the number of child neglect victims. The present society is responsible for the future society and how the children of future generations will turn out: as healthy functioning adults or adults with a multitude of problems who are unable to function and, in turn, will repeat the cycle of child neglect again.

Summary

Child neglect has been difficult to define, observe, and quantify making it quite challenging to develop preventive measures. Various professionals have identified a variety of ways with which to define and measure child neglect based on some of the multiple ecological causes and risk factors attributable to child neglect. These risk factors include those attributable to individuals (both children and adults), familial, community, and resource influences. To provide some preventive intervention regarding child neglect, as with general child abuse, predictive factors of child neglect have been researched based on the same four ecological risk factors. These include risk indicators (just to mention a few classified within the four ecological risk factors) such as age,

income, education, personal history or the presence of personal history of childhood neglect, substance abuse, and level of child development knowledge, adult attachment styles, mental health, support systems, and community and resource systems. The purpose of this study was to identify a point of entry through which proactive services can be provided to potentially prevent child neglect before it occurs, thus reducing the incidences of child neglect.

CHAPTER II

LITERATURE REVIEW OF THE RISK FACTORS OF CHILD NEGLECT

This chapter focuses on predictive factors which precipitate the neglect of children. There are multiple risk factors which correlate with child neglect, but for the purposes of this study, the literature review focused on those factors most relevant to predisposing first-time parents and their partners to be at risk for engaging in neglectful behaviors toward their children.

Pransky (1991) suggested that most social problems have been explained by causal theories focusing on demographics, epidemiological, and physical conditions but each aspect should be considered individually. He stated that cultural expectations coupled with environmental factors, people's organic/genetic makeup, and perceived lack of opportunity all contribute to different social problems. These factors are the same for all individuals but there are exceptions based on each individual and their personal reaction to the different factors affecting them. These factors then contribute to individuals' socially problematic behaviors. In the case of child neglect, risk factors that individuals encounter can contribute to how they behave toward their children. Accordingly, risk factors are stimuli to the individual's behavior, thereby causing stresses that can manifest in individuals in different ways one of which can be neglecting their children.

Pransky (1991) further advocates for primary prevention services at the family and school levels when children are still young and encounter opportunities that will affect how they will be socially and proactively influenced to react to stress in their lives. According to Pransky, stress hinders the development of individuals to build or develop healthy self-perceptions, social skills, awareness and support within their lives. By providing services to families encountering child neglect risk factors, not only are the families assisted to reduce stress, but the children within these families are being equipped with future healthy living skills that should subsequently reduce their eventual potential neglect of their own children.

Risk factors are organized into four categories: (a) demographic characteristics: age, gender, race, marital status, educational level, and income; (b) parental knowledge of child/infant development, (c) attachment styles of caregiver; and (d) situational factors: drug/alcohol use, mental health problems of the caregiver, history of personal childhood neglect, unstable housing, community and federal support systems, and employment. This chapter closes with a brief summary of the literature and four specific research questions.

Demographic Characteristics and Risk for Child Neglect

Six demographic characteristics have been reported in the literature as risk factors for child neglect. Three of these can be seen as inherent in potential perpetrators: age, gender and race, and the other three may be results of life opportunities and decisions: marital status, education, and income.

Age

Younger parents experience more stress due to insufficient preparation and often uninformed expectations of what is involved in caring for infants. Some research has focused on adolescent mothers and their potential to neglect their children. Lounds, et al. (2005) utilized the Mother-Child Neglect Scale (MCNS) to measure for unresponsive or problematic parenting beginning during the adolescents' third trimester of pregnancy and extending through the resulting child's 10th birthday. They reported that the children of these adolescent mothers were more likely to experience developmental problems in their early years in school. Another study found a negative relationship between maternal age and potential for child abuse, with older teens more likely to experience psychological problems due to perceived lack of support than younger teens who expected family help with their infants (Zelenko, Huffam, Lock, et al., 2001). Kids Count Data (2006) showed that females aged 15 – 19 had a birth rate of 42 per 1,000 births in 2003. Perhaps this partially explains why more research has focused on adolescents as an at-risk group. This study had the advantage of comparing first-time teenage mothers (from previous studies – younger than 18 years) and older mothers (this particular study, 18 years and older) on predictive risk factors for child neglect.

Gender

Most single parent families are headed by women (Child Maltreatment, 2004). Thus, a greater number of children in the neglect category are more likely to live with a mother rather than a father. For instance, in a study on adolescent mothers conducted by Conners, Whiteside-Mansell, Deer, Ledet, and Edwards (2006), 92% of the mothers were the primary caregivers. A correlation was found between adolescent mothers and the

potential for child neglect during middle childhood (Lounds, et al., 2006). Being the primary caregiver for a child increased the chances that a single caregiver would be associated with neglectful care of the child (Lounds, et al., 2006). Since a larger percentage of reported child maltreatment perpetrators are women, gender is thereby considered a high risk factor for child neglect. However, since approximately 40% of perpetrators are males poses the question: would these at-risk numbers also hold true within the general population (those not reported to child welfare services)?

Race

Race is associated with lower achieved educational levels, and lower socioeconomic status which may result in higher stress in the adult caregivers (Pransky, 1991). In 2004, racially delineated abuse/neglect victimization of children for Black/African-American, Asian/Pacific Islander, and American Indian or Alaska Native was 19.9, 17.6, and 15.5 per 1,000 respectively, and for Non-Hispanic White and Hispanic/Latino children were 10.7 and 10.4 respectively, while Asian/Pacific Islander children had the lowest rate of 2.9 per 1,000 (DHHS, 2004). Kids Count Data (2006) shows that in 2003 the death rates per 1,000 reported for children between ages 1 - 14 were: Non-Hispanic White - 19; Black/African American - 29; Asian/Pacific Islander - 16; American Indian and Alaskan Native - 30 and Hispanic/Latino - 20. Due to the significantly higher numbers of victims within the minority groups, this study aims to discover whether similar percentages hold true within the general population since these figures pertain only to reports made to child welfare services.

Kerr, Black, and Krsihnakumar (2000) reported on 6-year-old children (a group of 193) from African-American families, noting that children with a history of failure-to-

thrive (neglect) and maltreatment were more likely to embody behavior problems, demonstrate poor cognitive performance, and exhibited more impaired school functioning than children with neither risk factor (neglect or other maltreatment). Children exhibiting only one risk factor achieved intermediate scores in behavior problem assessment, cognitive functioning, and school performance. Cultural differences in child rearing practices make it difficult to determine a congruent definition of child maltreatment on a global level (Campbell, 2005). Some reports of maltreatment document the general association of presumed lower socioeconomic status among minority groups with a higher incidence of suspected neglect or abuse (Campbell, 2005).

Marital Status

Single parenthood is associated with lower socioeconomic status, less social support, and increase in stress (Lounds, et al., 2006; Zelenko, Huffman, Brown, et al., 2001, Zelenko, Huffman, Lock, et. al., 2001). Although in general, society at least partially insists that people must be able to care for their own families, this is not always possible, as the 20th century model of a *typical family* (with husband working and able to economically support the family while the wife stays home and provides care for the children) is now--in the American 21st century - largely a perceptual myth (Landsberg, 2005). A large percentage of working adults in today's families are single women rearing their children and in need of additional support but mostly enduring conditions they are unable to change (Landsberg, 2005). Kids Count Data (2006) stated that children living in households with single parents categorized by race occurred as follows: Non-Hispanic Whites - 23%, Black/African American - 65%, American Indian/Alaska Native - 49%, Hispanic/Latino - 36%, and Asian/Pacific Islander -17%. These statistics show that even

when delineated by race, minorities have higher rates of single parents present in low income families. These data are from general population at large from the Casey Kids Count database.

Berger (2004) found that low income for single-parent families (female headed) was more of a risk factor for maltreatment than for two-parent families. Of the children maltreated in 2004 (reported to child welfare services), about 10% of victims were living with married parents, 4.2% with unmarried or cohabitating parent, 14.2% with both parents but of unknown marital status, and the largest percentage, 44.2, having unknown living arrangements due to missing data (DHHS, 2004). Due to the indeterminate living arrangements of children and their parents, it is important to know which groups need more support or assessment due to the likelihood of being more at risk for child neglect.

Educational Level

A low parental level of achievement in education is a factor also associated with lower socioeconomic and employment status. Most of the recent studies in child neglect involved single women who received welfare assistance and who had limited educational skills for use in acquiring jobs with sufficient income to provide basic needs, medical care, and housing (Berger, 2004; Connors, et al., 2006; Landsberg, 2005; Lounds, et al., 2004). Kids Count Data (2006) show that in 2005 in the USA 17% of children lived in households where the head of the house was a High School dropout. According to Shore (2005), education generally determines the individual's occupation and economic level and the consequences of under-educated parents result in reduced child well-being outcomes since basic needs are not being met. This has affected children designated by race, with dropout-rates for Non-Hispanic White - 6%, Black/African American - 8%,

American Indian/Alaska Native - 11%, and Hispanic/Latino - 15%. Again, minorities exhibit higher school dropout percentage rates, indicating an increased number of low income families who then tend to be dependent on federal assistance to meet their basic needs.

Income

Neglect can be found in all socioeconomic levels (Bethea, 1999; Hay & Jones, 1994; Leventhal, 2000; Morales, 1998; Mulryan, 2000; Pritchard, 2004). Families receiving Temporary Aid for Needy Families (TANF) are usually individuals who are dependent on supplementary income (half their yearly income) from the government in money or food stamps. These families must meet the poverty threshold set by the federal government (\$39,000 for a family of four in what year?) in order to qualify for services, even though the caregivers might have employment, the jobs are not adequate to financially support their families. Kids Count Data (2006) noted that at least one of the parents in the low income level households had worked 50 or more weeks, and 12% of children under the age of 6 lived with a parent who had no job during that year.

Stress is associated with lack of funds to adequately meet the family's basic needs. Income appears to have a significant effect on child maltreatment, with low income families exhibiting 3 of 5 maltreatment indicators and risk index factors related to medical neglect and less healthy environments for child development (Berger 2004, 2005). Children living in poverty are associated with high risk levels for poor health, less education, poor emotional well-being, higher delinquency, and lack of employment opportunities (Gaudin, 1993; Pransky, 1991). However, some of these factors are due to the greater visibility of low income, or the at-risk individuals' likelihood of being

exposed to the child welfare system more than those in other income brackets (Kids Count Data Book, 2006 and 2008). This study included all economic levels to assess for this factor. Three economic levels were obtained with monthly income levels: lower/working class - below \$2,500; lower/upper middle class - between \$3,000- \$8,000, and high/upper class - \$9,000+ (Thompson & Hickey, 2005). The poverty level in 2006 was at \$20,444 for a family of four. About 18% of children living in poverty were minorities or Non-Hispanic White (Kids Count Data Book, 2008).

Theoretical Views of Risk for Child Neglect

The basic tenets of two theories (attachment and ecological) assist in explaining how risk levels are related to the characteristics of caregivers and whether their children would be neglected. To understand how child neglect is viewed within the society and how programs are devised and implemented within human services, two theories are helpful: attachment theory by Bowlby (1969) and ecological theory by Bronfenbrenner (1979). These theories help explain how characteristics (risk factors) of caregivers affect child development through the children's social interactions with their immediate families and environments. These theories focus on primary prevention targeted on potential perpetrators in the general public to assess how child neglect victims' numbers and services at secondary and tertiary levels can be reduced if certain types of primary prevention services are implemented prior to any neglect.

Attachment Theory

The main concepts of attachment theory are attachment, bonding, and child development. Attachment is the tendency of children, especially infants to seek close psychological relationships with their caregivers (Falhberg, 1998; Klaus, Kennell, &

Klaus, 1995). Bonding is the caregivers' response to an infant via provision of basic needs: food, shelter, and love, which in turn cycle back to the infant's attachment to the individual meeting the child's basic needs (Falhberg, 1998). Child development includes the physical, psychological, and cognitive processes that normally occur in the various stages of a child's life (Falhberg, 1998, Klaus, et al., 1995). Simple social interaction skills such as holding or carrying children, giving hugs and kisses, feeding, bathing, body massage, playing pat-a-cake and peek-a-boo (facial expressions) can enhance a parent-child relationship, thereby increasing the attachment development (Falhberg, 1998, Klaus, et al., 1995).

Bowlby (1988) stated that humans are social beings and need to interact and form relationships with others. Attachment theory states that neglected children who lack secure attachment in their social relationships are adversely affected in their socio-emotional development (Gaudin, 1993). This effect is due to lack of full development in certain parts of the brain (mainly the right hemisphere), a phenomenon that Begley (1996) called missing windows of opportunity. A window of opportunity comprises the time period when the full development of vital functions for survival and stress coping strategies occurs within the right hemisphere of the brain crucial to attachment development in children and later in adulthood (Begley, 1996; Schore, 2002; Zigler, Finn-Stevenson, & Hall, 2002).

Poor or delayed development of attachment and bonding is indicative of how protective (or not) a parent behaves toward the child and can thus be predictive of the child's maltreatment (Howe, 2005; Klaus, et al., 1995; Murry, et al., 2000). A sensitive period influencing brain development is also determined by environmental factors (in this

case involving early childhood dyad interaction with caregivers) that contribute to the stimuli sent to the brain; this influences how much the brain neurons are able to mature and subsequently form synaptic connections which determine developmental maturity in children and later affects their potential to become functional adults (Begley, 2000; Glasser, 2000). Glasser and Begley stated that this crucial period of development usually begins at birth and lasts until around age 3, but can be corrected up to age 10. Thus, children, and later on adults, who are under-developed in stress coping strategies within their environment are potentially more likely to become involved in neglect or abuse situations.

Adult Attachment Styles and Risk for Child Neglect

How individuals relate to others in adult relationships is indicative of the attachment style category into which they fall. A description of childhood attachment is first explained in order to understand how attachment styles in adults may develop. There are four styles of attachment of infants to their caregivers: secure, anxious-ambivalent, anxious-avoidant, and disorganized (Bowlby, 1988). These styles are based on how the caregivers respond to and provide care for infants.

In the *first style, secure children* will explore freely when their caregiver is present, will engage with strangers, and will be upset when the caregiver leaves. However, the child adjusts to babysitters and is thereafter happy to see the caregiver at their return. Adults who are secure are always there for their children. The children feel that they have a secure base to return to when in need of security because their needs are mostly appropriately met.

In the *second style*, *anxious-ambivalent children (fearful)* will not explore or engage strangers. Even when the caregivers are present they will be upset the whole time the caregivers are gone, and when the caregivers return, will seek to be close to them, but are resentful of being left behind in the first place. The adult in this scenario meets the child's needs when the caregiver chooses, not when the child's needs are paramount.

The *third style* embodies the *anxious-avoidant (preoccupied/enmeshed) children* who will avoid or ignore their caregivers, seeming not to care when caregivers leave or return. These children will not explore around them, they treat strangers with indifference just as they treat their caregivers. The caregiver in this instance does not meet the children's needs frequently, so these children tend to take care of themselves. These are the children usually in child neglect situations.

The *fourth style* is the *disorganized children (dismissive)* whose behavior mirrors caregivers who do not provide adequate care, or when provided, fear is involved, so the children are usually frightened of caregivers or strangers. The adults in these scenarios are mirroring what they learned in childhood and their children later reflect these styles in their own adult parenting. Van Wagner (2009) states that these children tend to take on adult roles or become the parents in their home situations.

Children's healthy attachments to their caregivers can determine the attachment styles and how they relate to others throughout their lives. Personal feelings of self-worth and self-esteem are developed during childhood and can be positive or negative, which in turn, affects their attachment patterns later in life (Green, Furrer, & McAllister, 2007; Howe, 2005). Brain development can be partially predetermined by genetics, but is primarily established within the child's environment. With neglectful families, issues of

poverty, drug abuse, poor housing, etc., all contribute to determining the adequate needs of a child. Provision of tangible basic needs of food and shelter might not be possible for some families, and thus the relationship of the child and caregiver is often insecure but could be ambivalent, avoidant, or even disorganized.

A parent with attachment problems who might not provide adequate care will create a situation whereby the child might develop attachment problems in childhood and later on in adulthood (Frinzi, Ram, Har-Even, Shnit, & Weizman, 2001; Minzenberg, Poole, & Vinogradov, 2006; Schmitt, 2004). Frinzi, et al. found that neglected children who displayed the anxious-ambivalent attachment style were at risk for social withdrawal, rejection, and feelings of not being competent. Zeanah, Nelson, Fox, Smyke, Marshall, Parker, and Koga, (2003) studied children who were reared in institutions and found that early deprivation (neglect) resulted in children being unable to form attachments. Lounds, et al. (2006) supported the theory that the poor quality of the adolescent mother-child early relationship is highly correlated with the potential for neglect by the caregiver.

The above theory can be applied to adult caregivers who have certain attachment styles, and who have problems relating to others (Bifulco, Moran, Ball, & Bernazzani, 2002; Neal & Frick-Horbury, 2001). The lack of attachment predisposes these adults to situations where they are likely not to relate to their own children (bonding), resulting in neglectful situations. Attachment, therefore, is formed during childhood, and the attachment style is manifest in later relationships with others (intimate, friendships, and/or parenting). The attachment style may be further affected by situational factors which predispose the adults to certain risk factors (social withdrawal, rejection, and

feelings of inadequacy; Frinzi, et al., 2001; Howe, 2005) that might lead to neglectful behavior toward their own children. One of the risk factors is parents' lack of knowledge of child development that could assist them in rearing their children, promoting healthy attachments and bonding.

Parental Knowledge of Child Development

The aforementioned demographic factors can be mitigated by the amount of knowledge parents possess regarding what to expect from their children at various ages. Shelov and Hannermann (1991) and Cooper (2004), developed a list of child development milestones for each age group to enable individuals to be aware of their child's predictable behaviors at different stages of life including social, emotional, cognitive, language, movement, and hand and finger skills. While each child may digress from the norm, the observation of significant diversity in behavior could indicate an abnormality needing special care (Cooper, 2004; Falhberg, 1998). Also, by understanding the developmental milestones, parents can avoid expecting too much too soon from their children, thereby avoiding stress that could lead to child neglect or abuse. In the early to middle 20th century, individuals often lived somewhat near extended family members and obtained free advice from these individuals. However, as Americans have migrated further away from extended family groups due to accessible mass transit, it has become more difficult to share experiences with their family members, particularly in relation to taking caring of their children. Therefore, most isolated individuals are often dependent on health care practitioners and books to obtain such information.

Bethell, Peck, and Schor (2001) stated that parents seemingly are reluctant to ask health care providers about child development issues. If parents were routinely provided

with this information outright, they might be better equipped to handle the developmental stages their children experience. The Knowledge of Infant Development Inventory scale, (KIDI) was created to determine the level of knowledge that individuals have about norms, milestones, and principles of infant development, parenting, health, and safety of children (MacPhee, 1981). This inventory and other similar tools can be utilized with individuals whose behavior toward their children has been identified as either potentially or actively abusive or neglectful to assess the need for provision of in-home nursing services.

Reich (2005) developed a scale (Opinions about Babies) to find out how much knowledge mothers had about infants and found that the mother's knowledge about child development affected, to some extent, how mothers reared their children. As a result of their study, Benasich and Gunn (1996) found that in a sample of low birth-weight babies, maternal knowledge of child development and concepts of child rearing had a significant relationship to the quality of home environment, the number of child behavior problems and to a smaller degree, the child's IQ level at 36 months. This finding shows a potential relationship between parental knowledge of child development and how the child is reared. Knowledge of child development is also related to how individuals actually parent their child.

Parenting Styles

Parenting styles affect human development especially in the socialization process of children (Baldwin, McIntyre & Hardaway, 2007). Child attachment and bonding is affected by how the parents were parented (grandparent parenting styles) and the strategies these parents employ in the socialization process of their children (Baldwin,

McIntyre, & Hardaway 2007; Snell, Overbey, & Brewer, 2005). Children's social development is also partially affected by observing and modeling their own parents' behaviors, whether with other adults or with the children themselves (Baldwin, et al., 2007; Baumrind, 1971; Green, et al., 2007). One should note that the influence of the parenting styles can also be affected by the child's own personality or genetic influences, thus it becomes a dyadic relationship.

Baumrind (1971) identified four main parenting styles: authoritative, authoritarian, permissive, and neglectful. **Authoritative** parents have high expectations of their children, demanding compliance with the parents' directives in regard to behaviors, but resulting in children gaining high self-esteem because their parents explain the reasons for their expectations and why punishment is being carried out. These children tend to be independent, self-assured, and easily develop their own opinions.

Authoritarian parents expect their children to obey rules and regulations without any explanations from parents or questions from the child. The parents are likely to physically punish child as a means of enforcing rules and regulations. These children do not have good self-esteem and rarely initiate any self opinions letting others decide for them. They are shy and thus socially withdrawn.

Permissive parents utilize a free style parenting with no set rules and regulations who expect their children to freely express their own feelings and thoughts. These children are rarely punished or they only get verbal consequences with no follow through making them more selfish, impulsive, insecure, and low achievers. These children also have no sense of social responsibility.

Neglectful parents are basically not involved with their children at all, only providing basic needs such as room and board. These children do as they want when they feel like it without any consequences (Baumrind, 1971).

Most research has shown a tendency for more acceptance of the authoritative parenting style than the other three styles (Baumrind, 1971; Baldwin, et al., 2007; Neal & Frick-Horbury, 2001; Snell, et al., 2005). Authoritative parents were more likely to view their children's future in a positive manner thus modeling optimistic behaviors for their children that result in the child's development of good morals, self-esteem, being achievement oriented, and improved health (Baldwin, et al; DeHart, Pelham, & Tennen, 2004). Parenting styles show that adult relationships (support systems) are affected by how children were parented (Green, Furrer, & McAllister, 2007; Marsiglia, Walczyk, Buboltz, & Griffith-Ross, 2007; Neal & Frick-Horbury, 2001; Snell, et al., 2005). Parenting styles affect individuals' interactions and attachments to their own children (Green, Furrer, & McAllister, 2007). This study sought to observe whether the parenting styles of the first-time mothers and their partners reflected their own parents' parenting styles.

Ecological Theory

Bronfenbrenner (1979) was one of the first theorists to explain how children are shaped by interactions with their immediate caregivers, families, and their environments. Children learn from the societies into which they are born and, in turn, they influence that same society (Bronfenbrenner, 1979). Ecological theory focuses on how humans develop within micro, meso, exo, and macro systems. The *microsystem* is comprised of the immediate and extended families, including the parents and other primary family

members. Individual characteristics such as domestic violence, history of parents' personal childhood neglect, any physical disabilities, age, education, and mental health are explored to see how such dynamics might play into child neglect. The *mesosystem* comprises the family's extended family support, school, peer groups, and child care, and includes how the interaction or lack of these factors impacts the family, potentially affecting the well-being of the whole family, especially the children. An *exosystem* is the external environment which indirectly affects the development of the family such as the parent's workplace, level of safety present or absent in their neighborhoods, and the availability of medical care. The *macrosystem* is the larger cultural context which includes the national economy (inflation rates) and any family culture and subcultures expectations.

With ecological theory, practitioners working with neglectful families are able to comprehensively assess the families with whom they are working, thereby finding multiple solutions to the problems. Unlike other theories that focus on one problem, cause, or solution, ecological theory seeks to provide solutions to problems that are more likely to be chain reactions. For example, lack of a job (macrosystem) and the resulting stress (microsystem) resulting from the inability to financially provide for the family (mesosystem), might cause a parent to abuse drugs (microsystem) thereby failing to supervise a 10-year-old child who stays out all night getting into trouble (exosystem) because the parent is incapacitated.

The goal of ecological theory is to address all possible situational factors that might affect the outcome of a problem. Glasser (2000) stated that within the first year of childhood the brain develops at an alarmingly fast rate and is influenced by

environmental/ecological (situational) factor that might be damaged by abuse and neglect. Zeanah, et al. (2003) found that children reared in institutions were more likely to experience early deprivation (neglect) resulting in their inability to form attachments later on in life. By examining all the factors interacting within a newborn's life, it can be seen how different situational factors affect that child and the child's likely development.

Situational Factors and Risk for Child Neglect

Research has sought to determine predictive factors of neglect in order to provide services to mitigate its re-occurrence after neglect has already been identified.

Bronfenbrenner (1979) stated that there is interrelatedness among the factors that might contribute to child abuse or neglect. Lounds, et al. (2005) used Belsky's ecological model (1980, 1993) to isolate social and psychological phenomena of individuals but still found that the individuals were affected by family, community, and cultural environments and systems. The following situational factors play roles in the occurrence of child neglect: drug/alcohol use, parental physical and mental health problems, history of personal childhood abuse, unstable housing, few or no community and federal support systems available, and being employed (DePanfilis & Salus, 1992).

DePanfilis and Salus (1992) guidelines for caseworkers focused on caregivers' individual characteristics, social support systems, community and societal characteristics, and how these impact their physical and psychological care-giving for their children. These factors were deemed predictive risk characteristics for caregivers who have abused or neglected their children before, and indicated their potential to re-abuse or re-neglect. The Sprang, et al. (2005) study concluded that 41.4% of their sample population was categorized as substantiated neglect, thereby emphasizing the significant role of parent-

child relationships; and that a poor parent-child relationship (a result of family stress) suggested higher severity of child maltreatment. Prospective parents who are then assessed as being at-risk for child neglect should be provided with services to prepare them for parenthood. Thus in this study, the characteristics of at-risk caregivers were studied with first-time prospective parents to explore whether their personal knowledge and perspectives regarding certain behaviors can be predictive of risk for child neglect. The following section describes studies that focused on the aforementioned eight situational factors that may identify which caregivers are more likely to be neglectful of their children.

Drug, Cigarettes, and Alcohol Use

Drug, cigarettes and alcohol use is associated with a higher incidence of infants' disabilities if their mothers were using drugs or smoking during pregnancy and tends to indicate later decreased parental ability to adequately care for children. Kids Count data show that 11% of birth mothers between the ages of 12 - 17 used alcohol during pregnancy, as did 41% of the birth mothers between the ages of 18 -25. Also while pregnant, these mothers, at a rate of 5% and 8% respectively, used illegal drugs other than marijuana. Zelenko, Huffman, Brown, et al., (2001) focused on incidents of children's medical problems as a result of their mothers' prenatal smoking and substance abuse. The study found that neonatal morbidity was highly correlated with smoking and substance abuse during pregnancy by economically impoverished adolescents. Freisthler, Needell, and Gruenewald (2005) found that neighborhoods with greater numbers of alcohol bars had higher incidences of child maltreatment including neglect. For older children, caregivers' personal use of drugs exposed the children to more neglect. For

example, children received inadequate care due to caregivers' inebriation, children ingested drugs left within their reach and were introduced by their parents to the use of harmful illegal and legal drugs. All of these issues that arise with illegal drug use and inappropriate use of alcohol and other legal drugs expose children to more neglectful situations.

Parental Mental Health Problems

Unstable emotional states of mind increase the likelihood of parental stress and the inability to cope with children's daily needs. Zelenko, Huffman, Lock, et al. (2001) found that adolescent mothers were associated with the potential for neglect based on their maternal psychiatric histories, current psychological distress, and perceived lack of support systems. Lounds, et al. (2006) found that mothers who lacked good relationships with their children were more likely to be assessed as at risk for neglecting their children based on the presence of maternal personal problems and the correlation with predicting children's behavior problems in childhood. Minzenberg, et al. (2006) found that adults with attachment problems within a group of individuals diagnosed with Borderline Personality Disorders (BPD) were related to inappropriate psychological expression, due to the after effects of childhood maltreatment, especially sexual abuse. These adults exhibited a lack of control in their behaviors, and symptoms of depression, anxiety, impulsivity, and interpersonal problems. All of these mental health problems can lead caregivers to provide inadequate care of their own children, resulting in neglect.

History of Personal Childhood Abuse

The stress of parents' personal abuse history as children decreases the parental capacity to care for their own children. Inadequate parenting skills have resulted from

their own poor role models, attachment issues, and the aftereffects of experiencing abuse or neglect themselves. Pregnant women who had been sexually or emotionally abused as children were predicted to be more likely to commit emotional and physical abuse and neglect their own children due to the effects of psychopathology and aggression during their pregnancies and up to one year after the birth of the child (Lang, Rodgers, & Lebeck, 2006). Lounds, et al., (2004) focused on mothers' histories of neglect, their intelligence, and behavior problems, and reported that both maternal personal histories of neglect and the quality of the mother-child interactions were predictive of the potential for neglect in adolescent headed families. Zelenko, Huffman, Lock, et al., (2001) found that personal histories of maltreatment were positively correlated with maternal histories of psychiatric and current problems with family members, which in turn affected the potential for child abuse by adolescent mothers.

Housing Status

Unstable housing might indicate that the caregiver does not have stable social support systems and may be indicative of low socioeconomic status (SES) which could result in additional stress and subsequent inadequate parenting. Muir, Monaghan, Gilmore, Clarkson, Crooks, and Egan (1989) focused on adolescent mothers in New Zealand who had no prior reports to child welfare agencies. Muir, et al. (1989) used a nine-item checklist (Dunedin Family Services Indicator) for prediction of either child abuse or neglect within primary prenatal care centers. The frequent changes of home addresses was the most powerful in its prediction of potential for abuse or neglect, which the researchers attributed to the absence of a strong social network to which a mother could belong, thereby potentially increasing the chance of social isolation.

Community and Federal Support Systems

Most individuals within the lower socioeconomic status (SES) struggle to provide basic needs of food and medical care for themselves and for their infants (Murry, Baker, & Lewin, 2000). Most studies conducted with teen mothers had samples from the low SES, as evidenced by support received for medical services (Lounds, et al., 2006; Zelenko, Huffman, Brown, et al., 2001; Zelenko, Huffman, Lock, 2001). Gaudin (1993) discussed how public social policies should address child neglect at the three levels of the individual, family, and community systems by stressing the importance of providing parents with support services such as financial assistance, job training, employment and access to child care.

The integration framework devised by Pransky (1991) is based on structural functionalism for primary prevention by focusing on ecological factors at the macro level, and how they affect individuals due to conflictual expectations. Individuals who are adversely affected by such stressors often develop a myriad of undesirable behaviors, one of which is neglecting their children. Services should not only be targeted to victims, but expanded to address the needs of potential abusers, making this a societal issue more than an individual-oriented endeavor, in order to counteract the magnitude of child neglect. By providing these services to all who might need them, the stigma of being targeted as abusers (identified and reported to child welfare services) will be reduced, while aid is provided to help parents adequately care for their children from the beginning.

Employment

A parent who has been unable to find a job might live in inadequate housing, in a neighborhood with few or no support systems and/or lacking the presence of extended

family; the resulting stress can manifest itself in drug or alcohol abuse, which in turn can lead to child neglect or abuse (Pransky, 1991). Parents might have to work at multiple jobs in order to maintain their families economically, thereby leaving the children unattended which may result in supervision neglect. Kids Count Data (2005) show that nearly 24 million children lived in households in which the parents did not work full or part-time. The well-being of these children is put at risk due to the likelihood of receiving insufficient basic needs ranging from inadequate nutritional foods, health care, stable housing, child care, education, and emotional stability. Thus primary prevention services targeted toward job attainment can boost individuals' income levels and increase child well-being by lowering potential child neglect risk factors.

Summary of Literature Review

Ecological theory is connected to the factors of familial, community, and societal characteristics in terms of how the presence of these systematic factors is indicative of potential risk of neglect within the home. The aim of the ecological perspective is to provide the caregivers with environments that are conducive to personal well-being. If these systems are dysfunctional, caregivers are unable to function due to high stress related to each or all of these systems. Attachment theory is connected to the parental risk factors and how certain activities of the parent are indicative of neglectful behavior. For example, the bonding strength between a child and parent is determined by whether basic needs activities are being performed or not. In turn, how adequately the needs are met for the child affects the type of attachment the child has in relation to the caregiver.

Family stress levels are generally associated with adults' abilities or inability to handle family situations (domestic violence, drug use, lack of support, physical and

mental health issues, and lack of adequate funds for meeting basic needs). This stress is one of the catalysts for potential abuse or neglect of their children. A measurement tool that is comprehensive enough to address all the different types and causes of child neglect, and that can be used for pre-screening with prospective parents and their partners, could aid in prescribing proactive support services before and after the child is born, thereby reducing the rate of child neglect. To reduce the rate of child neglect, practitioners need to observe how much capacity the caregivers have to actually attach and bond with their new infants since healthy attachment will be beneficial for both caregivers and children.

Research Questions

The literature on child neglect has identified individual personal characteristics and situational factors associated with risk for parents neglecting their children. The proposed study builds on this existing knowledge base by examining the role of these variables in predicting the risk level for neglect among expectant first-time parents. Thus, the following questions were posed:

- 1. What is the level of awareness for recognition of child neglect among first-time expectant mothers and their partners?**

This is an exploratory question focusing on both mothers and partners and how much awareness individuals have in recognizing child neglect. Comparing the results of both mothers and their partners can help explain whether partners rearing children together have congruent awareness of what is deemed neglect by child protection services.

2. A. Among first-time expectant mothers and their partners, what percentages are at-risk of being neglectful?

Data were gathered from the general population of first-time parents-to-be and compared to data from previous studies that focused on at-risk and already identified neglectful populations. Are the numbers within the general population as high as those already identified as at-risk or neglectful? Another purpose of this question was to learn the risk levels of these first-time mothers and their partners. New information was generated not only from mothers, but also from their partners. This is virgin territory, as child neglect studies to date have focused only on mothers.

B. Are first-time expectant mothers at greater risk than their partners for being neglectful?

This question is also a new area being explored by comparing the figures of child neglect risk levels: mothers versus their partners. As noted earlier, within the child neglect literature, single women have been identified as being neglectful. About 58% of women versus 42% of men are identified as neglectful of their children within the at-risk and identified neglectful families (DHHS, 2004). Would the same hold true about mothers and partners/spouses from the general population?

3. A. Is there a significant difference between (a) mothers and (b) partners' fearful attachment style and preoccupied attachment style with regard to risk of child neglect, awareness for recognition of child neglect, and opinion about babies?

B. Is there a significant difference between the mothers' and their partners in regard to the risk of child neglect, awareness for recognition of child neglect, and opinion about babies?

As mentioned above, this study focused on both mothers and partners and compared the results with existing results for at-risk and identified populations. Is the relationship between risk for neglecting children and attachment style in the general population similar to that of previously identified at-risk parents? Is the relationship between level of child neglect awareness and adult attachment style in the general population similar to that of previously identified at-risk parents? Also, is there a relationship between opinion about babies and adult attachment style? No comparisons were found in the literature review in regards to partners, so this is another new area being explored.

4. What factors best predict risk for child neglect among first-time expectant mothers and their partners?

The question has been posed with at-risk and identified neglectful families, but has not been studied within the general population for child neglect purposes. Would the same predictive risk factors identified in previous research studies hold for mothers and their partners in the general population?

5. A. Do first-time expectant mothers and their partners favor a mandated assessment to determine risk for neglect as part of the array of services they receive during the pregnancy?

B. Is there a relationship between favoring mandated assessment (WARCN) and indicators for possible risk and awareness for recognition of child neglect among expected first-time mothers and their partners?

This is another new exploration area that has not been found in the child neglect literature. By asking individuals within the general population if they would accept an assessment being conducted at time of birth, states might be able to implement appropriate primary prevention services, if individuals are accepting of this assessment. Also, are there any differences between mothers and partners on whether they would be willing to have an assessment implemented by policy?

Asking the aforementioned questions is necessary in the exploration of how to reduce child neglect. As a result, practitioners might be able to identify which of these variables are useful in diminishing the risk potential for child neglect, especially among couples just starting their families.

CHAPTER III

METHODOLOGY

This chapter discusses the methodology for this study: research design, sample, measures, data collection, and analysis plan. Then, consent procedures and Institutional Review Board (IRB) requirements are discussed. Finally, the implications of this study for social work practice are enumerated.

Design

This study utilized a non-experimental, cross-sectional correlational design to survey first-time expectant mothers and their partners.

Sample

The sample was recruited from expectant first-time mothers and their partners attending Lamaze Classes at University of Kentucky Hospital, Lexington, Kentucky. Lamaze classes usually accommodate 6 to 10 first-time expectant mothers and their partners. With two or three classes per month, 12 to 36 individuals were asked to participate in the study each month. Over the 12 month period in which this study was conducted, 360 individuals (expectant mothers and their partners) were invited to participate. The following inclusion/exclusion questions were applied to determine eligibility for participation in the study (Appendix A). These included whether the individual was 18 years or older, if this was the participant's first child, and their relationship to the expected child.

Measures

Ninety-seven items were administered with the participants to measure the dependent and independent variables (Appendices A – K).

Criterion Variable: The Potential for Child Neglect Risk

The potential for risk of neglecting children was measured on two dimensions: behavior/action, and recognition/awareness. The *behavior/action dimension* was measured by modifying Lounds, Borkowski, & Whitman's, (2004), Mother-Child Neglect Scale (MCNS, Appendix B). The MCNS assesses what behaviors/actions parents should perform to avoid being neglectful. The MCNS was originally adapted in 1995 from the Neglect Scale (NS) by Straus, Kinard, & Williams (2007). The MCNS asks parents about their behavior characteristics toward their children who were 8 years of age. The MCNS consists of 20 statements using a four point Likert scale that ranges from strongly agree (1 point) to strongly disagree (4 points). The MCNS was recommended by Lounds, et al., (2004) as having "potential as a screening device to identify parents at highest risk for child neglect thereby preventing its future occurrence" (p 379). Scores ranged from 20 to 80 with higher scores indicative of more neglectful behaviors towards children. The test-retest reliability was $r = .60$ (Lounds, et al., 2004).

For this study, the wording of the MCNS was modified to reflect the fact that the research participants were first time expectant parents, not individuals who were already parenting one or more children. Also, the scaling was modified to include a neutral response for the participants (ranging from Strongly Agree [1 point], Agree [2 points], Neutral [3 points], Disagree [4 points] and Strongly Disagree [5 points]). The scoring thus ranged from 20 – 100 with higher scores indicative of more neglectful behaviors.

The scores were grouped into three categories of potential for child neglect risk: Low = 20 – 40 (Strongly Agree and Agree); Medium = 41-60 (Neutral); and High (Disagree and Strongly Disagree) = 61 – 100. This modified version of the MCNS takes approximately 5 minutes to complete.

The *recognition/awareness* dimension was measured by a set of scenarios, the Recognition of Child Neglect Seven Scenarios (RCNSS) developed for this study by Sar and Mucherera (2007, Appendix C). The scenarios represent examples of types of reports that might be conveyed to the Child Abuse Hotline. Study participants were asked to read each scenario and then rate the severity of neglect (none, mild, moderate, severe, and extreme) they identified to exist. Their ratings were then compared with the independent rating of the scenarios from an experienced group of child protection intake/investigation workers (n = 7) from Kentucky in the area of child neglect. Participant's responses were marked *correct* if the answer matched those of the majority of the professionals' responses. To develop a total *recognition/awareness of severity* score, each *correct* response was scored "1" and then all the correct responses were summed, with higher scores indicating higher recognition/awareness of child neglect. This scale required approximately 5 minutes to complete.

Predictor Variables

The following predictor variables for demographic and attachment predictive characteristics were selected pursuant to previous research which has indicated an association with potential risk levels for child neglect or abuse.

Demographic information: The demographic variables selected for this study have been shown in previous studies to be correlated with risk for child neglect. The

variables selected are gender, race, age, marital status, educational level, income level, housing stability, community and federal support system, and employment. The scale for the demographic characteristics is in Appendix D and required approximately 5 minutes to complete.

History of personal childhood abuse: The scale has four questions (Appendix E) that indicate the presence or absence of history involving physical abuse, neglect, depression, or sexual abuse during the respondent's childhood. This is a nominal scale and required approximately two minutes to complete.

Drugs, cigarettes, alcohol use and mental, physical health problems: Abuse of drugs, cigarettes, and alcohol as well as indications of mental and health problems were measured using a combined five question scale (Appendix F) devised by Sar (2007). Three questions pertain to individuals' use of cigarettes/tobacco products, alcohol and unprescribed drugs. The questions employ a 4-point Likert scale encompassing a range of: never, sometimes, weekly, and daily use. However, this tool was not of a diagnostic nature (no reliability or validity had been established) and thus cannot be successfully utilized in predicting psychiatric diagnoses, but can be utilized only in determining tendencies for individuals who occasionally use any of the aforementioned substances.

Two questions addressed participants' general physical and mental health using a 4-point Likert scale: poor, average, good, and excellent. This tool also is not of a diagnostic nature, but a self report by the participants on how they felt about their personal physical and mental health at that particular point.

Parenting style: These two questions (Appendix G) surveyed the parenting styles of the participants own mothers' and fathers. There are four different types of parenting

styles: authoritative, authoritarian, permissive, and neglectful. These questions were adapted from the questionnaire, Parenting Authority Questionnaire (PAQ) by Buri (1991). Participants were asked to choose the one style that best described how their mother and father parented them. This is a nominal scale and required approximately two minutes to complete.

Parental knowledge of child development: In the first section, the Opinions about Babies (OAB) is 44-item instrument (Appendix H) that was designed by Reich (2005) to assess how much mothers know about infants. Reich designed the OAB using information from the Bright Futures Guidelines for Health Supervision (Green & Palfrey, 2002) and from the American Academy of Pediatrics (AAP) Guidelines for Health Supervision III (American Academy of Pediatrics, 1997). The scale is written at second grade reading level. The items are grouped into two sections of 39 items and 4 items, respectively. The 39 items include 14 questions involving cognitive and physical development, 7 addressing safety issues, 6 questions about discipline, 4 questions regarding feeding/nutrition, 3 pertaining to maternal health after birth, and 2 questions involving the sleeping habits of infants. This Likert scale offers three responses of Agree, Disagree, and No Opinion. It is scored as either correct or incorrect with No Opinion as incorrect (lacking knowledge) and missing items were not scored to avoid falsely concluding a lack of knowledge on items that were intentionally skipped.

The second section has three questions pertaining to developmental timing at 3, 6, 12 months with six responses for each (18 total); one question addressing infant crying with six responses, and one question involving child health problems with 5 responses. This scale had a total of 66 items. The percentage of correct answers was calculated from

the number of correct responses divided by the number of items completed. This scale required approximately 5-10 minutes to complete.

Adult attachment style: Attachment is defined as the relationship pattern between the mothers and their partners. The four attachment styles are secure, fearful (anxious-ambivalent), preoccupied/enmeshed (anxious-avoidant), and dismissive (disorganized). Adult attachment style was measured using a 36-item self-report measure of attachment called the Experience of Close Relationships (ECR) scale (Appendix I), developed by Brennan, Clark, and Shaver (1998). The items are measured on a seven point Likert scale ranging from Disagree Strongly (1) to Agree Strongly (7). Ten of the items are reverse coded before scoring. Odd numbered questions pertain to avoidance (alpha of .94) and even numbered questions indicate anxiety (alpha of .91). This scale required approximately 10 minutes to complete.

Willingness to be assessed for risk of child neglect (WARCN): This assessment was determined by 10 statements which asked participants to indicate their agreement with Willingness to be Assessed for Risk of Child Neglect (WARCN) (Appendix J). This scale was developed by Sar and Mucherera (2007). It utilizes a Likert scale: Do Not Agree, Agree Somewhat, Agree, More Than Agree, and Agree Totally. Scores ranged from 10 to 50 with higher scores indicating a tendency toward more positive responses regarding a mandated assessment and low scores indicating negative responses. It was created to obtain some indication of how the public might respond to mandated parenting classes before having children. This scale required approximately 5 minutes to administer.

Social desirability: The M-C 2(10) short-item scale by Straham and Gerbasi (1972), adapted from the 33-item scale by Marlowe-Crowne (1964), was utilized to measure the reliability of participants' self-reporting (Appendix K). This scale was employed in assessing participants' truthfulness in responding to the other items on the questionnaire. The Likert scale has 10 True-False items about behaviors that are desirable but uncommon or undesirable but common. The scoring tallied one point each for the correct response indicating either true, or false, and zero points for each incorrect response. The score range from 0 to 10 points. A high score (6-9 points) indicates the participants' tendency to be truthful and a low score (1-5 points) indicate the participants' tendency to give socially desirable answers. The coefficient alpha reliability of the original M-C 2(10) scale is .71. The scale was adjusted for this study as YES (True) and NO (False) and NOT SURE. The scoring was the same as the original scale expect for *Not Sure* which was given zero points. This scale required approximately 5 minutes to administer.

Data Collection Procedures

The data were collected from October 2007 to October 2008, a period of 12 months. The survey instrument (Appendices A - K) was administered to the participants by the researcher and the Lamaze instructor nurse, Lori Clem at the beginning of each first Lamaze class. Participating first-time expectant mothers and their partners were compensated with \$20 after completing the survey. A total of \$5,280 was expended in compensation for 264 individuals who participated in this study.

Consent Procedures

Institutional Review Board (IRB) approval from the University of Louisville (Appendix L) and from the University of Kentucky (UK) Hospital was sought prior to implementing the study. IRB approval was issued September 2007. Changes to IRB approval were sought and approved January 2008, June 2008, and July 2008, which allowed for the inclusion of the Lamaze instructor nurse to distribute surveys, an increase in number of participants who could be recruited and enrolled in the study, and extension for data collection. Flyers were posted and distributed to prospective participants at the University of Kentucky Hospital (Appendix M). A preamble consent (Appendix N) was provided to each participant prior to administration of the survey questionnaire.

Data Analysis

Data were analyzed with the Statistical Package for the Social Sciences (SPSS). The researcher coded the survey and entered the data. Descriptive statistics were computed for the demographic variables; t-tests and multivariate analysis were conducted to address the research questions. Pearson r , Spearman Rho r , and multiple regressions were conducted for predictive factors. Alpha was set at $p \leq 0.05$ for all tests of significance. Results are presented in the following chapter.

CHAPTER IV

RESULTS

The results of the study are described below, beginning with demographic characteristics of the participants followed by the results of the five research questions posed in this study.

Participants' Response Rate and Inclusion/Exclusion Criteria

Of the individuals asked to participate in the study, 132 couples (264 individuals) completed the survey. All individuals participating in this research were over 18 years of age and were expecting their first child. Responses from seven couples were excluded from the final analysis due to either one or both partners having children and/or they did not have a significant partner/spouse but a relative or friend as their partner at the time of the survey. This resulted in a total of 125 couples (250 individuals) whose responses were used to answer the questions.

Description of Sample

Expectant First-time Mothers (n = 125)

The demographic characteristics of the sample are listed in Tables 2 and 3 below. The expectant first-time mothers were 18 to 46 years old ($M = 28.70$, $SD = 4.56$). Eighty-four percent ($n = 105$) were white, 5% ($n = 6$) were African American, 10% ($n = 12$) were Asian/Pacific Islanders and 1% ($n = 1$) were Indian/Alaska.

Table 2

Demographic Characteristics of Mothers and their Partners^{a, b}

	MOTHERS		PARTNERS	
	N	%	N	%
RACE	N = 124		N = 124	
White	105	84	98	78
African/American	6	5	6	5
Asian/Pacific Islander	12	10	14	11
American Indian/Alaska	0	0	1	1
Hispanic/Latino	1	1	4	3
Other	0	0	1	1
EDUCATION	N = 117		N = 119	
No High School	0	0	4	3
High School	10	8	14	11
College	47	38	42	34
Graduate – Post Level	57	46	52	42
GED	1	1	3	2
Other	2	2	4	3
HOUSING STABILITY	N = 120		N = 120	
# of times Moved - 0	77	62	71	57
In past year 1	35	28	36	29
2	6	5	12	10
3	1	1	1	1
7	1	1	0	0
COMMUNITY SUPPORT	N = 124		N = 124	
None	103	82	111	90
Food Stamps	1	1	2	2
Medicaid	12	10	4	3
Daycare	2	2	0	0
Other	6	5	7	6
MARITAL STATUS	N = 123		N = 124	
Single	5	4	4	3
Partnered	14	11	13	10
Married	104	83	106	85
Separated	0	0	1	1
EMPLOYMENT	N = 124		N = 124	
Full-time	82	66	105	84
Part-time	14	11	13	10
Unemployed	27	22	5	4

Note: ^aNumbers not equal to sample total due to missing data^bPercentages not equal to 100% due to rounding and missing data

Table 3***Mean Demographics of Mothers and Partners***

Variable	Gender	N	Minimum	Maximum	Mean	SD
Age	Mothers	121	18	46	28.70	4.56
	Partners	121	18	47	29.93	5.82
Income	Mothers	25	0	\$15,000	\$2,646	\$2,364
	Partners	125	0	\$27,000	\$3,435	\$3,349
Employment stability (number of jobs in last year)	Mothers	119	0	7	1.24	0.84
	Partners	121	0	3	1.28	0.59
Housing stability (number of moves in last year)	Mothers	120	0	7	0.48	0.87
	Partners	120	0	3	0.53	0.71

Note: Numbers (N) is not equal to total sample due to missing data

Eighty-three percent ($n = 104$) stated that they were married, 11% ($n = 14$) partnered, and 4% ($n = 5$) single (stated they were single even though they showed up accompanied by male partners who also completed the survey). Forty-six percent ($n = 57$) of the mothers had post graduate level education (Masters or Ph. D), 38% ($n = 47$) had attended college, 8% ($n = 10$) attended high school, and 3% ($n = 3$) had acquired either GED or vocational training.

Sixty-six percent ($n = 82$) of the mothers were employed full-time, 11% ($n = 14$) part-time, and 22% ($n = 27$) unemployed. Of the mothers employed ($n = 96$), average number of jobs they had within the past year ranged from 1 to 7 jobs (mean = 1.28, SD = .59). Their income ranged from \$200 to \$15,000 per month (mean = \$2,646, SD = \$2,364). The median income for mothers was \$2,400 per month.

Eighty-two percent of mothers ($n = 103$) did not receive any type of federal or community support, but of those who received support ($n = 21$), the type of support consisted of: 10% ($n = 12$) Medicaid, 2% ($n = 2$) daycare, 1% ($n = 2$) food stamps, and 5% ($n = 6$) other types of support.

The mothers made anywhere from 0 to 7 moves within the past year (mean = .48; SD = .87), with 62% (n = 77) mothers reporting not moving within the past year. Of those who moved, 28% (n = 35) moved at least once during the past year, and 5% (n = 6) moved at least twice during the past year.

Partners (n = 125)

The partners were 18 to 47 years old (M = 29.93, SD = 5.82). Seventy-eight percent (n = 98) were white, 5% (n = 6) African American, 11% (n = 14) Asian/Pacific Islanders, 3% (n = 4) Hispanic/Latino, 1% (n = 1) American Indian/Alaska Native; and 1% (n = 1) Other - unspecified. The partners reported that 85% (n = 106) were married, 10% (n = 13) partnered, 3% (n = 4) single, and 1% (n = 1) separated. These numbers differed from the first-time mothers' percentages due in part to the respective partners' interpretations of their relationships and also due to missing data.

For the partners, a higher percentage, 42% (n = 52) had post graduate level education (Masters or Ph. D), 34% (n = 42) had attended college, 11% (n = 14) had attended high school, 5% (n = 7) had acquired either GED or other education such vocational training, and 3% (n = 4) had no high school education.

Eighty-four percent (n = 105) of the partners were employed full-time, with 10%, (n = 13) employed part-time, and 4% (n = 5) unemployed. Of the partners employed, (n = 118), the average number of jobs they had within the past year ranged from 1 to 3 jobs (mean=1.24, SD = .84). Their incomes ranged from \$200 to \$27,000 per month (mean = \$3,435, SD = \$3,449). The median income for partners was \$3,000 per month.

Ninety percent (n = 111) of the partners did not receive any federal or community support, and of those who did (n = 13), the types of support they received consisted of

3% (n= 4) Medicaid, 2% (n = 2) food stamps, and 5% (n= 7) other types of support. The partners (n = 120) reported 0 to 3 moves, with 57% (n = 71), reporting no moves within the past year. Of those who moved (n = 49), 29% (n = 36) moved at least once during the past year, and 10% (n = 12) moved at least twice during the past year.

Description of Criterion Variable Results

Potential for Child Neglect Risk

The potential for risk of child neglect was measured on two dimensions: behavior/action and recognition of child neglect.

Behavior/Action Dimension (Tables 4 and 5)

The adapted Mother-Child Neglect Scale (MCNS) consisted of 20 statements/items that assessed which behaviors/actions parents should perform in order not to be neglectful. The response format was, Strongly Disagree - 1; Disagree - 2; Neutral - 3; Agree - 4; to Strongly Agree - 5. The total score was obtained by adding the 20 items. The scores were grouped into three categories of potential for child neglect risk: Low = 20-40; Medium = 41 – 60; and High = 61 – 100. The scores for mothers ranged from 20 to 36 with a mean of 21.85 (SD = 3.63). About 56.1% (n = 69) of mothers were in the low risk level with 43.9% (n = 54) in the medium risk level, and none in the high risk level. The scores for partners ranged from 20 to 44 with a mean of 23.71 (SD = 5.48). About 43.5% (n = 54) of the partners were in the low risk level, 55.6% (n = 69) in the medium risk level, and 0.8% (n = 1) in the high risk level.

Table 4

Distribution of Total Scale Scores for Potential for Risk of Child Neglect as Measured by the Mother-Child Neglect Scale (Lounds, et. al 2004)

Behavior/Action	MOTHERS		PARTNERS	
	N	%	N	%
Ranges	n = 123		n = 124	
Low: 20 - 40	69	56.1	54	43.5
Medium: 41 - 60	54	43.9	69	55.6
High: 61 - 100	0	0	1	0.8

Table 5

Mean Scores for Potential for Risk of Child Neglect as Measured by Lounds, et al (2004)

Behavior/Action Dimension	N	Minimum	Maximum	Mean	Std. Deviation
Partners	124	20	44	23.71	5.48
Mothers	123	20	36	21.85	3.63
Valid N (listwise)	122				

Recognition Dimension (Tables 6, 7, 8, and 9)

The awareness for recognition of child neglect was measured on the dimension of whether participants would recognize incidents of child neglect and how they would rate them. A measure, The Recognition of Child Neglect Seven Scenarios, (RCNSS) consisting of seven scenarios was developed by Sar and Mucherera (2007) for this purpose. This measure was developed by utilizing scenarios of reports that could be made to child protection agencies which related to child neglect. Participants were asked to rate the seven scenarios as: None (no risk), Mild, Moderate, Severe, or Extreme Neglect. The

participants received one point for each scenario correctly rated and for those not correct, zero point, for a total ranging from 0 to 7 points.

First-time Expectant Mothers

The percentages for each scenario for mothers are listed below in Table 6. Two scenarios, labeled as Emily and Paula, 100% of the mothers recognized the risk level as No Risk. For Jason scenario 73% recognized it as Extreme Risk. For Elizabeth scenario, 38% recognized it as Severe Risk. For Alicia scenario, 62% recognized it as Extreme Risk. For two year old naked boy scenario, 26% recognized it as Moderate Risk. For Richard scenario, 30% recognized it as Mild Risk.

Table 6

First-Time Expectant Mothers: Number and Percentages of Mothers with Correct Responses on the Recognition of Child Neglect Seven Scenarios (RCNSS) as Measured by Sar and Mucherera (2007)

SCENARIO	N	% Correct
Emily calls the on-call nurse when her 3-month old daughter has a high fever	125	100.0
Jason refuses to allow his 8-year old son back into the house	91	72.8
Elizabeth and Booth live with their three children ages, 6-months, 2 years and 13 years old in a home that has garbage cans	48	38.4
Alicia leaves her 10-month old infant unattended in a bathtub full of water	77	61.6
A 2-year old naked boy playing alone in a fenced-in backyard across from a busy street.	32	25.6
The baby is still awake in his play crib and Richard fast asleep on the couch.	38	30.4
Paula holds her 2-month old close to her and makes eye contact with the baby for up to 3 to 5 minutes periodically throughout the day.	125	100.0

Partners

The percentages for each scenario for partners are listed in Table 7 following.

With two scenarios, Emily and Paula, 100% of the partners recognized the risk level as No Risk. For Jason scenario 74% recognized it as Extreme Risk. For Elizabeth scenario, 30% recognized it as Severe Risk. For Alicia scenario, 70% recognized it as Extreme Risk. For two year old naked boy scenario, 25% recognized it as Moderate Risk. For Richard scenario, 28% recognized it as Mild Risk.

Table 7

Partners: Number and Percentages of Partners with Correct Responses on the Recognition of Child Neglect Seven Scenarios (RCNSS) as Measured by Sar and Mucherera (2007)

SCENARIO	N	% Correct
Emily calls the on-call nurse when her 3-month old daughter has a high fever	125	100.0
Jason refuses to allow his 8-year old son back into the house	92	73.6
Elizabeth and Booth live with their three children ages, 6-months, 2 years and 13 years old in a home that has garbage cans	38	30.4
Alicia leaves her 10-month old infant unattended in a bathtub full of water	87	69.6
A 2-year old naked boy playing alone in a fenced-in backyard across from a busy street.	31	24.8
The baby is still awake in his play crib and Richard fast asleep on the couch.	35	28.0
Paula holds her 2-month old close to her and makes eye contact with the baby for up to 3 to 5 minutes periodically throughout the day.	125	100.0

Rating for both First-time Mothers and Partners

The scores for each participant were then totaled for a rating score of: Low, Medium, or High score awareness (Table 8). Low risk scores indicated that for all seven

scenarios, the mothers did not recognize the scenarios' risk levels. High scores indicated the mothers were able to recognize the risk levels of the scenarios. The mothers' scores ranged from 0 to 7 with $M = 4.08$, $SD = 1.24$ (Table 9). Of the mothers, 34% ($n = 42$) were in the low score level, with 61% ($n = 76$) in the medium score level, and 3% ($n = 4$) in the high score level of recognizing the risk levels of child neglect.

The scores for each participant were then totaled for a rating score of Low, Medium, and High score awareness. Those in the low score category were not able to recognize the scenarios' risk levels and those with high scores were able to recognize the risk levels of the scenarios. The partners' scores ranged from 1 to 7 with mean = 4.04, $SD = 1.30$ (Table 9). The partners with low scores were 25% ($n = 31$), medium level was 70% ($n = 88$), and 2% ($n = 2$) in the high score level of recognizing risk levels of child neglect (Table 8).

Table 8

Frequencies of Total Range Levels: Awareness for Recognition of Child Neglect

Recognition Ranges	MOTHERS		PARTNERS	
	n = 121	%	n = 122	%
Low: 0 – 2	42	34	31	25
Medium: 3 - 5	76	61	88	70
High: 6 - 7	4	3	2	2

Table 9

Mean Scores for Awareness for Recognition of Child Neglect

Recognition	N	Minimum	Maximum	Mean	Std. Deviation
Partners	122	1	7	4.04	1.30
Mothers	121	0	7	4.08	1.24
Valid N (listwise)	121				

Description of Predictor Variables Results

Following is a description of the results of all the predictor risk factor variables: history of childhood neglect, drug, cigarette and alcohol use, physical and mental health problems, parenting styles, parental knowledge of child development, adult attachment styles, willingness to be assessed for risk of child neglect, and social desirability.

History of Personal Childhood Abuse

Participants were asked to identify whether they had been abused or neglected during their own childhood years and to specify the type of maltreatment (Table 10). Of those reporting no abuse/neglect during their childhood years, 83% (n = 104) were mothers and 84% (103) were partners. For the mothers (n = 20) who reported as having been abused, 13% (n = 16) reported physical, 2% (n = 3) emotional, and 1% (n = 1) sexual abuse. Of the partners (n = 20) 11% (n = 14) reported physical, 2% (n = 2) neglect, 2% (n = 3) emotional, and 1% (n = 1) sexual abuse.

Table 10

Percentages of History of Personal Childhood Abuse

History of Personal Childhood Abuse	MOTHERS		PARTNERS	
	N	%	N	%
No Abuse	104	83	103	84
Physical	16	13	14	11
Neglect	0	0	2	2
Emotional	3	2	3	2
Sexual	1	1	1	1

Drugs, Cigarettes, and Alcohol Use

The results of drug, cigarettes, and alcohol use are shown for mothers and partners (Table 11). Individuals were asked whether in the past month they had used

substances/drugs not prescribed by a doctor, smoked cigarettes or tobacco products, or had drunk alcohol. The responses were never, sometimes, weekly, or daily.

Table 11

Percentages of Drugs, Cigarettes, and Alcohol Use

		MOTHERS		PARTNERS	
Smoking Cigarettes		N	%	N	%
	Never	122	97	101	81
	Sometimes	1	1	9	7
	Weekly	2	2	1	1
	Daily	0	0	14	11
Alcohol Use					
	Never	121	97	49	39
	Sometimes	3	2	47	38
	Weekly	1	1	25	20
	Daily	0	0	4	3
Substance Use					
	Never	123	98	117	93
	Sometimes	1	1	6	5
	Weekly	1	1	1	1
	Daily	0	0	1	1

For smoking cigarettes, 97% (n = 122) of mothers stated that within the past month, they had never smoked cigarettes, 1% (n = 1) sometimes, and 2% (n = 2) weekly. In regards to drinking alcohol, 97% (n = 122) never, 1% (n = 1) sometimes, and 2% (n = 2) weekly. For substance abuse, 98% (n = 123) of mothers stated that within the past month they had never used any substance, 1% (n = 1) each for sometimes and weekly. Eighty-one percent (n = 101) of partners reported that they never smoked cigarettes within the past month, 7% (n = 9) sometimes, 1% (n = 1) weekly and 11% (n = 11) daily. In regards to drinking alcohol, 39% (n = 49) never, 38% (n = 47) sometimes, 20% (n =

25) weekly, and 3% (n = 4) daily. For substance use, 93% (n = 117) of partners stated never, 5% (n = 6) sometimes, 1% (n = 1) each for weekly, and daily use.

Physical and Mental Health Problems

Participants were asked to rate how they would describe their overall physical and emotional health at the time of the survey completion (Table 12). Thirty-five percent (n = 44) of mothers reported being in excellent health, 51% (n = 64) in good health, 14% (n = 17) in average health. For emotional health, 35% (44) reported excellent, 47% (n = 59) good, and 18% (n = 22) average. The partners reported 33% (n = 41) in excellent health, 50% (n = 62) in good health, 16% (n = 20) average, and 2% (n = 2) poor. For partners' emotional health, 39% (n = 49) reported excellent health, 46% (n = 57) good, and 15% (n = 19) average.

Table 12

Percentages of Physical and Mental Health

		MOTHERS		FATHERS	
Physical Health		N	%	N	%
	Excellent	44	35	41	33
	Good	64	51	62	50
	Average	17	14	20	16
	Poor	0	0	2	2
Emotional Health					
	Excellent	44	35	49	39
	Good	59	47	57	46
	Average	22	18	19	15

Parenting Style

Participants were asked to identify what type of parenting their own parents used during their years as their parents' dependents. These were questions adopted from the Parenting Authority Questionnaire (PAQ) by Buri (1991). This was measured on two

levels of each parent's (mother and father) parenting style. Table 13 shows the percentage comparison of the two groups.

Mothers reported 54% (n = 67) of their own mothers as being Authoritarian, 34% (n = 43) as Authoritative, 6% (n = 8) as Permissive, and 5% (n = 6) as Neglectful. As to their fathers, mothers reported that 57% (n = 71) of the fathers were Authoritarian, 27% (n = 34) Authoritative, 6% (n = 7) Permissive, and 10% (n = 12) as Neglectful. Partners reported that 42% (n = 52) of their mothers were Authoritarian, 38% (n = 48) were Authoritative, 14% (n = 18) were Permissive, and 6% (n = 7) were Neglectful. Partners then reported of their fathers that 50% (n = 63) were Authoritarian, 16% (n = 20) Authoritative, 14% (n = 17) Permissive, and 19% (n = 23) Neglectful.

Table 13

Percentages of Parenting Styles

Variables	MOTHERS		PARTNERS	
	N	%	N	%
Mother's Parenting	N = 124		N = 125	
Authoritative	43	34	48	38
Authoritarian	67	54	52	42
Permissive	8	6	18	14
Neglectful	6	5	7	6
Father's Parenting	N = 124		N = 124	
Authoritative	34	27	20	16
Authoritarian	71	57	63	50
Permissive	7	6	17	14
Neglectful	12	10	23	19

Parental Knowledge of Child Development

The participants were asked to complete the 44-item Opinions about Babies (OAB) scale (Reich, 2005) to assess their knowledge regarding babies (Table 14).

Table 14***Mean Percentage Correct for Total Knowledge Survey and Each Subscale******Opinion about Babies Scale as Measured by Reich (2005)***

Subscales		Percentage Correct				
		N	Min %	Max %	Mean %	SD
Daily Routines:	Mothers	125	33	100	95	14.87
	Partners	124	0	100	94	18.88
Nutrition:	Mothers	125	25	100	73	22.93
	Partners	122	0	100	58	27.58
Development:	Mothers	123	23	92	69	14.62
	Partners	121	23	100	64	16.06
Discipline:	Mothers	124	29	100	76	18.48
	Partners	121	14	100	69	16.80
Safety:	Mothers	125	25	100	78	15.58
	Partners	120	25	100	67	19.97
Sleep Habits:	Mothers	125	20	100	69	17.66
	Partners	121	0	100	62	17.04
Maternal Health:	Mothers	125	33	100	82	18.25
	Partners	122	0	100	82	20.63
Three Months Old:	Mothers	125	0	33	10	11.16
	Partners	125	0	50	40	11.99
Six Months Old:	Mothers	125	0	50	18	13.32
	Partners	125	0	50	27	14.68
One Year:	Mothers	125	0	83	67	17.77
	Partners	125	0	83	61	21.07
Crying Baby:	Mothers	125	17	83	65	11.32
	Partners	125	17	83	63	15.18
Warning Signs:	Mothers	125	0	60	43	17.51
	Partners	125	0	60	41	19.90

Each participant received a total score on the first section, with 39 items comprised of 3 questions regarding daily routines, 4 addressing nutrition/feeding, 14 questions on cognitive and physical development, 6 involving discipline, 7 on safety issues, 2 addressing sleeping habits of infants, and 3 regarding maternal health after birth.

This was Likert scale with agree, disagree and no opinion. It was scored with either correct or incorrect and no opinion as incorrect (lacking knowledge). Missing items were not scored to avoid falsely concluding a lack of knowledge on items that might have been intentionally skipped by the participants.

The second section had five questions, with three questions concerning developmental timing at 3, 6, and 12 month stages, one involving responding to infant crying, and one regarding warning signs of potential health problems. For each developmental timing stage there were six response options indicating what a child is able to accomplish physically and cognitively. For example some of the response options were, was the baby able to roll over onto his/her stomach at 3 months old, crawl at 6 months, or pull-up self to standing at one year. The items were scored as percentage correct. The fourth question was “When babies cry the best things to do are”. The response options were for example: see if the diaper needs to be changed, check temperature to see if the baby is sick, call the doctor, etcetera. The fifth question was “Which of the following in a six month old baby can be a sign of a health problem?” Some examples of the response options were blows bubbles with mouth, lies on back and not interested in the things around her.

For each subscale, the minimum and maximum scores are reported in Table 14, with the mean and standard deviation for mothers and partners. For example, both mothers and partners had high mean scores regarding knowledge of child routines with ($M = 95$, $SD = 14.87$) and ($M = 94$, $SD = 18.88$) respectively, maternal health after childbirth for mothers ($M = 82$, $SD = 18.25$), and for fathers ($M = 82$, $SD = 20.63$). Mean scores on nutrition, physical/cognitive development, discipline, safety, sleep habits,

developmental ability at one year, and crying babies ranged from $M = 58$ to $M = 76$. Low scores indicated lack of knowledge of development ability at three months with ($M = 10$, $SD = 11.16$) mothers, and ($M = 40$, $SD = 11.99$) partners; developmental ability at six months with ($M = 18$, $SD = 13.32$) mothers, ($M = 27$, $SD = 14.68$) partners; and warning signs of health problems with ($M = 43$, $SD = 17.51$) mothers and ($M = 41$, $SD = 19.90$) fathers.

There were 44 items in total for the Opinion about Babies (OAB) scale. A correct percentage was calculated by adding the number of correct answers and dividing them by the number of items (Table 15). Missing items were not scored and thus the results of the OAB survey are estimates. Both mothers and partners were comparable in their total scores for level of knowledge about child development, with the mothers' mean percentage scores determined as: $M = 61$, $SD = 7.74$ and partners $M = 59$, $SD = 8.00$.

Table 15

Mean Overall Scale Scores for Opinions about Babies (OAB)

	Percentage Correct				
	N	Min%	Max%	Mean%	SD
Overall Scale Score: Mothers	122	37	75	61	7.74
Partners	114	35	76	59	8.00

Adult Attachment Style

A 36-item self-report measure of attachment, Experience of Close Relationships (ECR) by Brennan, Clark, and Shaver (1998) was utilized to measure attachment relational patterns of mothers and their partners. The ECR uses a seven point Likert scale ranging from Disagree Strongly (1) to Agree Strongly (7). Items 1-18 measure attachment-related anxiety and items 19-36 measure attachment-related avoidance.

Certain items (9, 11, 20, 22, 26, 27, 28, 29, 30, 31, 33, 34, 35, and 36) are reverse scored. Then all the items are averaged to come up with an attachment-related anxiety or attachment-related avoidance score. The four attachment styles/typologies: secure, fearful (avoidant-anxious), preoccupied/enmeshed (avoidant-ambivalent), and dismissive (disorganized) were computed according to Bartholomew and Shaver's (1998) method and using the classification coefficients (Fischer's linear discriminant functions) they developed for each attachment style in their sample (n = 1082). Then, the classification into attachment style is determined by the resultant score as compared to the scores for the three other possible attachment styles. For example, if the computed value for Secure attachment is greater than the values for Preoccupied, Fearful and Dismissive, the person is classified as having a Secure attachment style, etc.

The results of these computations indicated that participants in this study fit into only two of the four attachment style typologies: fearful and preoccupied attachment styles. None of the participants in the study fell into the secure or dismissive attachment style typologies. Of the mothers, 56% (n = 70) were Fearful, 18.4% (n = 23) Preoccupied, and 25.6% (n = 32) had missing data. Of the partners, 63.2% (n = 79) were Fearful, 10.4% (n = 13) Preoccupied, and 26.4% (n = 33) had missing data.

Table 16

Attachment Styles as Per Experience of Close Relationship (Brennan, Clark, & Shaver, 1998)

	Attachment Style	Frequency	Percent	Valid Percent
Mothers n = 93	Fearful	70	56.0	75.3
	Preoccupied	23	18.4	24.7
Partners n = 92	Fearful	79	63.2	85.9
	Preoccupied	13	10.4	14.1

Table 17 shows attachment style by dyad. The comparison of mothers' and their partners' data showed that of the 91 couples who completed the scale, 59 couples (64.8%) had the same fearful attachment style, 3 couples (3.2%) had the same preoccupied style, 10 couples (9.9%) had fearful mothers and preoccupied partners, and 19 couples (20.1%) had preoccupied mothers and fearful partners.

Table 17

Attachment Style by Dyad

Same		Different	
Fearful	59 (64.8%)	Mothers Preoccupied / Fathers Fearful	19 (20.1%)
Preoccupied	3 (3.2%)	Mothers Fearful / Fathers Preoccupied	10 (9.9%)

Willingness to be Assessed for Risk of Child Neglect (WARCN)

This section focused on whether participants were willing to be assessed for risk of child neglect and if there should be laws/policies to mandate this type of assessment for all first-time mothers and their partners. The 10-item scale, Willingness to be Assessed for Risk of Child Neglect (WARCN) was developed by Sar and Mucherera to measure willingness to be assessed. The WARCN uses a Likert response scale: Do Not Agree (1), Agree Somewhat (2), Agree (3), More Than Agree (4), and Agree Totally (5).

Table 18 shows the mean scores and standard deviations for the ten statements regarding first-time mothers and their partners' opinions about willingness to be assessed for risk of child neglect.

Table 18

Willingness to be Assessed for Risk of Child Neglect Scale: Mean Levels of Agreement for Mothers and Partners by Scale Item

Item	Mothers		Partners	
	N	Mean (SD)	N	Mean (SD)
Every woman be screened	125	2.55 (1.23)	125	2.30 (1.31)
Every first time mother be screened	125	2.62 (1.24)	125	2.44 (1.35)
Every man be screened	125	2.55 (1.23)	125	2.27 (1.32)
Every first time father be screened	125	2.60 (1.24)	125	2.46 (1.36)
Law for first time mothers	125	2.34 (1.26)	125	2.06 (1.28)
Law for first time fathers	125	2.36 (1.25)	125	2.10 (1.29)
Law for every expectant mother	125	2.34 (1.25)	125	2.00 (1.21)
Law for every expectant father	125	2.37 (1.27)	125	2.03 (1.25)
If there is a law, I would participate	125	3.18 (1.38)	125	2.84 (1.43)
I favor law requiring assessment	125	2.50 (1.35)	125	2.22 (1.39)

Table 19 indicates the mean total scores for both mothers and partners. The mothers' scores ranged from 10 to 50 with $M = 25.42$, $SD = 11.69$. The partners' scores ranged from 10 to 50 with $M = 22.72$, $SD = 11.76$. Partners were slightly less willing to be assessed for risk for child neglect.

Table 19

Willingness to be Assessed for Risk of Child Neglect: Mean Levels of Agreement for Mothers and Partners for Total Scale

	N	Minimum	Maximum	Mean	Std. Deviation
Mothers	125	10.00	50.00	25.42	11.69
Partners	125	10.00	50.00	22.72	11.76

Table 20 indicates the percentages for each response to the 10 statements for both first-time mothers and their partners.

Table 20

Percentage Frequencies of WARC� as Measured by Sar and Mucherera

QUESTIONS	RESPONSE	MOTHERS		PARTNERS	
		N	%	N	%
1. Every woman who is expecting a child should be screened for potential neglect of their child regardless of how many children they have.	Do Not Agree	28	22.4	47	37.6
	Agree Somewhat	37	29.6	28	22.4
	Agree	37	29.6	29	23.2
	More Than Agree	9	7.2	8	6.4
	Totally Agree	14	11.2	13	10.4
2. Every first time expectant mother should be screened for potential neglect of their child	Do Not Agree	27	21.6	42	33.6
	Agree Somewhat	34	27.2	26	20.8
	Agree	38	30.4	32	25.6
	More Than Agree	12	9.6	10	8.0
	Totally Agree	14	11.2	15	12.0
3. Every man who is expecting a child should be screened for potential neglect of their child regardless of how many children they have.	Do Not Agree	29	23.2	48	38.4
	Agree Somewhat	35	28.0	29	23.2
	Agree	37	29.6	28	22.4
	More Than Agree	11	8.8	6	4.8
	Totally Agree	13	10.4	14	11.2
4. Every first-time expectant father should be screened for potential neglect of their child	Do Not Agree	27	21.6	41	32.8
	Agree Somewhat	36	28.8	27	21.6
	Agree	36	28.8	31	24.8
	More Than Agree	12	9.6	10	8.0
	Totally Agree	14	11.2	16	12.8
5. There should be a law requiring assessment for potential neglect of all first time expectant mothers like there is a requirement for a license to drive.	Do Not Agree	39	31.2	57	45.6
	Agree Somewhat	37	29.6	32	25.6
	Agree	28	22.4	19	15.2
	More Than Agree	9	7.2	5.0	4.0
	Totally Agree	12	9.6	12	9.6
6. There should be a law requiring assessment for potential neglect of all first time fathers like there is a requirement for a license to drive	Do Not Agree	37	29.6	56	44.8
	Agree Somewhat	39	31.2	30	24.0
	Agree	28	22.4	23	18.4
	More Than Agree	9	7.2	3	2.4
	Totally Agree	12	9.6	13	10.4
7. There should be a law requiring assessment of all expectant mothers regardless of how many children they have for potential neglect like there is a license to drive.	Do Not Agree	39	31.2	59	47.2
	Agree Somewhat	36	28.8	32	25.6
	Agree	29	23.2	19	15.2
	More Than Agree	10	8.0	6	4.8
	Totally Agree	11	8.8	9	7.2

8. There should be a law requiring assessment of all expectant fathers regardless of how many children they already have for potential neglect like there is a license to drive.	Do Not Agree	39	31.2	59	47.2
	Agree Somewhat	35	28.0	29	23.2
	Agree	29	23.2	21	16.8
	More Than Agree	10	8.0	6	4.8
	Totally Agree	12	9.6	10	8.0
9. If there was a law requiring assessment of expectant first time parents for potential neglect, I would participate and be assessed.	Do Not Agree	20	16.0	30	24.0
	Agree Somewhat	15	12.0	23	18.4
	Agree	46	36.8	35	28.0
	More Than Agree	10	8.0	11	8.8
	Totally Agree	34	27.2	26	20.8
10. I favor law being passed requiring assessment of first time expectant parents for potential of neglect.	Do Not Agree	38	30.4	57	45.6
	Agree Somewhat	30	24.0	20	16.0
	Agree	31	24.8	26	20.8
	More Than Agree	9	7.2	7	5.6
	Totally Agree	17	13.6	15	12.0

The total scores for the ten questions ranged from 10 to 50 points with higher scores indicating a tendency toward a positive response and low scores indicating a negative response on the establishment of a mandated assessment (Table 21). Each participant's score was totaled and a percentage was computed.

The results indicate that within the first-time mothers' 15.2% (n = 19) Agree totally, 9.6% (n = 12) more than agree, 36% (n = 45) agree, 26.4% (n = 33) agree somewhat and only 12.8% (n = 16) do not agree. The partners results indicate that 10.4% (n = 13) agree totally, 9.6% (n = 12) more than agree, 28.8% (n = 36) agree, 32.8% (n = 41) agree somewhat and only 18.4% (n = 23) do not agree. A paired sample t-test (Table 22) was calculated to compare the mean range scores for mothers to the mean range scores for partners regarding willingness to be assessed for risk of child neglect. The mean range for mothers on the awareness for recognition of child neglect was 2.88 (SD = 1.22) as compared to the mean for partners was 2.61 (SD = 1.20). There was significant difference found $t(124) = -2.17$ and $p < .001$. There was significant variance in the

responses between mothers and their partners in the range for willingness to be assessed for child neglect.

Table 21

Total Percentage Scores of the WARC�

		MOTHERS		PARTNERS	
		N	%	N	%
Do not agree	1	16	12.8	23	18.4
Agree somewhat	2	33	26.4	41	32.8
Agree	3	45	36	36	28.8
More than agree	4	12	9.6	12	9.6
Agree totally	5	19	15.2	13	10.4
	Total	125	100.0	125	100.0

For first-time mothers, if the totals for *do not agree* and *agree somewhat* ($n = 49$) are compared to the total of *agree*, *more than agree*, and *agree totally* ($n = 76$), 60.8% of first-mothers' scores indicate a tendency towards favoring establishment of the mandated assessment based on the WARC�. For the partners, if the totals for *do not agree* and *agree somewhat* ($n = 64$) are compared to the total of *agree*, *more than agree*, and *agree totally*, ($n = 61$), 48.8% of the partners have scores indicating a tendency towards favoring establishment of the mandated assessment based on the WARC�.

A paired sample t-test (Table 22) was calculated to compare the mean scores for mothers to the mean scores for partners regarding the 10 statements' willingness to be assessed for risk of child neglect. The mean for mothers on the awareness for recognition of child neglect was 25.42 ($SD = 11.69$) as compared to the mean for partners was 22.72 ($SD = 11.76$). There was significant difference found $t(124) = -2.07$ and $p < .05$. There was significant variance in the responses between mothers and their partners in the percentages for each statement.

Table 22***Paired Sample t-test WARC� for First-time Mothers and their Partners***

N= 125		Mean	SD	T	Df
Pair 1	WARCN Partners	22.72	11.76	-2.07	124
	WARCN Mothers	25.42	11.69		124

Social Desirability Scale (Table 23)

The 10-item M-C2 (Straham & Gerbasi, 1972), brief version of Marlowe-Crowne's (1964) Social Desirability Scale was utilized to measure self-reliability reporting of the participants. The 10 statements asked questions such as "I never hesitate to go out of my way to help someone in trouble" or "I can't remember 'playing sick' to get out of something." The scoring is based on answering the questions honestly (1 point) or not (zero points). The total ranges from 0 to 10 with higher scores indicating less desirability and more honesty.

Table 23***Social Desirability Scale by Straham & Gerbasi (1972)***

POINTS	MOTHERS		PARTNERS	
	Frequency	Percent	Frequency	Percent
1 - 5	54	43.5	65	52.8
6 - 9	70	56.5	58	47.2
Total	125	100	125	100

The scores for mothers ranged from 0 to 10 with a mean of 5.68 (SD = 1.82). About 43.5% (n = 54) of mothers had low scores (0 to 5 points) indicating a desire to present oneself in a good light. About 56.5% (n = 70) of the mothers had high scores (6 to 10 points) indicating less desirability and a tendency to be more honest.

The scores for partners ranged from 1 to 9 with a mean of 5.45 (SD = 2.07). About 52.8% (n = 65) of the partners were in the lower level (1 to 5 points), indicating a desire to present oneself in a good light. About 47.2% (n = 58) were in the high level (6 to 9 points) indicating less social desirability and more honesty.

Correlation of Social Desirability to Other Variables/Scales

A correlation matrix of the social desirability scale (MC-2) with all the other variables scales was conducted to see which scales were most vulnerable to high social desirability responses (Table 24).

For first-time mothers, of the 27 variables, 15 of the variables were negatively correlated with social desirability scale. These were: risk of child neglect, age, race, educational level, federal support systems, employment status, history of past childhood abuse/neglect, history of physical abuse, history of depression, smoking status, physical health status, emotional health status, mothers parenting style, father's parenting style, and attachment style.

Table 24

Correlation Matrix for Social Desirability (MC-2) and all other Variable Scales

	Social Desirability			
	MOTHERS: N = 125		PARTNERS: N = 125	
PEARSON	R	P	R	P
Opinions about babies	0.120	0.189	0.074	0.440
Risk of Neglect	-0.167	0.064	-0.084	0.357
Recognition Child Awareness	0.130	0.153	-0.056	0.544
WARCN	0.115	0.200	0.120	0.187
Age – How old are you?	-0.003	0.972	0.026	0.781
Monthly Income	0.025	0.782	0.003	0.972
Changed Residences	0.064	0.489	-0.050	0.589
How many jobs in a year?	0.048	0.604	-0.177(*)	0.054
SPEARMAN RHO	MOTHERS		PARTNERS	
Race	-0.091	0.316	0.052	0.569
Educational Level	-0.030	0.750	-0.046	0.620
Federal Support	-0.133	0.139	0.055	0.548
Marital Status	.229(*)	0.011	-0.103	0.260
Employment Status	-0.072	0.427	-0.060	0.508
Past History of Abuse/Neglect	-0.171	0.058	-0.067	0.465
History of Physical Abuse	-0.142	0.117	0.049	0.591
History of Neglect	.	.	0.086	0.346
History of Depression	-.214(*)	0.017	-0.107	0.241
History of Sexual	0.023	0.799	-0.031	0.732
Smoking Status	-0.109	0.226	0.088	0.333
Alcohol Status	0.034	0.705	-.224(*)	0.013
Substance Abuse Status	0.022	0.808	-.185(*)	0.040
Physical Health Status	-.316(**)	0.000	-.208(*)	0.021
Emotional Health Status	-.178(*)	0.047	-.230(*)	0.010
Mother's Parenting	-0.174(*)	0.053	-0.063	0.491
Father's Parenting	-0.164	0.068	-0.134	0.140
Attachment Style	-0.046	0.660	0.153	0.149

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

For the partners, of the 27 variables, 16 variables were negatively correlated with social desirability scale. These were: risk of child neglect, recognition of awareness of child neglect, changes of residence in a year, how many jobs in a year, educational level, marital status, employment status, history of past abuse/neglect, history of depression,

history of sexual abuse, alcohol status, substance abuse status, physical health status, emotional health status, mothers parenting style, and father's parenting style.

For both first-time mothers and partners, the negatively correlated scales indicated that these scales might have been skewed due to response bias of participants providing more socially desirable answers because their scores were low, between 1- 5 points (suggesting less honesty).

Further analysis was conducted by selecting out cases with high social desirability (those who provided more socially acceptable answers with scores of 1- 5 points) and only leaving the cases with individuals who had a tendency to be more honest. The correlation results of the social desirability and the other scale measures for only those with a tendency for more honest is shown in Table 25. There was no linear relationship between social desirability and the other scale variables for the partners.

For the first-time mothers, a significant correlation was found for willingness to be assessed for child neglect ($r(69) = 0.26, p < 0.05$ and age ($r(67) = 0.26, p < 0.05$ with social desirability. The first-time mothers who had higher scores on the social desirability (tended to be more honesty) had higher scores on the willingness to be assessed for child neglect and were older.

Further analysis can be conducted on the relationships of each scale measure to each other as influenced by the social desirability scale. This can then be compared to other previous studies with the MC-2 for reliability and validity. The following section addressed the five research questions in depth.

Table 25

Correlation Social Desirability and other Scales: Score 6-10 points

	Social Desirability			
	MOTHERS: N = 70		PARTNERS: N = 58	
PEARSON	R	P	R	P
Opinions about babies	0.17	0.16	-0.12	-0.12
Risk of Neglect	0.01	0.96	-0.21	0.39
Recognition Child Awareness	-0.04	0.75	-0.04	0.12
WARCN	0.26*	0.03	0.05	0.75
Age – How old are you?	0.26*	0.04	0.03	0.69
Monthly Income	0.08	0.53	-0.12	0.83
Changed Residences	-0.13	0.30	-0.02	0.37
How many jobs in a year?	-0.06	0.16	-0.26	0.87
SPEARMAN RHO	MOTHERS		PARTNERS	
Race	0.21	0.08	0.01	0.91
Educational Level	0.02	0.86	0.01	0.96
Federal Support	-0.12	0.33	0.04	0.76
Marital Status	0.16	0.19	0.19	0.16
Employment Status	-0.01	0.96	-0.08	0.55
Past History of Abuse/Neglect	-0.09	0.47	-0.12	0.38
History of Physical Abuse	.	.	-0.07	0.59
History of Neglect	.	.	0.03	0.84
History of Depression	-0.05	0.69	-0.10	0.44
History of Sexual	0.00	0.99	.	.
Smoking Status	-0.15	0.23	-0.09	0.51
Alcohol Status	-0.06	0.61	0.06	0.65
Substance Abuse Status	0.15	0.22	-0.16	0.23
Physical Health Status	-0.20	0.09	-0.17	0.19
Emotional Health Status	-0.01	0.95	-0.12	0.35
Mother's Parenting	-0.02	0.86	0.01	0.94
Father's Parenting	-0.18	0.14	-0.20	0.13
Attachment Style	-0.15	0.27	-0.01	0.93

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The Five Research Questions

Question 1: What is the level of awareness for recognizing child neglect among first-time expectant mothers and their partners?

Level of awareness for recognizing child neglect was measured by a seven statement scale created by Sar and Mucherera (2007). Participants were asked to rate seven scenarios/incidents as to what level of neglect they indicate: None, Mild, Moderate, Severe or Extreme. The results were described earlier in the preceding scale. The mothers' scores ranged from 0 to 7 with $M = 4.08$, $SD = 1.24$ (earlier Table 9). Of the mothers, 34% were in the low level, with 61% in the medium level, and 3% in the high level of recognizing the risk levels of child neglect (Table 9). The partners' scores ranged from 1 to 7 with $M = 4.04$, $SD = 1.30$ (Table 7). The partners in the low level were 25%, medium level was 70%, and 2% in the high level of recognizing risk levels of child neglect as previously shown in Table 8 above.

Was there any significant difference between the mothers' and partners' levels of awareness of recognition of child neglect? A paired-sample t-test was calculated to compare the child awareness expectant mothers' mean score to the child awareness partners' mean score. The mean for mothers was 2.30 ($SD = 1.06$), and the mean for partners was 2.31 ($SD = 1.05$). No significant difference from mothers to partners was found ($t(117) = .070$, $p > .05$) suggesting that mothers were no more likely than their partners to recognize neglect.

Question 2A: Among first-time expectant mothers and their partners, what percentages are at risk for being neglectful?

Risk of child neglect was measured as Potential for Child Neglect Risk utilizing the MCNS measure created by Lounds, et al, (2004) and modified for this study. The scores of the MCNS (earlier Table 4) were grouped in three categories of potential for child neglect risk: Low = 20 to 40 (Strongly Agree and Agree); Medium = 41 to 60 (Neutral); and High = 61 to 100 (Disagree and Strongly Disagree). About 56.1% of mothers were in the low risk level with 43.9% in the medium risk level, and none in the high risk level. About 43.5% of the partners were in the low risk level, 55.6% in the medium risk level, and 0.8% in the high risk level. Results indicate that first-time mothers were at lower risk of child neglect than their partners. A chi-square good of fit test was calculated comparing the frequency of occurrence of low, medium, and high risk level for the expectant first-time mothers. No significant deviation was found (chi-square (1) = 1.83, $p > .05$). The values appear to be fair. A chi-square good of fit test was calculated comparing the frequency of occurrence of low, medium, and high risk level among partners. A significant deviation from the hypothesized values was found (chi-square (2) = 61.76, $p < .05$).

Question 2B: Are first-time expectant mothers at greater risk than their partners for being neglectful?

Was there any significant difference between the two groups putting one group at greater risk of being neglectful to their child than their partners? A paired-sample t-test was calculated to compare the Child Neglect Scale expectant mothers' mean score to the Child Neglect Scale partners' mean score. The mean for mothers was 21.27 (SD = 3.64),

Table 26

Independent Sample t-tests: Attachment Styles and the Effect on Risk of Child Neglect, Recognition of Child Neglect, and Opinion about Babies¹

	Attachment Style	N	Mean	SD	1t	df	Sig. 2-tailed
MOTHERS							
Pair 1: Risk of Child Neglect	Fearful	69	22.02	3.69	3.10	89.2	.003
	Preoccupied	23	20.47	1.08			
Pair 2: Awareness for Recognition of child neglect	Fearful	69	2.18	1.07	2.08	89	.040
	Preoccupied	22	2.72	.98			
Pair 3: Opinions about babies	Fearful	68	40.80	5.18	3.09	88	.003
	Preoccupied	22	44.63	4.57			
PARTNERS							
Pair 1: Risk of Child Neglect	Fearful	78	23.91	5.98	.079	89	.93
	Preoccupied	13	23.76	5.64			
Pair 2: Awareness for recognition of child neglect	Fearful	76	2.18	1.05	.715	86	.48
	Preoccupied	12	2.41	.99			
Pair 3: Opinions about babies	Fearful	72	40.29	5.52	.518	81	.61
	Preoccupied	11	39.36	5.57			

¹t tests where equal variances were not assumed were conducted due to large differences in n's by group.

Awareness for Recognition of Child Neglect

An independent sample t-test (Table 26) was conducted comparing the mean scores of 69 mothers with fearful attachment style and 22 with preoccupied attachment style. The mean for fearful attachment mothers' awareness for recognition of child neglect was 2.18 (SD = 1.07), compared to 2.72 for preoccupied attachment mothers (SD = .98). An independent sample t-test comparing the mean scores of the two attachment style groups, fearful and preoccupied found a significant difference between the means of the two groups ($t(89) = -2.08, p < .05$). The mean difference is .54, thus preoccupied attachment style first-time mothers have higher tendencies of being aware of recognizing child neglect than fearful attachment style first-time mothers.

Opinions about Babies

An independent sample t-test (Table 26) was conducted comparing the mean scores of 68 mothers with fearful attachment style and 22 with preoccupied attachment style. The mean for fearful attachment mothers' opinions about babies was 40.80 (SD = 5.18), compared to 44.63 for preoccupied attachment mothers (SD = 4.57). An independent sample t-test comparing the mean scores of the two attachment style groups, fearful and preoccupied found a significant difference between the means of the two groups ($t(88) = -3.09, p < .05$). The mean difference is a 3.83, thus preoccupied attachment mothers have higher scores on opinions about babies than fearful mothers.

(b) Partners

Risk of Child Neglect

An independent sample t-test (Table 26) was conducted comparing the mean scores of 78 partners with fearful attachment and 13 with preoccupied attachment. The mean for fearful attachment partners' risk of child neglect was 23.91 (SD = 35.98), compared to 23.76 for preoccupied attachment partners (SD = 5.64). An independent sample t-test comparing the mean scores of the two attachment style groups, fearful and preoccupied found no significant difference between the means of the two groups ($t(89) = .079, p > .05$). The mean difference is .15, thus there is no significant difference between the two groups with regard to their levels for risk of child neglect.

Awareness for Recognition of Child Neglect

An Independent sample t-test (Table 26) was conducted comparing the mean scores of 76 partners with fearful attachment and 12 with preoccupied attachment. The mean for fearful attachment partners being aware of recognizing child neglect was 2.18

(SD = 1.05), compared to 2.41 for preoccupied attachment partners (SD = .99). An independent sample t-test comparing the mean scores of the two attachment style groups, fearful and preoccupied found no significant difference between the means of the two groups ($t(86) = .715, p > .05.$). The mean difference is .23. Thus, there is no significant difference between the two groups with regard to their levels of awareness in recognizing child neglect.

Opinions about Babies

An independent sample t-test (Table 26) was conducted comparing the mean scores of 72 partners with fearful attachment and 11 with preoccupied attachment. The mean for fearful attachment partners' scores on opinions about babies was 40.29 (SD = 5.52), compared to 39.36 for preoccupied attachment partners (SD = 5.57). An independent sample t-test comparing the mean scores of the two attachment style groups, fearful and preoccupied found no significant difference between the means of the two groups ($t(81) = .518, p > .05.$). The mean difference is .93. Thus, there is no statistical significant difference between the two groups regarding their scores on opinions involving babies.

Question 3B: Is there a significant difference between the mothers' and their partners in regard to the risk of child neglect, awareness for recognition of child neglect, and opinion about babies?

Risk of Child Neglect

A paired sample t-test (Table 27) was calculated to compare the mean scores for partners to the mean scores for mothers regarding risk of child neglect. The mean for partners involving the risk of child neglect was 23.53 (SD = 5.37) and the mean for

mothers addressing risk of child neglect was 21.85 (SD = 3.61). A significant difference was found $t(104) = 3.31$ and $p < .01$. Partners were more at risk of child neglect.

Table 27

Paired Sample t-test Criterion Variables for First-time Mothers and their Partners (n = 105)

	Mean	SD	t	df	Sig. 2-tailed
Pair 1: Risk of Child Neglect					
MOTHERS	21.84	3.60	3.314	104	.001
PARTNERS	23.53	5.36			
Pair 2: Awareness for Recognition of Child Neglect					
MOTHERS	2.30	1.07	.220	104	.827
PARTNERS	2.33	1.02			
Pair 3: Opinions about Babies					
MOTHERS	41.56	5.22	2.346	104	.021
PARTNERS	40.01	5.55			

Awareness for Recognition of Child Neglect

A paired sample t-test (Table 27) was calculated to compare the mean scores for mothers to the mean scores for partners regarding awareness for recognition of child neglect. The mean for mothers on the awareness for recognition of child neglect was 2.30 (SD = 1.07) as compared to the mean for partners was 2.33 (SD = 1.02). There was no statistical significant difference found $t(104) = .220$ and $p > .05$.

Opinion about babies

A paired sample t-test (Table 27) was calculated to compare the mean scores for mothers to the mean scores for partners regarding their opinion about babies. The mean for mothers regarding their opinions about babies was 41.56 (SD = 5.22) and the mean for partners' opinions about babies was 40.01 (SD = 5.55). A statistical significant difference was found $t(104) = 2.346$ and $p < .05$.

Since the data analysis revealed only two attachment typologies instead of the four, further analysis was conducted to examine the relationship between attachment-related anxiety and avoidance scores and criterion variables: risk for neglect and awareness of neglect.

Correlation of Attachment Styles and Criterion Variables

Expectant First-time Mothers' Risk of Child Neglect

A Pearson correlation (Table 28) was calculated for the relationship between mothers' avoidant attachment style and risk of child neglect. A positive correlation was found ($r(91) = .308, p < .01$), indicating there is a significant positive relationship between mothers' risk of child neglect and avoidant attachment style. Mothers with attachment-related avoidance were more likely to be risk for child neglect.

A Pearson correlation was calculated for the relationship between mothers' anxiety attachment style and risk of child neglect. A correlation that was not significant was found ($r(91) = .073, p > .05$). Mothers' anxiety attachment is not related to risk of child neglect.

Expectant First-time Mothers' Awareness for Risk of Child Neglect

A Pearson correlation was calculated for the relationship between mothers' avoidant attachment style and awareness for risk of child neglect. A negative correlation was found ($r(90) = -.214, p < .05$), indicating that expectant first-time mothers with attachment-related avoidance were less likely to be aware of risk for child neglect.

A Pearson correlation was calculated for the relationship between mothers' anxiety attachment style and awareness for risk of child neglect. A negative correlation

that was not significant was found ($r(90) = -.032, p > .05$). Anxiety attachment is not related to awareness for risk of child neglect.

Table 28

First-time Mothers Pearson Correlation of Attachment Styles and Criterion

Variables

FIRT-TIME MOTHERS		Risk of Child Neglect	Awareness for Awareness for risk of child neglect	Avoidant Attachment	Anxiety Attachment
Risk of Child Neglect	Pearson Correlation	1	-.246(**)	.308(**)	.073
	Sig. (2-tailed)		.007	.003	.487
	N	123	120	93	93
Awareness for risk of child neglect	Pearson Correlation	-.246(**)	1	-.214(*)	-.032
	Sig. (2-tailed)	.007		.041	.762
	N	120	122	92	92
Avoidant Attachment	Pearson Correlation	.308(**)	-.214(*)	1	.515(**)
	Sig. (2-tailed)	.003	.041		.000
	N	93	92	94	93
Anxiety Attachment	Pearson Correlation	.073	-.032	.515(**)	.1
	Sig. (2-tailed)	.487	.762	.000	
	N	93	92	93	94

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Partners' Risk of Child Neglect

A Pearson correlation was calculated for the relationship between partners' avoidant attachment style and risk of child neglect. A positive correlation that was not statistically significant was found ($r(91) = .095, p < .05$). Partners' avoidant attachment

style is not related to risk of child neglect. A Pearson correlation was calculated for the relationship between partners' anxiety attachment style and risk of child neglect. A positive correlation that was not significant was found ($r(89) = .119, p > .05$). Partners' anxiety attachment is not related to risk of child neglect.

Partners' Awareness for Risk of Child Neglect

A Pearson correlation (Table 29) was calculated for the relationship between partners' avoidant attachment style and awareness for risk of child neglect. A negative correlation that was not significant was found ($r(88) = -.012, p > .05$). Partners' avoidant attachment style is not related to awareness for risk of child neglect.

Table 29

Partners: Pearson Correlation of Attachment Styles and Criterion Variables

PARTNERS		Risk of Child Neglect	Awareness for risk of child neglect	Avoidant Attachment	Anxiety Attachment
Risk of Child Neglect	Pearson Correlation	1	-.122	.095	.119
	Sig. (2-tailed)		.181	.365	.261
	N	124	121	93	91
Awareness for risk of child neglect	Pearson Correlation	-.122	1	.012	.043
	Sig. (2-tailed)	.181		.907	.693
	N	121	121	90	88
Avoidant Attachment	Pearson Correlation	.095	.012	1	.422(**)
	Sig. (2-tailed)	.365	.907		.000
	N	93	90	94	92
Anxiety Attachment	Pearson Correlation	.119	.043	.422(**)	1
	Sig. (2-tailed)	.261	.693	.000	
	N	91	88	92	92

A Pearson correlation was calculated for the relationship between partners' anxiety attachment style and awareness for risk of child neglect. A negative correlation that was not significant was found ($r(86) = -.043, p > .05$). Partners' anxiety attachment is not related to awareness for risk of child neglect.

In summary, only expectant first-time mothers' attachment-related avoidance was found to correlate with risk for neglect and awareness for neglect. Interestingly, for partners, neither attachment related anxiety nor avoidance explain awareness or risk for child neglect.

Question 4: What factors best predict risk for child neglect among first-time expectant mothers and their partners?

Multiple regressions were conducted for situational predictor variables to observe predictive patterns in ecological (situational) factors. The risk factors are demographic characteristics: age, gender, race, marital status, educational level, and income; parental knowledge of child development: infant development, attachment styles of the caregiver, situational factors: drug, cigarette and alcohol use, mental health problems of the caregiver, history of personal childhood neglect, unstable housing, community and federal support systems, and employment.

Following is the description of the process leading to the computation of the final four regression models for both first-time mothers and their partners. The results of the final models for prediction of the two criterion variables of risk of child neglect and awareness for recognition of child neglect are then reported.

Process of Elimination of PVs from the Final Regression Models

Pearson correlations were separately calculated for both criterion variables: risk of child neglect and awareness for recognition of child neglect for both first-time mothers and their partners with five variables (Appendix N): opinion about babies, monthly income, number of jobs held in the last years, number of changes in residences in the last year, and age. Table 30 shows the significant PV variables correlated with each CV.

Spearman Rho correlations were separately calculated for both criterion variables (CVs): risk of child neglect and awareness for recognition of child neglect for both first-time mothers and their partners with the 16 predictor variables (PVs) (Appendix N): Marital Status, Education, Federal Support, Smoking Status, Alcohol Status, Substance abuse Status, Physical Health Status, Emotional Health Status, Race, Attachment Style, Parenting Style – Mother, Parenting Style – Father, History of Physical Abuse, Neglect, Depression, and Sexual Abuse. Table 30 shows the PV variables correlation to the two CV's. Those PVs which were most significantly correlated to the CVs (highlighted in grey) were utilized in their respective model for the regression analysis for predictive factors. Four different regression models were conducted, two each for first-time mothers and two for their partners.

First-Time Mothers' Risk of Child Neglect

After recoding for one of the variables Mother's Parenting (four items); six variables were included in the regression model for Risk of Child Neglect for first-time mothers and these were: opinion about babies, race, alcohol abuse status, physical health status, mother's parenting (recoded into four items: parented mother authoritarian,

parented mother authoritative, parented mother permissive, parented mother neglectful), and attachment styles.

Table 30

Pearson and Spearman Rho Correlation for both Criterion Variables

	First-Time Mothers				Partners			
	Risk		Awareness		Risk		Awareness	
PEARSON	<i>r</i>	<i>P</i>	<i>R</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
Opinions about babies	-.365**	.000	.224*	.014	-.153	.106	-.059	.534
How many jobs in year	-.172	.064	.005	.960	-.095	.303	-.010	.915
Changed Residences	.044	.636	.127	.171	-.102	.272	.055	.561
Income	-.141	.120	-.062	.497	.152	.092	.070	.448
Age – How old are you	.099	.282	-.081	.382	.146	.111	-.006	.946
SPEARMAN RHO	Risk		Awareness		Risk		Awareness	
Race	.287**	.001	-.156	.088	.230*	.010	-.095	.301
Federal Support	.165	.070	.048	.600	-.085	.348	.024	.798
Marital Status	.135	.140	.137	.136	.245**	.006	.021	.823
Employment	.074	.416	-.042	.647	-.001	.990	-.093	.314
Past History of Abuse	.070	.443	.100	.274	-.060	.511	-.005	.957
History of Physical	.052	.571	-.035	.702	.001	.995	.001	.989
History of Neglect	-	-	-	-	.069	.449	.007	.936
History of Depression	.044	.631	.191*	.036	-.002	.982	.185*	.043
History of Sexual	-.002	.985	.616	.078	.015	.872	-.037	.692
Smoking Status	.146	.108	-.100	.273	-.133	.141	.126	.167
Alcohol Status	.235**	.009	.013	.887	.027	.768	.031	.738
Substance Abuse Status	.061	.505	.084	.359	-.008	.932	-.185*	.042
Physical Health Status	.227*	.012	-.070	.443	.076	.401	.038	.679
Emotional Health Status	.050	.581	.063	.488	.038	.674	-.018	.848
Mother's Parenting	-.212*	.019	.006	.945	.081	.369	-.041	.657
Father's Parenting	-.039	.670	-.067	.463	.055	.545	-.226*	.013
Attachment Style	-.224*	.032	.222*	.035	.001	.991	.070	.516

** Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the .005 level (2-tailed)

After the regression model was computed, the tolerance of the PVs was reported first to check for multi-collinearity. One of the recoded variables from mother's parenting style was excluded from the final analysis due to the tolerance levels being below 0.1: Parented Mother Authoritative $t < 0.1$ and also based on theory that authoritative parenting style is the preferred method of parenting that would not be harmful to children. The model summary results are listed in Table 31.

Table 31

Summary of Hierarchical Regression Analysis for Variables Predicting Risk of Child Neglect for First Time Mothers (n = 88)

<i>Variable</i>	<i>B</i>	<i>SE b</i>	<i>Beta</i>	<i>t</i>	<i>P</i>
Parental Mother Permissive	-1.14	1.15	-0.12	-1.25	.22
Alcohol Status	1.65	1.24	0.12	1.32	.19
Parented Mother Neglectful	-1.60	1.40	-.10	-1.14	.26
Opinions about Babies	.02	0.06	-0.34	-3.94	.00
Physical Health Status	1.16	.46	.22	2.50	.012
Race	4.00	.74	.46	5.41	.00
Attachment Styles	-.19	.67	-.03	-.29	.78
Parented Mother Authoritarian	-.44	.66	-.07	-.66	.51

$$R^2 = 0.464, R^2_{adj} = .410, F_{(8, 88)} = 8.65, p \leq 0.001$$

Standard multiple regression was conducted to determine the accuracy of the predictor variables opinion about babies, race, alcohol abuse status, physical health status, mother's parenting (three items: parented mother authoritarian, parented mother permissive, parented mother neglectful), and attachment styles, in predicting risk of child neglect for first-time mothers. Regression results indicated that the overall model significantly predicts risk of child neglect, $R^2 = .46$, $R^2_{adj} = .41$, $F(8, 80) = 8.65$, $p < .000$. This model accounts for 41% of variance in risk of child neglect among first-time mothers.

A summary of regression coefficients is presented in Table 31, and indicates that only three (opinions about babies: $Beta = -.22$, $t(80) = -3.91$, $p = .00$; race: $Beta = 4.00$, $t(80) = .46$, $p = .00$ and physical health status: $Beta = 1.16$, $t(80) = 2.5$, $p = .02$) of the seven variables significantly contributed to the model. The results indicate a negative partial correlation between opinions about babies (OAB) and risk of child neglect; the less knowledge about child development (OAB) mothers have, the higher the risk of child

neglect. The results also indicate a positive partial correlation between race and risk of child neglect; minorities have higher risk of child neglect. The results also indicate a positive partial correlation between physical health status and risk of child neglect; the worse your health is, the higher the risk of child neglect.

First-time Mothers' Awareness for Recognition of Child Neglect

Three variables were included in the regression model for awareness for recognition of child neglect for first-time mothers and these were: opinion about babies, history of depression, and attachment styles. After the regression model was computed, the tolerance of the PVs was reported first and none of the variables had multi collineality with each other. The model summary results are listed in Table 32.

Standard multiple regression was conducted to determine the accuracy of the independent variables opinion about babies, history of depression, and attachment style in predicting awareness for recognition of child neglect. Regression results indicate that the overall model significantly predicts risk of child neglect, $R^2 = .106$, $R^2_{adj} = .07$, $F(3, 83) = 3.28$, $p < .025$. This model accounts for only .07% of variance in awareness for recognition of child neglect among first-time mothers.

Table 32

Summary of Hierarchical Regression Analysis for Variables Predicting Awareness for Recognition of Child Neglect for First Time Mothers (n = 86)

<i>Variable</i>	<i>B</i>	<i>SE b</i>	<i>Beta</i>	<i>t</i>	<i>P</i>
History of Depression	.68	.32	.23	2.12	.04
Opinion about Babies	.02	.02	.10	.91	.37
Attachment Styles	.43	.27	.17	1.57	.12

$R^2 = .106$, $R^2_{adj} = .07$, $F(3, 83) = 3.28$, $p \leq 0.05$

A summary of regression coefficients is presented in Table 32 and indicates that only one (history of depression: $Beta = .23$, $t(83) = 2.12$, $p = .04$) of the three variables significantly contributed to the model. The results indicate a positive partial correlation between depression and awareness for recognition of child neglect; if an individual had history of depression they had higher score on the awareness of recognition of child neglect. However, this is not very significant because this model only accounts for 0.07% variance, not a very large percentage.

Partners' Risk of Child Neglect

Two variables were included in the regression model for risk of child neglect for partners and these were: race and marital status. After the regression model was computed, the tolerance of the PVs was reported first. The model summary results are listed in Table 33.

Standard multiple regression was conducted to determine the accuracy of the independent variables race and marital status in predicting risk of child neglect among partners. Regression results indicate that the overall model significantly predicts risk of child neglect, $R^2 = .16$, $R^2_{adj} = .14$, $F(2, 12) = 11.71$, $p < .001$. This model accounts for 14% of variance in risk of child neglect among partners.

Table 33

Summary of Hierarchical Regression Analysis for Variables Predicting Risk of Child Neglect for Partners (n = 123)

<i>Variable</i>	<i>B</i>	<i>SE b</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
Marital Status	-4.25	1.28	-.28	-3.33	.001
Race	4.44	1.11	.34	3.99	.000

$R^2 = .16$, $R^2_{adj} = .14$, $F_{(2, 121)} = 11.71$, $p \leq 0.001$

A summary of regression coefficients is presented in Table 33 and indicates that both variables: race: $Beta = .34, t(121) = 3.99, p = .000$, and marital status: $Beta = -.28, t(121) = -3.33, p = .001$) significantly contributed to the model. The results also indicate a positive partial correlation between race and risk of child neglect; minorities have higher risk of child neglect. The results also indicate a negative partial correlation between marital status and risk of child neglect; non-married partners are more likely to be at risk of child neglect.

Partners' Awareness for Recognition of Child Neglect

Three variables were included in the regression model for risk of child neglect for partners and these were: history of depression, substance abuse, and parented father (recoded into four items: parented father authoritarian, parented father authoritative, parented father permissive, parented father neglectful) in predicting awareness of recognizing child neglect. After the regression model was computed, the tolerance of the PVs was reported first.

Two models were run for this regression analysis: First regression model excluded parented father authoritarian which had a tolerance level below $t < 0.1$. A second regression model was run including parented father authoritarian and removing parented father authoritative based on attachment theory that authoritative is the more desired/acceptable way of parenting than authoritarian which produces more problems in raising children. Thus, by including authoritarian in the regression equation, it is more likely to be predictive of risk of child neglect.

First Model

The first model had three variables of history of depression, substance abuse, and parented father (parented father authoritative, parented father permissive, parented father neglectful). The model summary results are listed in Table 34. Standard multiple regression was conducted to determine the accuracy of the independent variables history of depression, substance abuse, parented father authoritative, parented father permissive, and parented father neglectful in predicting awareness of recognizing child neglect. Regression results indicate that the overall model significantly predicts awareness of recognition of child neglect, $R^2 = .16$, $R^2_{adj} = .12$, $F(5, 114) = 4.27$, $p < .001$. This models accounts for 12% of variance in awareness of recognition of child neglect among partners.

Table 34

Summary of Hierarchical Regression Analysis for Variables Predicting Awareness for Recognition of Child Neglect for Partners (n = 119) First Model

<i>Variable</i>	<i>B</i>	<i>SE b</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
Parental Father Neglectful	-.36	.27	-.14	-1.51	.13
Substance Abuse Status	-.41	.23	-.16	-1.82	.07
History of Depression	.74	.32	.20	2.32	.02
Parented Father Permissive	.02	.02	.10	-3.10	.00
Parented Father Authoritative	.15	.26	.05	.60	.55

$$R^2 = .16, R^2_{adj} = .12, F_{(5, 114)} = 4.27, p \leq 0.001$$

A summary of regression coefficients is presented in Table 34 and indicates that only two, history of depression: $Beta = .740$, $t(114) = 2.315$, $p = .02$ and parented father permissive, $Beta = -.83$, $t(114) = -3.10$, $p = .002$, significantly contributed to the model. The results indicate a positive partial correlation between history of depression and

awareness for recognition of child neglect; if you had history of depression, the higher the scores on awareness for recognition of child neglect. The results also indicate a negative partial correlation between parented father permissive and awareness for recognition of child neglect; those who were parented in a permissive manner have more problems in identifying incidences of child neglect, less awareness of recognition of child neglect.

Second Model

The second model had three variables of history of depression, substance abuse, and parented father (parented father authoritarian, parented father permissive, parented father neglectful). The model summary results are listed in Table 35.

Table 35

Summary of Hierarchical Regression Analysis for Variables Predicting Awareness for Recognition of Child Neglect for Partners (n = 119) Second Model

<i>Variable</i>	<i>B</i>	<i>SE b</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
Parental Father Neglectful	-.36	.27	-.14	-1.51	.13
Substance Abuse Status	-.41	.23	-.16	-1.82	.07
History of Depression	.74	.32	.20	2.32	.02
Parented Father Permissive	.02	.02	.10	-3.10	.00
Parented Father Authoritative	.15	.26	.05	.60	.55

$R^2 = .16$, $R^2_{adj} = .12$, $F(5, 114) = 4.21$, $p \leq 0.05$

Standard multiple regression was conducted to determine the accuracy of the independent variables history of depression, substance abuse, parented father authoritarian, parented father permissive, and parented father neglectful in predicting awareness of recognizing child neglect. Regression results indicate that the overall model significantly predicts risk of child neglect, $R^2 = .16$, $R^2_{adj} = .12$, $F(5, 114) = 4.21$, p

<.002. This model accounts for 12% of variance in awareness of recognition of child neglect among partners.

A summary of regression coefficients is presented in Table 35 and indicates that only two (history of depression: $Beta = .76$, $t(114) = 2.37$, $p = .020$, and parented father permissive: $Beta = -.92$, $t(114) = -2.86$, $p = .005$) of the three variables significantly contributed to the model. The results indicate a positive partial correlation between history of depression and awareness for recognition of child neglect; if you had history of depression, the higher the scores on awareness for recognition of child neglect. The results also indicate a negative partial correlation between parented father permissive and awareness for recognition of child neglect; those who were parented in a permissive manner have more problems in identifying incidences of child neglect, less awareness for recognition of child neglect.

Of the 22 predictor variables, only six were significantly correlated to risk of child neglect for the first-time mothers and only two for partners. Three predictive factors were significantly correlated to awareness for recognition of child neglect for mothers and also three different predictive factors for partners. The predictor variables for the first-time mothers of opinion about babies, race, alcohol status and history of depression were run in the two regression models. For the first-time mothers, the first regression model accounted for 41% of variance for risk of child neglect. The second regression model accounted for only 0.07% of variance in awareness for recognition of child neglect. For the partners, predictor variables of race, marital status, history of depression and substance abuse status were run in the two regression models. The first model accounted

for 16% of variance in risk of child neglect. The second model accounted for 12% of variance in awareness of recognition of child neglect.

Question 5A: Do first-time expectant mothers and their partners favor a mandated assessment to determine risk for neglect as part of the array of services they receive during the pregnancy?

Reliability testing was conducted on the ten items of the Willingness to be Assessed for Risk of Child Neglect (WARCN) because this was a new tool. The reliability analysis that was conducted resulted in a Crombach's Alpha of .975. Factor analysis was also conducted and as expected the result was a one component solution (Table 36). This solution accounted for 82.86% of the total variance in the original items. These items had positive loadings and addressed WARCN.

Table 36

Factor Analysis: Willingness to be assessed for risk of child neglect

*Component Matrix	Loading
Every woman be screened for potential neglect	0.922
Every first-time mother screened for neglect	0.924
Every man be screened for potential neglect	0.945
Every first-time father screened for neglect	0.929
Law for first-time mothers	0.946
Law for first-time fathers	0.945
Law for every expectant mother	0.933
Law for every expectant father	0.928
If there is law I would participate	0.694
I favor law being passed requiring assessment	0.909

Extraction Method: Principal Component Analysis

**Only one component was extracted. The solution cannot be rotated.*

First, an index was constructed by summing the responses for the ten statements regarding favoring mandated assessments. Table 20 (pages 74 – 75), revealed the total

scores regarding the opinions of both mothers and their partners. As noted earlier, there is a high probability of both partners favoring a mandated assessment if it is made into law.

To answer Question 5: Do first-time expectant mothers and their partners favor a mandated assessment to determine risk for neglect as part of the array of services they receive during the pregnancy, Table 22 shows the overall percentage of the totaled ten items. If the totals for *do not agree* and *agree somewhat* are compared to the totals of *agree, more than agree*, and *agree totally*, 60.8% of mothers and 48.8% of the partners have scores indicating a tendency toward favoring establishment of the mandated assessment, WARC�.

Question 5B: Is there a relationship between favoring mandated assessment (WARCN) and indicators for possible risk and awareness for recognition of child neglect among expected first-time mothers and their partners?

WARCN scores were correlated with risk for child neglect scores and awareness for recognition of child neglect by computing Pearson correlation coefficients. Tables 37 and 38, display the results for both first-time mothers and their partners. For first-time mothers, there was a positive correlation between WARC� and awareness for recognition of child neglect: $r(120) = .20, p < .05$, indicating a significant linear relationship between the two variables. Those who favored the WARC� were more likely to be higher on the awareness for recognition of child neglect. For partners, there were no significant correlations of WARC� with either risk of child neglect or awareness for recognition of child neglect.

Table 37***First-time Mothers - WARC� Correlation***

		Risk of Neglect	MMCN	Awareness
Risk of neglect	Pearson Correlation	1	-.043	-.246**
	Sig. (2-tailed)		.637	.007
	N	123	123	120
WARCN	Pearson Correlation	-.043	1	.201*
	Sig. (2-tailed)	.637		.026
	N	123	125	122
Awareness for recognition	Pearson Correlation	-.246**	.201*	1
	Sig. (2-tailed)	.007	.026	
	N	120	122	122

** Correlation is significant at the 0.05 level (2 tailed)

Table 38***Partners - WARC� correlation***

		Risk of Neglect	WARCN	Awareness
Risk of Neglect	Pearson Correlation	1	-.164	-.122
	Sig. (2-tailed)		.069	.181
	N	124	124	121
WARCN	Pearson Correlation	-.164	1	.131
	Sig. (2-tailed)	.069		.151
	N	124	125	121
Awareness for recognition	Pearson Correlation	-.122	.131	1
	Sig. (2-tailed)	.181	.151	
	N	121	121	121

A paired sample t-test was conducted to compare the scores for mothers and partners on each of the 10 items in the WARC� scale. Table 39 indicates the paired t-test results with mean, standard deviation, t-score, degrees of freedom, and the two-tailed

significant scores. The results of the *t* tests (2-tailed) indicate that four items were statistically significantly different.

For Pair 5: “There should be a law requiring assessment for potential neglect of all first-time expectant mothers like there is a requirement for a license to drive”; there was a significant difference between first-time mothers and their partners ($t(124) = 1.97$, $p < .05$). The results indicate that first-time mothers had higher scores on this question and were more favorable towards having a law for first-time mothers than the partners.

Table 39

First-time Expectant Mothers and Partners' Paired Sample T-test of the WARCN

n = 125			Mean	SD	T	Df	0.05 Sig 2-tailed
Pair 1	Every woman screened for potential neglect	*Mo **Pa	2.55 2.29	1.234 1.314	1.76	124	.082
Pair 2	Every first-time mother screened for neglect	*Mo **Pa	2.61 2.44	1.243 1.346	1.24	124	.216
Pair 3	Every man be screened for potential neglect	*Mo **Pa	2.55 2.27	1.234 1.322	1.88	124	.063
Pair 4	Every first-time father screened for neglect	*Mo **Pa	2.60 2.46	1.244 1.359	.96	124	.337
Pair 5	Law for first-time Mothers	*Mo **Pa	2.34 2.06	1.258 1.281	1.97	124	.051
Pair 6	Law for first-time fathers	*Mo **Pa	2.36 2.09	1.246 1.291	1.85	124	.067
Pair 7	Law for every expectant mother	*Mo **Pa	2.34 1.99	1.245 1.214	2.50	124	.014
Pair 8	Law for every expectant Father/partner	*Mo **Pa	2.36 2.03	1.267 1.250	2.31	124	.023
Pair 9	If there is law I would participate	*Mo **Pa	2.18 2.84	1.381 1.433	2.21	124	.029
Pair 10	I favor law being passed requiring assessment	*Mo **Pa	2.49 2.22	1.353 1.390	1.72	124	.088

*Mo: First-time mothers

**Pa: Partners

For Pair 7: “There should be a law requiring assessment for all expectant mothers regardless of how many children they already have for potential neglect like there is a

requirement for a license to drive”; there was a significant difference between first-time mothers and their partners ($t(124) = 2.50, p < .05$). The results indicate that first-time mothers had higher scores on this question and were more favorable towards having a law for every expectant mother than the partners.

For Pair 8: “There should be a law requiring assessment for all expectant fathers regardless of how many children they already have for potential neglect like there is a requirement for a license to drive”; there was a significant decrease from first-time mothers to partners ($t(124) = 2.31, p < .05$). The results indicate that first-time mothers had higher scores on this question and that they were more favorable to having a law for every expectant father than the partners.

For Pair 9: “If there was a law requiring assessment of expectant first-time parents for potential neglect, I would participate and be assessed”; there was a significant increase from first-time mothers to partners ($t(124) = 2.21, p < .05$). The results indicate that partners had higher scores on this question and were more favorable towards participating in the survey if there was a mandated law, than the first-time mothers.

There were no significant differences in questions 1, 2, 3, 4, 6, and 10 with $p > .05$, indicating that there were no statistical significant differences in the first-time mothers and partners in regards to those particular questions. These six questions were: Pair 1: Every woman who is expecting a child should be screened for potential neglect of their child regardless of how many children they already have; Pair 2: Every first time expectant mother should be screened for potential neglect of their child; Pair 3: Every man who is expecting a child should be screened for potential neglect of their child regardless of how many children they have; Pair 4: Every first time expectant father

should be screened for potential neglect of their child; Pair 6: There should be a law requiring assessment for potential neglect of all first time expectant fathers like there is a requirement for a license to drive; and Pair 10: I favor a law being passed requiring assessment of first time expectant parents for potential neglect

The following chapter is a discussion of the results and implications for future research and work within child welfare.

CHAPTER V

DISCUSSION AND IMPLICATION FOR PRACTICE AND RESEARCH

This chapter is a discussion of the relevance of the findings of the five research questions and (a) how the results can be applied to the three purposes of the research and the implications on child neglect, (b) the limitations of the research study, and (c) how future areas of study may build on this research. Child neglect is the most frequent of all child maltreatment cases within the United States at 62% of all substantiated child maltreatment reports.

The purposes of this study were to (a) assess child neglect risk levels for both expectant first-time mothers and their partners within the general population, (b) find a point of entry for primary *prevention* services for child neglect, and (c) analyze individual opinions about multi-dimensional family assessments prior to birth. The overall purpose was to provide practitioners with a comprehensive assessment approach for child neglect.

This study utilized a non-experimental, cross-sectional design to survey first-time expectant mothers and their partners. The sample of 250 individuals (mothers and their partners) was recruited from expectant first-time mothers and their partners attending Lamaze Classes at a public hospital in Lexington, Kentucky. Participants completed a questionnaire with 97 items (Chapter III). The following section contains the discussion regarding the results (Chapter IV) of the study.

General Demographics of the Study Sample

The participants were first-time expectant mothers and their partners in Lexington, Kentucky, an urban area and one of the three major metropolitan areas in Kentucky. A significant number of those individuals accessing health care in this particular hospital may be University of Kentucky employees and their families inasmuch as the hospital is owned by and located on its campus. The study included both expecting mothers and fathers, compared to previous published studies that were limited to mothers. The mean age of these first-time mothers and their partners was 28 and 29 years old respectively. This places both partners within the same age range. Previous studies have focused on younger teenage mothers, but this group encompassed individuals who could ostensibly be considered more mature and thus, perhaps, better able than younger parents to identify issues of neglect.

The mothers in this study were predominantly Caucasian (84%), with Caucasian partners (78%). Most previous studies of neglect focused on minority groups (e.g. Campbell, 2005; Kerr, Black, Krishnakumar, 2000), which tended to have higher incidences of reported neglect with child protection agencies. Since this group was primarily Non-Hispanic White, the results should indicate whether there is also a high rate of neglect when focusing on the majority race. Because of the higher percentage of whites in this study, it was difficult to compare the findings to results to previous research focusing on minority groups.

The majority of the participants in this study were married or partnered; previous studies have focused on single parents who tended to have higher incidences of neglect due to economic difficulties and lack of support (Lounds, et al., 2006; Zelenko, Huffman,

Lock, et al., 2001). Of the cases reported to Child Protective Services in 2002, only 10% of children with parents who were married were reported for neglect compared to 65% for single parents in that pool (DHHS, 2004; Kids Count Data, 2006). Since approximately 83% of the couples in this study were married, does this factor affect the predictors of child neglect or not (discussed below in Question 4)? The marital status of partners was significantly correlated with higher risk of child neglect (Spearman Rho $r(125) = .245, p < .01$), indicating that non-married partners are more likely to put children at risk. There was no significant correlation between being married and risk of child neglect for the first-time mothers. Thus, marital status for the women seemed to indicate that being married put a child at less risk of being likely neglected.

Education was another significant factor as a predictor of child neglect with less educated individuals being more likely to be reported to child protection services for child neglect (DHHS, 2004). This study determined that most of the participants, 46% mothers and 42% of the partners had graduate or doctoral degrees, with 38% of the mothers and 34% of their partners having college degrees. This makes for a total of 84% mothers and 76% partners having either graduate/doctoral or college degree. Less parental education is positively associated with unemployment and lower income levels, which are also significant indicators of predicting child neglect (Berger, 2004; Conners, et al., 2006 Landsberg, 2005; Lounds, et al., 2004). In this study, however, parental education did not emerge as a predictor of being neglectful. In other words, it would seem that having a higher education would be a protective factor in reducing risk of child neglect. Being educationally aware might thus predispose individuals to being less at risk of neglecting their children. However, practitioners should keep in mind that even

in this sample there were individuals who were at moderate risk of neglecting their children as they were unable to recognize child neglect scenarios. So education does not necessary eliminate the risk of child neglect and services or parental education should be offered to those with education as well. This is an important finding because society focuses on the uneducated as if they are the only ones that neglect their children, when in fact, that is probably not the case; as indicated by this study's findings.

Sixty-six percent of the participants in the study were first-time mothers, and 84% of partners were employed full-time with a mean monthly income of \$2,400 and \$3,300 respectively. They had monthly incomes nearly two times higher than that of low income families (monthly income average \$1,600 for a family of four) who are typically reported to child welfare agencies (Kids Count Data Book, 2008; Thompson & Hickey, 2005). These mothers and partners were thus at the lower/upper middle class economic level (Thompson & Hickey, 2005). The income levels of the participants in this study thus were not considered as a significant detrimental factor associated with risk of child neglect due to the majority of first-time mothers and their partners being above the federal poverty level. The findings bear this out as income was not significantly correlated to either risk of child neglect or awareness for recognition of child neglect for either first-time mothers or their partners.

Gender has always been a factor of major interest in child welfare reports, with single mothers being the dominant focus (Lounds, et al., 2006). This study concentrated on both first-time expectant mothers and their partners; thus the results take in consideration responses from both sexes/parental roles. The study was also able to compare the demographics of expectant first-time mothers and fathers/partners, as well as

the predictors for child neglect, without focusing only on one gender, thus addressing the statistic that 40% of perpetrators of child neglect are males (DHHS, 2004). Gender comparisons are reported in detail in the following section.

Discussion Regarding the Purpose of Research

This discussion focuses on the results of the research questions and how they are related to the study purpose, especially addressing risk of child neglect and awareness for recognition of child neglect for both first-time expectant mothers and their partners. The purposes of the study were to (a) assess child neglect risk for first-time expectant mothers and their partners from the general population, (b) find a point of entry for primary prevention services for child neglect, and (c) analyze individuals' opinions about multi-dimensional family assessments prior to birth. The general purpose is to identify a comprehensive child neglect assessment tool for use by health providers and social service-related practitioners.

Assessing Child Neglect Risk Level for Both First-time Expectant Mothers and Their Partners

By identifying into which category of child neglect risk level (low, medium, and high) first-time expectant mothers and their partners enrolled in Lamaze classes (child-birth preparation) fall, risk factors that have been identified in previous studies as predictors for neglect can be assessed for proactive intervention services. Research Questions 1, 2A, 2B, and 3 all address the assessment of child neglect risk for both first-time expectant mothers and their partners.

Question 1: What is the level of awareness for recognition of child neglect among first-time expectant mothers and their partners?

This exploratory question focused on both mothers and partners assessing how much awareness individuals possess in recognizing child neglect. Comparing the results of both expectant first-time mothers and their partners can be potentially useful in explaining whether partners rearing children together have congruent awareness of what is deemed neglect by child protection services. The gender issue is addressed within this section.

The levels of awareness for recognition of child neglect incidents were high, medium, and low with high scores indicating individuals who were able to recognize risk levels of child neglect by identifying at least 6 – 7 of the scenarios as child neglect. The results of the potential for recognition of child neglect incidents determined that only 3% of first-time mothers and 2% of partners were able to recognize incidents of child neglect. The majority of both first-time mothers and their partners were at the medium level (able to recognize 3 – 5 scenarios) of awareness regarding child neglect, 61% and 70% respectively. About 34% of first-time mothers and 25% of partners had low scores (able to recognize 0 – 2 scenarios) which indicated their lack of awareness regarding what constitutes child neglect incidents. This result indicates that even though previous research has focused on minority groups, low education, low income, the study population was also in the high risk category, lacking awareness of what constitutes child neglect as determined by child protection professionals.

By focusing on both genders, when most research has focused primarily on mothers, especially single mothers, this study was able to identify an interesting trend. In

comparing first-time mothers and their partners, there was no significant difference in the level of awareness for recognition of child neglect ($t(117) = .070, p > .05$) suggesting that both expecting mothers and their partners are equal in lacking awareness for what constitutes neglect. Thus, future research should concentrate on both parents, not only on mothers as potential perpetrators of child neglect.

Question 2A: Among first-time expectant mothers and their partners, what percentages are at risk of being neglectful?

Data were gathered from the population of first-time parents-to-be and compared to data from previous studies that focused on at-risk and already identified neglectful populations. Another purpose of this question was to determine the risk levels of the first-time mothers and their partners. New data was gathered not only from mothers, but also from their partners, an area previously neglected in child neglect studies which previously have focused primarily on mothers.

The results from this research show that 56.1% of first-time mothers and 43.5% partners were in the low risk category of potential for neglect, with 43.9% first-time mothers and 55.6% partners in the medium risk level and only .8% of partners in the high risk categories. The potential for this subject group to be neglectful of their children was low or medium level but not high risk. The percentage children who are reported to child protection and substantiated for maltreatment of neglect by both parents is 66.3% (DHHS, 2004). This group of participants is at a lower level for risk of child neglect at 48.5% (medium risk level). Focus for future prevention programs should include both parents instead of focusing solely on the mothers and those at moderate risk for neglect, not just high risk to maximize the well-being of children.

Question 2B: Are first-time expectant mothers at greater risk than their partners for being neglectful?

This question also constitutes a new area of exploration by comparing the data involving child neglect risk levels: mothers versus their partners. As noted earlier, within the child neglect literature, single women have been identified as being neglectful. Previous studies demonstrate that 58% women versus 42% men are identified as neglectful of their children within the at-risk and identified neglectful families (DHHS, 2004). Would the same hold true regarding mothers and partners/spouses from this study?

The results indicate that there was a significant difference between first-time mothers as compared to their partners ($t(121) = 3.91, p < .01$), with partners more at-risk of being neglectful than the first-time mothers. Based on these results it can be considered that prevention services should be geared toward both parents of the child rather than focusing solely on mothers (single mothers especially). Participation of fathers and non-biological boyfriends in child-rearing roles has increased, and thus the likelihood of fathers or non-biological boyfriends becoming neglect/abuse perpetrators is also correspondingly greater.

Statistically, approximately 42.2% of the parental perpetrators of child neglect are men, a large population percentage which is currently not scrutinized as much as at-risk populations (single parents, women, minorities) within child neglect research (DHHS, 2004). Recently, the Transitional Research on Child Neglect Consortium in 2009 has focused more on child neglect research due to increased federal funding by the National Institute of Health and Department and Health and Human Services. In the future it

would be helpful for such grants to focus on both mothers and fathers. Of all substantiated maltreated children, 62% was substantiated on both biological mothers and fathers for child neglect versus 10.9% and 7.7% for physical and sexual abuse respectively (DHHS, 2006). Thus, it is important to focus on both biological parents and non-biological boyfriends regarding neglect issues. Primary prevention services should be targeted towards both, mothers and partners rather than examining friends or neighbors who comprise only 9.9% of neglect perpetrators.

Question 3: Is there a relationship between each of these three factors and a parent's attachment style: risk for child neglect; awareness for recognition of child neglect; and opinion about babies?

Examination of attachment styles revealed that for the first-time mothers, including the two identified attachment groups of preoccupied (anxious-avoidant) and fearful (anxious-ambivalent), fearful mothers had higher levels of risk of child neglect, ($t(89.2) = 3.10, p < .05$) than preoccupied mothers. Fearful mothers meet the child's needs when they choose, not when the child's needs are paramount. Preoccupied mothers frequently do not meet the needs of the child and children in the care of these mothers are therefore likely to become involved in neglectful situations. However, as shown in the study results, fearful mothers were found to be more likely at-risk of perpetrating child neglect.

However, preoccupied attachment mothers were more likely than fearful mothers to recognize child neglect ($t(89) = 2.08, p < .05$). The same held true when comparing the fearful mothers and preoccupied mothers with regard to opinions about babies, with preoccupied mothers obtaining higher scores in their knowledge about child development

($t(88) = 3.09, p < .05$). According to adult attachment theory, preoccupied parents usually do not meet the children's needs frequently and so the children are usually in child neglect situations (Bowlby, 1988). The results indicate that preoccupied mothers even though more likely to be involved in neglectful situations, are able to recognize those detrimental situations. The subsequent assumption can be made that although preoccupied mothers can recognize neglectful situations, they do not necessarily intervene to alleviate situations which could result in child neglect. On the other hand, fearful parents may be neglectful because they meet the children's need when they choose to, not when the need is required (Bowlby, 1988). This study indicates that fearful first-time mothers are less able to recognize incidents of child neglect than preoccupied first-time mothers.

Regarding the responses of the partners for all three areas (risk of child neglect, awareness for recognition of child neglect, and opinion about babies) no significant differences were identified between the two fearful and preoccupied attachment groups.

Comparing the two groups, first-time mothers and their partners with regard to attachment styles, a significant difference in the risk of child neglect, with first-time mothers obtaining lower scores, ($t(104) = 3.314, p < .01$). It can thus be inferred that mothers are less likely than their partners to be at-risk of committing child neglect in relationship to their newborn babies. Culturally, in the United States, fathers are generally not the primary caregivers of babies and this inexperience might put them at greater risk than first-time mothers of child neglect. Traditionally in American culture, girls frequently engage in providing babysitting/child care services during their adolescent

years and this experience might well provide them with more confidence while responding to situations which might put a child at-risk for neglect.

Significant differences between the first-time mothers and their partners, ($t(104) = .220$, $p < .05$ in regard to awareness for recognition of child neglect. This result indicates that both groups of first-time mothers and their partners are functionally not aware of recognizing incidences of child neglect, thus putting both groups at risk of perpetrating child neglect. However, inferring from the mean scores of risk of child neglect, partners appeared more likely to be at-risk of child neglect, with a higher percentage in the medium category for risk of neglect at 55.6% and 0.8% in the high risk category. Also the same held true with awareness for recognition of child neglect, with 70% of partners in the medium risk category compared to mothers' at 61%. Overall for both groups, only a small percentage was able to recognize the scenarios as being neglectful. Both groups were at no risk of child neglect, but still a large percentage of these new parents could not recognize scenarios of child neglect.

In regard to knowledge involving child development, as measured by Opinion about babies (OAB), a significant difference was found ($t(104) = 2.35$, $p < .05$ with partners producing lower scores indicating that they are less likely to possess knowledge addressing child development issues. This result may be attributable to the fact that partners or fathers are not generally a child's primary caregiver and thus they often have less knowledge about child development. Since males constitute 42% of child neglect perpetrators (DHHS, 2004), this study indicates that males are also in need of prevention services for child neglect. With the combination of being at-risk of child neglect, being unable to recognize child neglect scenarios, and having less knowledge regarding child

development, partners are more likely than first-time mothers to be at-risk of neglecting their infants.

Focus on services should be geared toward both parents, capitalizing on recent trends which indicate that fathers are becoming more involved in the basic care of the children (Geiger, 1996; West, et al., 2009). This finding indicates a potential relationship between parental knowledge of child development and how competently the child is reared. Prior knowledge of child development may be related to how individuals actually parent their child.

The aforementioned results reveal that assessing child neglect risk levels are necessary for both first-time expectant mothers and their partners. Attachment theory and ecological theory help explain how characteristics (risk factors) of caregivers affect child development through the child's social interactions with the immediate family and environment. The study focused on primary prevention targeted toward potential perpetrators in the general public, to assess how child neglect victims' numbers and services at secondary and tertiary levels can be reduced if certain types of primary prevention services are implemented prior to any neglect. Even though the first-time mothers and their partners indicated low levels of potential for neglecting their children, they nevertheless tested with high rates of inability to identify incidents which are deemed neglectful.

The attachment measure could have been ostensibly affected by parents' emotional states especially since the couples were going through two major life transition periods: new marriage or relationship, and expecting their first child (ecological or situational factors). These major factors affect individuals' stress levels due to

consequential new life changes. Periods of transition have a significant effect on individuals' stress levels, making it potentially more likely for these individuals to be prone to neglectful behaviors. In the future additional research should focus on this population and aim at providing proactive prevention parenting services for both parents to increase their knowledge regarding infants and which actions are likely to result in child neglect incidents.

Finding a Point of Entry for Primary Prevention Services for Child Neglect

The research study was conducted in order to determine indicators for justifying the development of early primary prevention programs within a particular setting (hospitals) whereby first-time mothers and their partners can be assessed for predictive risk factors conducive to child neglect. By identifying some of the predictors of child neglect, health providers and social workers may be able to intervene before neglect actually occurs thus preventing the need for intervention services.

Question 4: What factors best predict risk for child neglect among first-time expectant mothers and their partners?

The question has been posed with at-risk and identified neglectful families, but has not been studied for child neglect purposes within this study sample. The question posed in Chapter Two was: "Would the same predictive risk factors identified in previous research studies hold true for first-time mothers and their partners in this study sample?" The results indicate that only a few of the identified predictive factors had significant relationship to the two dependent variables: risk of child neglect and awareness for recognition of child neglect. Of the 22 predictor variables, only six were significantly correlated to risk of child neglect for the first-time mothers and only two for partners. For

the other dependent variable, three factors were significantly correlated to awareness for recognition of child neglect for mothers and three different factors for partners.

First-time Mothers: Risk of Child Neglect

Of the 22 predictive factors, only six correlated with risk of child neglect. These variables were studied to determine which had significant predictive relationship with risk of child neglect. The final model accounted for 41% of variance in risk of child neglect among first-time mothers. Only three of the seven variables significantly contributed to the model: opinions about babies: $Beta = -.218$, $t(80) = .3.905$, $p = .000$; race: $Beta = 4.004$, $t(80) = .462$, $p = .000$ and physical health status: $Beta = 1.156$, $t(80) = 2.498$, $p = .015$.

The results indicate a negative partial correlation between opinions about babies (OAB) and risk of child neglect; the less knowledge mothers have about child development (OAB), the higher the risk of child neglect. The results indicated that with less knowledge of child development, the greater was the likelihood that the mothers were at potential for risk of child neglect. Parental knowledge of child development as measured by the opinions about babies scale (OAB) indicated and supported the premises that to some extent mothers' knowledge about child development affected how the mothers raised their children, those with less knowledge about child development were more likely to be at-risk of child neglect (Benasich and Gunn, 1996; Reich, 2005). Benasich and Gunn found that maternal knowledge of child development and concepts about child rearing had a significant impact on the quality of home life, the number of child behavior problems and to a smaller degree, the child's IQ level at 36 months (1996).

The study results indicated that first-time expectant mothers had less knowledge about child development at three months (10%) and at six months (18%). Low scores indicated that first-time mothers were in need of child development classes. Providing classes for child development may present an appropriate opportunity to begin teaching prospective new parents so that what was formerly learned through contact with extended families in past generations/cultures can now be imparted to individuals through organized classes. Lamaze classes which are not mandated due to cost, currently contain a small component regarding child care. Many individuals who may benefit from proactive education are unable to attend. On another note, perhaps since many of the parents in this particular study are educated and affluent, on-line course material, material on sites such as Facebook and other outlets could reach these parents and prevent neglect.

The study results also indicate a positive partial correlation between participants' race and risk of child neglect. Even though the percentage of minorities for this particular study was only 16%, the significance of the predictive relationship was strong $Beta = 4.004, t(80) = .462, p = .000$; minority mothers were more likely to be at risk of child neglect. As mentioned in Chapter Two, minorities have the highest rates per capita of death victims and child maltreatment reports made to child protection agencies (Kerr, Black, and Krishnakumar, 2000; Kids Count Data, 2006). The results indicate that greater focus should be placed to understanding and determining the factors and conditions that minority mothers face in order to proactively address risk of child neglect.

The results also indicate a positive partial correlation between physical health status and risk of child neglect; the worse the parent's physical health, the higher the risk of child neglect. Poor maternal physical health frequently can negatively affect the fetus'

health before birth, even potentially causing pre-term delivery. Thus, individuals indicating poor physical health should seek pre-natal care.

First-time Expectant Mothers: Awareness for Recognition of Child Neglect

The research study purpose was to determine whether individuals were aware of what is defined as “child neglect” within the formalized child protection agencies, and whether this understanding (or lack of same) is a pertinent factor in reducing risk of child neglect. The model for mothers which was run for three predictive factors (opinion about babies, history of depression, and attachment styles) constituted correlation to awareness for recognition of child neglect. The model accounted for 10.6% of variance in awareness for recognition of child neglect among first-time expectant mothers. Only one of the three variables, history of depression $Beta = .228, t(83) = 2.117, p = .037$, significantly contributed to the model. The study results indicate a positive partial correlation between depression and awareness for recognition of child neglect; the presence of history of depression was associated with greater awareness of recognition of child neglect.

This is somewhat startling due to the fact that individuals with a history of depression were able to recognize scenarios that could potentially be dangerous to children. However, when considering Depressive Realism Theory which presumes that depressed individuals are more aware of the negative impacts of life - subjects are more able to recognize incidents of child neglect (Moore and Fresco, 2007). For this particular research study, mothers who had childhood history of depression were perhaps then able to recognize what they might have endured themselves as children. Unfortunately, this does not necessarily mean that they are able to prevent neglecting their own children. Thus in order to prevent child maltreatment, the mental health of mothers need to be

monitored and treated swiftly so that no harm comes to their children in the event of a depressive episode.

In summary, for first-time mothers, the combination of inadequate knowledge of child development, being a member of a racial minority, and being in poor physical health, resulted in a 41% likelihood of being at potential risk for child neglect. Providing proactive educational parenting instructional services for prospective parents, promoting universal health care coverage and monitoring the mental health of mothers might well reduce the potential for risk of child neglect even though if only by a small percentage.

Partners: Risk of Child Neglect

The partners had two factors (race and marital status) in the model both of which significantly contributed to risk of child neglect. For recognition of awareness of child neglect, two models were run: each had three factors (history of depression, substance abuse, and parented father) but for each model, only two factors (history of depression and parented father permissive) significantly contributed to the predictive model.

The first model for risk of child neglect accounted for 16% of variance in risk of child neglect among partners. Both variables: race and marital status significantly contributed to the model. The results also indicate a positive partial correlation between race and risk of child neglect; minorities have higher risk of child neglect. Even though the percentage of minority fathers in this study was only 21%, the correlation between race and potential for risk of child neglect was significant enough that children of racial minorities were at higher potential for risk of child neglect than the majority White subject group. As mentioned earlier regarding the first-time mothers, race seemed to be a

significant predictive factor for risk of maltreatment in previous research, and the same held true for this particular study as well.

The results indicate a negative partial correlation between marital status and risk of child neglect; i.e., the unmarried partners have higher potential for risk of child neglect at 14%. This area requires further research with greater focus on minority fathers in order to consider these results for future determination of services.

Partners: Awareness for Recognition of Child Neglect

Partners had three factors (history of depression, substance abuse, and parented father) in both predictive models. The first model accounted for 15.8% of variance in awareness of recognition of child neglect among partners. Only two factors significantly contributed to the model: history of depression, $Beta = .740$, $t(114) = 2.36$, $p = .02$ and parented father permissive, $Beta = -.825$, $t(114) = -3.10$, $p = .002$. The second model accounted for 15.6% of variance in awareness of recognition of child neglect among partners. Only two of the three variables significantly contributed to the model: history of depression: $Beta = .755$, $t(114) = 2.367$, $p = .020$, and parented father permissive: $Beta = -.920$, $t(114) = -2.856$, $p = .005$. Both models had the same percentage in variance.

The results indicate a positive partial correlation between history of depression and awareness for recognition of child neglect. If subjects had history of depression, their scores on awareness for recognition of child neglect were higher. As with the first-time expectant mothers, history of childhood depression indicated a potential for these individuals to be more aware of neglectful situations if they had experienced neglect themselves or possessed a greater awareness of negative life circumstances, having experienced it themselves. This can be explained by Depressive Realism Theory coined

by Beck (1967) and Alloy and Abramson (1979) which presupposes that individuals who are depressed observe life negatively, while those not depressed see life with a positive optimistic view (Moore and Fresco, 2007). However, this does not preclude exceptions for both.

The results also indicate a negative partial correlation between parented father permissive and awareness for recognition of child neglect. Those who were parented in a permissive manner had more problems in identifying incidences of child neglect, thus exhibiting less awareness of recognition of child neglect. Attachment theory states that in relation to parenting styles, attachment and bonding of parent and child can later affect the child's own personality and how they parent their own child (Falhberg, 1998). In regard to permissive parents, a free style of parenting has no set rules, and often the children with permissive parents become selfish, impulsive, insecure, low achievers, with no sense of personal responsibility (Bowlby, 1988).

Child neglectful parents generally have no sense of responsibility and thus often fail to provide for their children's basic needs (Bowlby, 1988). Coupled with being members of minority groups, it can be speculated that minority partners may also tend to have a reduced sense of responsibility, thus being more at-risk for inability to adequately care for their own children due to an inability to recognize incidents of child neglect.

Analyzing Individuals' Opinions Regarding Multi-dimensional Family Assessment

Prior to Birth

The ability to proactively predict which prospective parents are at-risk for neglectful/abusive behavior would benefit not only the unborn children, but also the parents, communities, and society in general. Other studies have shown that preventive

services targeted toward perpetrators yield more favorable outcomes in reducing abuse (Farber & Miller-Cribbs, 2002; Morales, 1998). A logical response would be to utilize a similar system with potential perpetrators to prevent the maltreatment from occurring at the outset. Question 5A and 5B of the research study focused on individuals' opinions relating to their being assessed for risk of child neglect before childbirth.

Question 5A: Do first-time expectant mothers and their partners favor mandated assessment to determine risk for neglect as part of the array of services they receive during the pregnancy?

This question is a new research area that has not been previously addressed in the child neglect literature. By asking individuals within the sample population to respond to whether they would voluntarily cooperate with assessment performed prior to the time of birth, data from their responses may potentially assist child neglect prevention personnel in identifying appropriate entry points of preemptive provision of services. If individuals indicate an attitude of cooperation with regard to this assessment, the respective states may be encouraged to implement appropriate primary prevention services with positive nationwide implications.

Inasmuch as these individuals had recently completed the questionnaire which assessed for risk of child neglect, their responses to Question 5 indicate their potential willingness to complete this tool prior to giving birth. It also would indicate their general willingness to participate in completion of this assessment if completion was eventually mandated by law.

The total score results from the scale measure indicated that 60.5% of the first-time expectant mothers and 48.8% of the partners favored establishment of the mandated

assessment, Willingness to be Assessed for Risk of Child Neglect (WARCN). Regarding the question of whether the participants would participate in a WARCN if there was mandated requirement, 72% of first-time expectant mothers agreed, more than agreed, or totally agreed, as compared to 57% of their partners' willingness to agree. With regard to whether they favored enactment of a law requiring all first-time expectant parents to be assessed for potential of risk of child neglect, 57% of first-time expectant mothers and 38.4% of the partners agreed, more than agreed or totally agreed with implementation of such a law.

Question 5B: Is there a relationship between favoring mandated assessment (WARCN) and indicators for possible risk and awareness for recognition of child neglect among expected first-time mothers and their partners?

The aforementioned results indicate that although first-time mothers were favorable regarding participating in a mandated assessment, their partners were not as accepting at (57%), compared to the mothers (72%). Both groups were not particularly favorable regarding enactment of a law mandating the assessment, even though they would participate if it was mandated. This reveals that individuals would cooperate with a mandated requirement. However, additional research should explore the reasons why people would choose to cooperate with a mandated requirements but conversely would not voluntary participate in services from which they could also potentially benefit. One reason people might embrace a mandated requirement could be a presumed lack of negative stigma attached to across-the-board parental participation without individually targeting people based on ecological or situational conditions (current focus is generally applied solely toward economically disadvantaged single mothers).

Thus, this study suggests that prospective mothers and their partners should be screened prior to childbirth to provide proactive services before and after the child is born, thereby preventing future neglect. Many child welfare agencies already screen individuals and provide parent education to prospective foster and adoptive parents, but services available for expectant birth parents are generally erratic and inadequate, and involve additional fees if prospective parents need to access them (parenting classes or even Lamaze classes).

Overall Purpose: A Comprehensive Assessment Tool for Child Neglect

This study also increases knowledge for practitioners in positions capable of providing early family multi-dimensional assessments and suggest how, if administered routinely, such implementation can potentially reduce child neglect. The concept here is not unlike other tests and screenings that currently (a) prevent diseases such as smallpox and tuberculosis, or (b) protect the public such as driving tests (Pransky, 1991) and (c) provide screening for adequate parenting skills amongst potential foster and adoptive individuals.

The reliability of the individual measures utilized in this study and the feasibility of administering them indicate that the instrument could be developed into a practical comprehensive assessment tool in clinics and physicians offices serving expectant mothers and children. With regard to conclusions drawn from the research section in Chapter Two, the discussion involving multiple tools designed to measure individual factors of child neglect and disagreements on what constitutes child neglect, complicate devising a workable combination of individual measures within one measurable tool designed to adequately identify child neglect at all levels. The multiple measures which

were incorporated into this research tool/questionnaire described in detail in Chapter Three represent a significant challenge to such an effort.

The overall purpose of this study was to provide health care and human services practitioners with assessment tools designed to identify potential risk of child neglect in order to reduce its incidences. By developing a comprehensive assessment tool for child neglect, child welfare oriented practitioners could utilize this tool with first-time parents and assist in identifying individuals who might otherwise be at-risk of neglecting their children, providing them with tools to help prevent child neglect from occurring.

One avenue of resolution for child neglect is to begin at the point of first contact with the potential perpetrators, which often involves health care practitioners during prenatal care or birth (Bethea, 1999). This is not to suggest that everyone is going to become a child abuse perpetrator; however, since parents constitute the majority of perpetrators, these early clinical encounters would provide an ideal beginning point. The next step would involve having physicians and nurses assess parental skills and make appropriate prevention referrals. However, the question then arises; would individuals agree to be assessed for risk of potential neglect and confront the possibility of being thereafter referred for intervention services? If the follow-on services were accomplished by practitioners in the same setting, intervention would be de-stigmatized and seen by patients as part of the preparation for childbirth and child-rearing. In addition the need to coordinate services between health care providers and social workers within the hospital setting is important. Due to the focus on universal screening and provision of services without stigmatizing the services, the importance of establishing a relationship between the health care practitioners and social workers who would provide services within the

new setting should be emphasized. If social workers are in the health care setting, then the potential for child neglect prevention may be improved.

Limitations of Study

Limitations of the study were identified in the areas of sampling frame, instrumentation/questionnaire, and design.

Sampling Frame

Four sampling frame limitations were identified in the study in regard to diversity of sample, size of the sample, the sample selection, and ineligible participants.

One sampling limitation was the race or diversity of the group (84% white and the remaining 16% representing minority groups) that participated in the research. This study is not comparable to previous research conducted in this area, in which a majority of the participants were generally racial minorities. In Chapter Two, it was noted that highest rates of abuse occur within minority groups of African American, American Indian or Alaska Native, and Pacific Islander (DHHS, 2002). Thus, even though this research focused on White Caucasian population, this represents the population that generally has the lowest rate of abuse as compared to minority groups. However, an advantage to having a predominantly racially white population is that the study provides data pertaining to generally neglected mainstream USA culture. This study reveals potential misconceptions which presuppose that neglect does not occur frequently in the majority white race in USA whereas the data actually indicate that the surveyed (predominately white) population actually produced relatively low scores with regard to knowledge about developmental abilities of children at three, six, and ten months, which can interfere with adequately caring for infants and moderate risk for child neglect.

Another limitation was the fact that the sample was small (only 125 couples) with some sample sizes of less than $N = 80$ (predictive factors such as in Question #4), due to filtering out the ineligible participants from the number which actually participated. Missing data from some participants resulted in smaller analyses of some predictive factors actors such as in Question #4. Participants did not complete the last 10 questions of the ECR (one page was missing for the last questions on the ECR – oversight of researcher), thereby reducing the sample size finally used in the analyses of that section. This also affected the predictor variables for that section with a smaller sample utilized.

Another limitation stemmed from conducting the research within only one hospital, thus failing to have a broad representative sample of the target population in Lexington, Kentucky. Generalizing the results to other populations or to the general population cannot be accomplished due to this limitation. The results were thus specific only to the study population. The population utilizing the services of the University of Kentucky Hospital includes a significant number of the employees insured through the University health plan. For future research, sample selection reliability could be improved with a broader population mix by including clients of all four area hospitals.

Another limitation of the sample occurred in the diversity of the participants in regard to race. Due to a small percentage of minority groups, results based on race would increase in accuracy with a larger minority sample size. Future research should seek to obtain a more diverse populace, which due to the small minority population of Kentucky and the Lexington area would suggest a study population in one of the surrounding states. Another limitation was the use of the Lamaze classes as a sample since there is a

significant self-selection of the population based on having to pay for this class as well as having an interest. This excluded individuals who were unable to attend Lamaze classes.

Instrumentation

The 97-item questionnaire had some limitations regarding individual scale measures that were not entirely sufficient or appropriate for measuring the study variables.

The scale measuring for drug, alcohol, and cigarette use and physical and mental health status was a shortened scale with items borrowed from other tools and compiled not to be invasive in nature. For future research, utilizing a formalized tool for each of these sections would potentially produce more reliable results for each of the variables especially as predictors of child neglect.

In regards to demographics, when asking participants' to state their marital status, the responses of married, single, or partnered appeared to be confusing with what individuals considered married or partnered. For example, one individual indicated being married and the other individual (couple) indicated being partnered. Some participants may have perceived the need to clarify their answers, but due to the nature of the questionnaire there was no capability to probe for responses or qualify the participants' answers to a certain item. Income range reporting wherein some responses indicated individuals were earning \$15,000 to \$27,000 per month; however, this might actually have indicated both individuals' (couple/household) monthly income instead of individual person's income. Another possibility is that individuals from this study may have indicated yearly income instead of monthly, and some individuals may have misread the requirement regarding which income figures were actually being requested.

Another possible limitation in this study may occur since a significant number of individuals studied may have been covered by the University health insurance. Such individuals may have accurately reported income if they were physicians and/or their families. For future research, identifying the source of health insurance and its type would assist in clarifying perceived disparities in monthly income. The results may be skewed by the range of extremes within the participants' reported income levels due primarily to the number of individuals having completed advanced educational degrees.

The Recognition of Child Neglect Seven Scenarios (RCNSS) developed by Sar and Mucherera (2007) requires additional testing (pilot study) in order to determine the reliability and validity of the scale. Also, participants' scores on the Experiences in Close Relationships (ECR) Scale fell into two categories of preoccupied and fearful and none in the other two categories of secure and dismissive. This interesting finding requires further research with a larger sample size of expectant first-time parents to corroborate these findings.

An additional limitation involved the reliability of the participants in the study. The social desirability scale showed that 52.5% of partners were more likely to present themselves in a favorable manner instead of honestly answering some items on the questionnaire as compared to 43.5% of first-time mothers. Thus, one could conclude that participants were not entirely forthcoming with truthful responses regarding how they replied to certain items on the scales, thereby potentially affecting the results of the data.

As a part of the study, a correlation matrix of the social desirability scale and the other measures was conducted. The results indicated that for the first-time mothers, 15 out of 27 measures and for partners 15 out of 27 measures (not the same as those of first-

time mothers) were skewed due to response bias of significant number of participants who responded with socially desirable answers (less honesty). When individuals were selected for a tendency for greater honesty and correlations were run again, only two variables (willingness to be assessed for child neglect and age) significantly correlated with the MC-2 for the first-time mothers. For the partners, there was no relationship at all between the variables and social desirability. Future research could include more participants and comparison with other studies which have previously utilized the MC-2, in order to account for greater reliability.

Design

The use of a non-experimental, cross-sectional design is another limitation resulting from the fact that even though some variables were correlated, no direct inference could be made that such factors caused the result, making it difficult for this study to be utilized as an adequate predictor of risk of child neglect. For exploratory research purposes, the research design was not difficult to utilize in obtaining preliminary results; for more detailed scientific results, however, a different research design could potentially produce more reliable results.

Areas for Future Research

For future research and work within child neglect prevention, the combination of the results from this dissertation coupled with the Six-Sigma model to identify the source of problems utilizing existing data. Six-Sigma is a systematic, analytical problem solving tool which is utilized to identify the source or root of problems. Six-Sigma identifies root causes to problems originating from six basic areas of: no standard, standard designed

poorly, standard out of date, people not trained, people poorly trained or people failed despite having appropriate standards and training (Berger, 2009). Thus utilizing the Six-Sigma model in considering child neglect prevention implies that if personal behaviors and environmental conditions result in child neglect, behavior theory and models could be used appropriately in working to prevent child maltreatment (Berger, 2009).

In child welfare, Six-Sigma is a methodology that could be utilized to improve work standards in order to consistently ensure that services are being provided in a cost effective manner, while nevertheless meeting policy and procedures by analyzing the data from the services provided. The current standard within child protection services is to utilize the behavior model in assisting abusive parents alter their behaviors after the action/maltreatment has occurred rather than focusing on preventing the action from occurring in the first place. This research has identified some of the root causes of child neglect and this can be used as the beginning of providing standards for prevention.

The study approach can be beneficial to the general population in eliminating the harmful effects of the negative behaviors and conditions by proactively utilizing behavior theory and model applications prior to the occurrence of maltreatment. With behavior theory, studies have indicated that there is a high correlation between individual attitudes and behavior control with subsequent ability to influence future behavior (Fishbein & Ajzen, 2005; Van Wagner 2009). Thus, if societal norms change regarding how child neglect is viewed and behavior control could be maintained through mandated law/policy, a positive change could be anticipated in the individual's ability to change negative behaviors subsequent reduction in the number of child neglect incidents. If there is a shift in the paradigm in which universal screening for child neglect is de-stigmatized,

individuals may participate in offered services without fear of being stigmatized by society. By normalizing the services of parenting without targeting only “at-risk” populations and providing the services to all groups, discriminatory disparities may be overcome and individuals become more accepting of participating in universal screening.

Ecological theory is connected to the factors of familial, community, and societal characteristics in terms of how the presence of these systematic factors is indicative of potential risk of neglect within the home. The aim of the ecological perspective is to provide the caregivers with environments that are conducive to personal well-being. If these systems are dysfunctional, caregivers are unable to function due to high stress related to each or all of these systems. Attachment theory is connected to parental risk factors and how certain activities of the parent are indicative of neglectful behavior. For example, the bonding strength between a child and parent is determined by whether basic needs activities are being performed. In turn, how adequately the child’s needs are met affects the type of attachment the child forms in relation to the caregiver.

Child neglect has multiple consequences for the child victims. Some of these victims suffer once they become adults, a powerful negative force which USA society desperately needs to counteract. Tax funds are being utilized for intervention programs whereas many child neglect issues might ostensibly be reduced by identification and prevention services before the neglect actually occurs. Earlier, in this first decade of this new millennium, the Bush Administration used block grant funding to provide additional federal resources for child neglect prevention services and research (Prevent Child Abuse, 2001). Kentucky’s capital expenditures on child welfare were \$413,813,484 for a

population of 4,199,449, amounting to an annual per capita spending of \$98.54. (Every Child Matters, 2009)

Prevention services might reduce the overall expense occurring as a result of child maltreatment. Table 40 shows the expense the United States of America sustains **AFTER** child maltreatment occurs (Ching-Tung & Holton 2007).

Table 40

Cost of Child Abuse

Category	Annual Total
Hospitalization	\$6,625,959,263
Mental Health Care System	\$1,080,706,049
Child Welfare System	\$25,361,329,051
Law Enforcement	\$33,307,770
Special Education	\$2,410,306,242
Juvenile Delinquency	\$7,174,814,134
Mental Health and Health Care	\$67,863,457
Adult Criminal Justice System	\$27,979,811,982
Lost Productivity to Society	\$33,019,919,544

Ching-Tung & Holton (2007)

To better provide for our children, Every Child Matters advocates for an additional 3-5 billion dollars of Federal allocations to American states, in order to increase the number of case managers in child protection agencies and thus decrease caseloads and improve training; provide more public health and social services to at-risk families; encourage states to adopt federal standards through the use of best practices and policy; and allow policy makers, the press, and the public to better understand which policies and practices required in order to reduce child deaths/neglect. Additional funds could be focused towards research for standardized definitions and methodologies in child maltreatment and funding for child death review teams, as well as funding for public education campaigns to encourage reporting of child maltreatment. Finally, states

could establish more stringent laws for civil and criminal proceedings involving child maltreatment perpetrators (Every Child Matters, 2009).

Although, the study results might not have shown in great detail how prominent the predictive individuals and societal factors have been for first-time expectant mothers and their partners, in detecting risk of child neglect, the fact remains that American children die as a result of neglect. After identifying individual, family, and environmental risk factors through the use of the attachment and ecological theory, preventive services for these risk factors can be generated utilizing behavior theory, as seen through Theory of Reasoned Action by Fishbein and Ajzen (2006).

Conclusion

Child neglect is the most common type of all substantiated child maltreatment. Since 62% of all children reported to child welfare protection agencies were neglected, reducing this number would benefit society. This study was conducted to identify the risk level for child neglect based on individual personal characteristics and situational factors previously identified in a review of the child neglect literature. The study purpose was three-fold: to find a point of entry for primary prevention of child neglect, to assess for child neglect risk level of both first-time expectant mothers and their partners, and to survey individual opinions regarding establishment and administration of a multi-dimensional family assessment tool prior to birth. These purposes align with the overall goal of diminishing potential child neglect risk especially among couples initiating families.

This study utilized a non-experimental, cross-sectional design to survey first-time expectant mothers and their partners. The sample of 250 individuals (mothers and their

partners) was recruited from expectant first-time mothers and their partners attending Lamaze Classes at a public hospital in Lexington, Kentucky. Participants completed a 97-item questionnaire which consisted of a modified version of the Mother-Child Neglect Scale (MCNS) (Lounds et al, 2004); Recognition of Child Neglect Seven Scenarios (RCNSS) (Sar & Mucherera, 2007); demographic characteristics; a combined alcohol/drug and mental health scale, history of personal childhood maltreatment; adult attachment styles as measured by the Experiences in Close Relationships (ECR) questionnaire (Brennan et al, 1998); four questions on parenting styles from Parenting Authority Questionnaire (PAQ) (Buri, 1991); questions on family/social support; Willingness to be Assessed for Risk of Child Neglect (WARCN) (Sar & Mucherera, 2007); and knowledge of infant development measured by the Opinions about Babies tool (OAB) (Reich, 2005).

Data were analyzed with the Statistical Package for the Social Sciences (SPSS). The researcher coded the survey and entered the data. Descriptive statistics were conducted for the demographic variables; t-test and multivariate analysis were conducted to answer the research questions. Pearson r , Spearman Rho r , and multiple regressions were conducted for predictive factors. Probability level for tests of significance results was $p < .05$.

Results indicated that for this particular population of predominately White Caucasians first-time expectant mothers and their partners, the partners were at greater risk of child neglect than first-time expectant mothers. First-time mothers were at low risk of child neglect but at higher risk for being unable to recognize situations indicative of child neglect. Preoccupied mothers were more likely than fearful mothers to recognize

child neglect. First-time expectant mothers and their partners with a history of childhood depression were better able to recognize scenarios of child neglect. The participants had less knowledge of child development at ages 3 and 6 months, with partners producing lower scores indicating that they are less likely to possess knowledge addressing child development issues. For the partners, those who were parented in a permissive manner generally exhibited more problems in identifying incidences of child neglect, thus indicating less awareness of recognition of child neglect. The partners from the minority race were more at-risk of child neglect. First-time expectant mothers and their partners were not particularly favorable regarding passage of a law mandating the assessment of child neglect prior to birth, even though they indicated they would participate if it was mandated. Thus, these individuals would cooperate with mandated requirements.

Of the 22 predictor variables, only three (opinions about babies, race, and physical health) significantly contributed to the predictive model for risk of child neglect for the first-time expectant mothers and only two (race and marital status) for partners. For the other predictor variable, only one (history of depression) significantly contributed to the predictive model for awareness regarding recognition of child neglect for mothers, and two (history of depression and parented father permissive) for partners. This research study identified some of the predictive factors that should be considered in designing and initiating preventive services to address child neglect prior to its occurrence.

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APPENDICES

Appendix A

Expectant Parents' Questionnaire

Unique ID: 001			
Are you 18 years or older? YES		NO	
If NO. Please STOP . You are not eligible to participate in this study.			
Will this be your first child? YES		NO	
If NO. Please STOP . You are not eligible to participate in this study.			
Are you:	Mother-to-be:	Father-to-be:	Relative: Friend:

Appendix B

Potential for Child Neglect Risk Measure

Rate your level of agreement with each statement below by checking the box response that best describes how important the following actions are for parents to do.					
It is important for a parent to:.....	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Do things with their child just for fun.					
Be interested in their child's activities or hobbies.					
Help their child with homework.					
Want to know what their child was doing when he/she is not at home.					
Comfort their child when he/she is upset.					
Keep their child clean.					
Help their child do his/her best.					
Make sure their child goes to school.					
Care if their child got into trouble at school.					
Make sure their child sees a doctor when he/she needs one.					
Be interested in the kind of friends their child has.					
Give their child enough to eat.					
Help their child when he/she has trouble understanding something.					
Read books to their child.					
Help their child when he/she has problems.					
Praise their child.					
Care if their child does things such as shoplifting.					

Tell their child he/she loves him/her.					
Keep their house clean.					
Give their child enough clothes to keep him/her warm.					

Appendix C

Recognition of Child Neglect Seven Scenarios (RCNSS) Measure

Read each situation described below. Decide on the level of neglect present. Circle your choice.

Situation	Level of Neglect				
Angela, who is 8-years old is left to care for her 3-year old sister, Maria while their parents go out to the neighborhood diner for drinks and a late supper.	None	mild	moderate	Severe	extreme
Emily calls the on-call nurse when her 3-month old daughter has a high fever and is vomiting and follows directions to bring her baby to the emergency room.	None	mild	moderate	Severe	extreme
Jason refuses to allow his 8-year old son back into the house after his son ran away and now wants to return and his son ends up sleeping in an alley close to the house.	None	mild	moderate	Severe	extreme
Maxine falls asleep with her colic ridden 4-month old baby on the couch of her apartment every night.	None	mild	moderate	Severe	extreme
Elizabeth and Booth live with their three children ages, 6-months, 2 years and 13 years old in a home that has garbage cans filled to the brim with used diapers, leftover fast food, and smells of urine, and has nothing but rotting food in the refrigerator.	None	mild	moderate	Severe	extreme
Alicia leaves her 10-month old infant unattended in a bathtub full of water to check on the casserole in the oven.	None	mild	moderate	Severe	extreme
A 2-year old naked boy playing alone in a fenced-in backyard across from a busy street.	None	mild	moderate	Severe	extreme
Richard watches his 8-month old boy while his wife, Serena waits tables at night. Often when Serena comes home, the baby is still awake in his play crib and Richard fast asleep on the couch.	None	mild	moderate	Severe	extreme
Paula holds her 2-month old close to her and makes eye contact with the baby for up to 3 to 5 minutes periodically throughout the day.	None	mild	moderate	Severe	extreme

Mary and Joseph have a new baby who is six weeks old. You live next door. You hear them yelling and screaming at each other throughout the evening at least once a week. Occasionally, you see the baby and Mary on the porch. The last two times you noticed the baby looked pale and had what looked like a blister on the arm.					
	None	mild	moderate	Severe	extreme

Appendix D

Demographic Information Measure

How old are you?

What is your monthly income?

How many times have you changed residences within the past year?

How many jobs have you had within the past year?

What is your race?

- ☐ White Non-Hispanic
- ☐ Black/African American
- ☐ Asian/Pacific Islander
- ☐ American Indian/Alaska Native
- ☐ Hispanic/Latino
- ☐ Other _____

What is your educational level?

- ☐ No High School
- ☐ High School
- ☐ College
- ☐ Graduate – Post level
- ☐ GED
- ☐ Other _____

Do you receive any type of support?
Place an X by all that apply.

- ☐ AFDC
- ☐ Food Stamps
- ☐ Medicare
- ☐ Daycare
- ☐ Housing Assistance
- ☐ Other _____

What is your relationship status?

- ☐ Single
- ☐ Partnered
- ☐ Married
- ☐ Separated
- ☐ Divorced
- ☐ Other _____

Are you currently employed?

- ☐ Employed full-time
- ☐ Employed part-time
- ☐ Unemployed

Appendix E

History of Personal Childhood Abuse Measure

Do any of the following apply to you? **Place an X** by all that apply.

- ☐ Past history of physical abuse
- ☐ Past history of neglect
- ☐ Past history of depression
- ☐ Past history of sexual neglect

Appendix F

Drug/Alcohol Abuse and Mental Health Problems Measure

Please check one answer only.

In the past month, have you smoked cigarettes or used tobacco products?

Never	Sometimes	Weekly	Daily
-------	-----------	--------	-------

In the past month, have you used alcohol?

Never	Sometimes	Weekly	Daily
-------	-----------	--------	-------

In the past month, have you used substances that were not prescribed by a doctor? (for example, marijuana, pain killers)

Never	Sometimes	Weekly	Daily
-------	-----------	--------	-------

How would you describe your overall physical health now?

Poor	Average	Good	Excellent
------	---------	------	-----------

How would you describe your overall emotional health now?

Poor	Average	Good	Excellent
------	---------	------	-----------

Appendix G

Parenting Style Measure (Questions from PAQ by Buri, 1991)

Overall how would you describe how you were parented most of the time when you were growing up by your MOTHER? Circle the choice that best fits your past experience.

A	B	C	D
My mother always encouraged verbal give and take whenever I felt that family rules and restrictions were unreasonable	Whenever my mother told me to do something when I was growing up, she expected me to do it immediately without asking any questions	My mother has always felt that what children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want	As I was growing up, my mother was uninvolved in my life and she took little notice in what I did

Overall how would you describe how you were parented most of the time when you were growing up by your FATHER? Circle the choice that best fits your past experience.

A	B	C	D
My father always encouraged verbal give and take whenever I felt that family rules and restrictions were unreasonable	Whenever my father told me to do something when I was growing up, he expected me to do it immediately without asking any questions	My father has always felt that what children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want	As I was growing up, my father was uninvolved in my life and he took little notice in what I did

Appendix H

Parental Knowledge of Child Development Measure (Opinion about Babies)

Please **CIRCLE** the box that best fits your answer.

STATEMENT	Disagree	Agree	No	STATEMENT	Disagree	Agree	No
It is important to have regular bedtime routines for babies.	1	2	3	Feeding babies cereal does not help them sleep through the night.	1	2	3
Newborns can only see 8-12 inches from their face.	1	2	3	Babies learn from watching what their mothers do.	1	2	3
Having a normal naptime and bedtime is important to babies.	1	2	3	Babies will copy what an adult does, such as sticking a tongue out or making silly noises.	1	2	3
It is important to let children know when they are being good or doing something right.	1	2	3	It is best to use your wrist to check if water is hot, rather than your fingers.	1	2	3
Once a baby turns 6-months, the care seat should be front-facing.	1	2	3	A baby's brain develops when they think.	1	2	3
For the first few months, babies like toys more than faces.	1	2	3	At 6-8 months, babies begin to be afraid of people they do not know.	1	2	3
Hard foods like popcorn or carrots are dangerous for babies.	1	2	3	Baby food and cereal should be given to babies when they are 3-months old.	1	2	3
Spanking teaches children that hitting is OK.	1	2	3	It is okay to give honey to a baby that is less than one year old.	1	2	3
Newborns know their mother's voice.	1	2	3	Some women feel depressed during or after pregnancy.	1	2	3
Babies are safer if they sleep on their backs.	1	2	3	Talking to babies is better than listening to the television or radio for teaching them to talk.	1	2	3
Babies brains stay the same size until they are one year old.	1	2	3	If an object is the same size as a quarter, then it is too big for a baby to choke on it.	1	2	3

Babies like bright colors best.	1	2	3	If the space between the slats of a crib is wide enough to fit a soda can through, it is dangerous for a child.	1	2	3
Baby walkers are dangerous.	1	2	3	It helps to get children to look or play with something else when they misbehave.	1	2	3
Spanking is the best way to teach a child how to behave.	1	2	3	Most 18-months old children are able to sit quietly at a dinner table for an hour while everyone eats.	1	2	3
When children see their parents scream they learn that it is okay to scream.	1	2	3	Routines are important for babies to feel secure.	1	2	3
A one year old child will sometimes do things that are mean on purpose.	1	2	3	Discipline means to punish.	1	2	3
It is not possible to spoil a child less than 4-months old.	1	2	3	It is best not to hold a baby when you are upset.	1	2	3
Newborns are not able to smell with their noses.	1	2	3	By 6-months old, babies spend more time awake then asleep.	1	2	3
If a person feels really sad after having a baby, she should talk to a doctor or a health care provider.	1	2	3	Babies should eat on a strict schedule.	1	2	3
Breast milk helps keep babies healthier than formula.	1	2	3				

For each question there may be more than one answer. Please check all the answers that fit best.

By 3-months of age, most babies can:

- Smile back to an adult
- Follow an object with their eyes.
- Reach for objects
- Roll over onto their stomach
- Be scared around strangers
- Bang toys

By One year of age, most babies can:

- Grab things with two fingers.
- Crawl
- Pull up to standing
- Can share things
- Copy sounds
- Look for toys that are covered with a blanket

By 6-months of age, most babies can:

- Sit up without help
- Hold things with all fingers
- Crawl
- Change an object from one hand to another.
- Say first word
- Pick things up with two fingers.

When babies cry the best things to do are:

- See if the diaper needs to be changed
- See if there is something hurting the baby, like clothing pinching their skin.
- See if the baby is hungry
- Check temperature to see if the baby is sick.
- Let the baby cry it out until he/she falls asleep.
- Call a doctor.

Which of the following in a 6 month old baby can be a sign of a health problem?

- Baby avoids eye contact
- Baby blows bubbles with mouth
- Baby has hiccups a lot
- Baby lies on her back and is not interested in things around her.
- Baby does no smile and does not make any sounds.

Appendix I

Adult Attachment Style Measure (ECR) by Reich

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

1	2	3	4	5	6	7
Disagree Strongly	Somewhat Disagree	Disagree	Neutral/Mixed	Agree	Somewhat Agree	Strongly Agree

- ☐ I prefer not to show a partner how I feel deep down.
- ☐ I worry about being abandoned.
- ☐ I am very comfortable being close to romantic partners.
- ☐ I worry a lot about my relationships.
- ☐ Just when my partner starts to get close to me I find myself pulling away.
- ☐ I worry that romantic partners won't care about me as much as I care about them.
- ☐ I get uncomfortable when a romantic partner wants to be very close.
- ☐ I worry a fair amount about losing my partner.
- ☐ I don't feel comfortable opening up to romantic partners.
- ☐ I often wish that my partner's feelings for me were as strong as my feelings for him/her.
- ☐ I want to get close to my partner, but I keep pulling back.
- ☐ I often want to merge completely with romantic partners, and this sometimes scares them away.
- ☐ I am nervous when partners get too close to me.
- ☐ I worry about being alone.
- ☐ I feel comfortable sharing my private thoughts and feelings with my partner.
- ☐ My desire to be very close sometimes scares people away.
- ☐ I try to avoid getting too close to my partner.
- ☐ I need a lot of reassurance that I am loved by my partner.

- ☐ I find it relatively easy to get close to my partner.
- ☐ Sometimes I feel that I force my partners to show more feeling, more commitment.
- ☐ I find it difficult to allow myself to depend on romantic partners.
- ☐ I do not often worry about being abandoned.
- ☐ I prefer not to be too close to romantic partners.
- ☐ If I can't get my partner to show interest in me, I get upset or angry.
- ☐ I tell my partner just about everything.
- ☐ I find that my partner(s) don't want to get as close as I would like.
- ☐ I usually discuss my problems and concerns with my partner.
- ☐ When I'm not involved in a relationship, I feel somewhat anxious and insecure.
- ☐ I feel comfortable depending on romantic partners.
- ☐ I get frustrated when my partner is not around as much as I would like.
- ☐ I don't mind asking romantic partners for comfort, advice, or help.
- ☐ I get frustrated if romantic partners are not available when I need them.
- ☐ It helps to turn to my romantic partner in times of need.
- ☐ When romantic partners disapprove of me, I feel really bad about myself.
- ☐ I turn to my partner for many things, including comfort and reassurance.
- ☐ I resent it when my partner spends time away from me.

Appendix J

Willingness to be Assessed for Risk for Child Neglect Measure (WARCN)

by Sar & Mucherera

Please read the items below and check ONE of the five answers you would best agree with.

1. Every woman who is expecting a child should be screened for potential neglect of their child regardless of how many children they already have.

☐ ☐ ☐ ☐ ☐

Do Not Agree Agree Somewhat Agree More Than Agree Agree Totally

2. Every first time expectant mother should be screened for potential neglect of their child.

☐ ☐ ☐ ☐ ☐

Do Not Agree Agree Somewhat Agree More Than Agree Agree Totally

3. Every man who is expecting a child should be screened for potential neglect of their child regardless of how many children they have.

☐ ☐ ☐ ☐ ☐

Do Not Agree Agree Somewhat Agree More Than Agree Agree Totally

4. Every first time expectant father should be screened for potential neglect of their child.

☐ ☐ ☐ ☐ ☐

Do Not Agree Agree Somewhat Agree More Than Agree Agree Totally

5. There should be a law requiring assessment for potential neglect of all first time expectant mothers like there is a requirement for a license to drive.

☐ ☐ ☐ ☐ ☐

Do Not Agree Agree Somewhat Agree More Than Agree Agree Totally

6. There should be a law requiring assessment for potential neglect of all first time expectant fathers like there is a requirement for a license to drive.

☐ ☐ ☐ ☐ ☐

Do Not Agree Agree Somewhat Agree More Than Agree Agree Totally

7. There should be a law requiring assessment of all expectant mothers regardless of how many children they already have for potential neglect like there is a requirement for a license to drive

☐ ☐ ☐ ☐ ☐

Do Not Agree Agree Somewhat Agree More Than Agree Agree Totally

8. There should be a law requiring assessment of all expectant fathers regardless of how many children they already have for potential neglect like there is a requirement for a license to drive

☐ ☐ ☐ ☐ ☐

Do Not Agree Agree Somewhat Agree More Than Agree Agree Totally

9. If there was a law requiring assessment of expectant first time parents for potential neglect, I would participate and be assessed.

☐ ☐ ☐ ☐ ☐

Do Not Agree Agree Somewhat Agree More Than Agree Agree Totally

10. I favor a law being passed requiring assessment of first time expectant parents for potential neglect

☐ ☐ ☐ ☐ ☐

Do Not Agree Agree Somewhat Agree More Than Agree Agree Totally

Appendix K

Social Desirability Measure (M-C 2(10) by Straham & Gerbasi

Check your best answer.

I never hesitate to go out of my way to help someone in trouble.	Yes	No	Not Sure
I have never intensely disliked anyone.	Yes	No	Not Sure
There has been times when I was quite jealousy of the good fortune of others.	Yes	No	Not Sure
I would never think of letting someone else be punished for my wrong doings.	Yes	No	Not Sure
I sometimes feel resentful when I don't get my way.	Yes	No	Not Sure
There have been times I felt like rebelling against people in authority.	Yes	No	Not Sure
I am always courteous, even to people who are disagreeable.	Yes	No	Not Sure
When I don't know something, I don't at all mind admitting it.	Yes	No	Not Sure
I can't remember "playing sick" to get out of something.	Yes	No	Not Sure
I am sometimes irritated by people who ask me for favors.	Yes	No	Not Sure

Appendix L

IRB Approvals from the University of Louisville

July 14, 2008
(REVISED)

Bibhuti Sar, Ph.D.
Kent School of Social Work
University of Louisville
Louisville, KY 40292

RE: IRB FULL BOARD MEETING OF 7/9/08
IRB# 341.07: TITLE: Predictors of Potential Risk for Child Neglect Among Expectant First-time Mothers and their Partners

Dear Dr. Sar:

The following items have been reviewed and approved at the Institutional Review Board (IRB) meeting noted above:

- Progress Report, dated 5/28/08
- Protocol, dated 5-08
- Revised Preamble, not dated
- Advertisement

The study now has continued approval from 8/1/08 through 7/31/09. Please submit a Progress Report/Continuation Request Form eight weeks prior to **7/31/09** in order to ensure that no lapse in approval occurs.

Please copy the new stamped approved consent for use with future subjects. As a reminder, as long as your study is open to enrollment, your consent will need to be re-approved with the next continuation request.

Best wishes for continued success with this study. Please send all inquires and electronic revised/requested items to our office email address at hsppofc@louisville.edu.

Sincerely,
Patricia K. Leitsch, Ph.D., Chair,
Social/Behavioral/Educational Institutional Review Board
PKL/crn
Human Subjects Protection Program Office
Med Center One – Suite 200
501 E. Broadway
Louisville, KY 40202-1798
Office: 502.852.5188 Fax: 502.852.2164

June 9, 2008

Bibhuti Sar, PhD
Kent School of Social Work
Oppenheimer Hall, Belknap Campus
University of Louisville
Louisville, Kentucky 40292

RE: 341.07 - Predictors of Potential Risk for Child Neglect Among Expectant First-time Mothers and their Partners

Dear Doctor Sar:

The following items have been received by the Human Subjects Protection Program Office and approved by the chair of the Institutional Review Board (IRB) through the expedited review procedure according to 45 CFR 46.110(B):

- Amendment, dated 6/4/2008
- Revised Study Preamble, dated 1/2/2008

The modifications include:

- Increase in the number of subjects to be enrolled to 300. The preamble has been revised to reflect the increase in enrollment. The committee will be advised of this action at their next full board meeting. Please send all inquires and electronic revised/requested items to our office email address at hsppofc@louisville.edu.

Sincerely,

Patricia K. Leitsch, Ph.D., Chair,
Social/Behavioral/Educational Institutional Review Board
PKL/elp
Human Subjects Protection Program Office
MedCenter One – Suite 200
501 E. Broadway
Louisville, KY 40202-1798
Office: 502.852.5188 Fax: 502.852.2164

Appendix M

Flyer Posted and Distributed to Prospective Participants

VOLUNTERS NEEDED FOR RESEARCH STUDY WITH FIRST TIME PREGNANT WOMEN AND THEIR PARTNERS

Researchers at the University of Louisville, Kent School of Social Work are looking for First-time Pregnant women and their partners to participate in a research study about knowledge and experiences of expectant first time parents and parenting of the newborn. You may be eligible for this study if you are male or female, 18 years and older who is expecting their first child. Participants will be compensated for their time, which involves completing a survey that takes approximately 40 minutes. The compensation will be \$20. The study is being conducted at University of Kentucky Hospital (800 Rose street, Lexington, KY 40536).

If you are interested in participating in this study, please contact Bertha Mucherera at (407)697-3903 by phone or by email at bmmucherera@bellsouth.net or talk with your Lamaze instructor, Lori Clem.

Appendix N

Preamble

Predictors of Risk for Child Neglect Among Expectant First-time Mothers and their Partners

Dear Participant:

You are being invited to participate in a research study by answering the attached survey about child neglect and how some factors (such as age, income, gender, education, attachment style, substance abuse, knowledge about child development of infants, opinions about doing an assessment for all individuals having children, mental health, employment status, and history of own childhood neglect) which might be potential in causing neglect of children. There are no known risks for your participation in this research study. The information collected may not benefit you directly. The information learned in this study may be helpful to others. The information you provide will be used to increase services to any new families, in terms of daycare services, medical aid, kids after school programs which would be implemented for all families who want and need them without any screening of whether you qualify or not for the services. Other countries have implemented such services in general for families. Your completed survey will be stored at the Kent School of Social Work, Louisville. The survey will take approximately 30 – 40 minutes to administer.

Individuals from the Department of Human Services (at the hospital you are attending Lamaze Classes), the Institutional Review Board (IRB) of the University of Louisville, the Human Subjects Protection Program Office (HSPPO), and other regulatory agencies may inspect these records. In all other respects, however, the data will be held in confidence to the extent permitted by law. Should the data be published, your identity will not be disclosed.

Taking part in this study is voluntary. By completing this survey you agree to take part in this research study. You do not have to answer any questions that make you uncomfortable **or can be prosecutable by law**. You may choose not to take part at all. If you decide to be in this study you may stop taking part at any time. If you decide not to be in this study or if you stop taking part at any time, you will not lose any benefits for which you may qualify.

If you have any questions, concerns, or complaints about the research study, please contact: Dr. Bibhuti Sar (502) 852-3932, Bertha M. Mucherera (859) 321-0377 or Lori Clem at (859) 257-5168.

If you have any questions about your rights as a research subject, you may call the Human Subjects Protection Program Office at (502) 852-5188. You can discuss any questions about your rights as a research subject, in private, with a member of the Institutional Review Board (IRB). You may also call this number if you have other

questions about the research, and you cannot reach the research staff, or want to talk to someone else. The IRB is an independent committee made up of people from the University community, staff of the institutions, as well as people from the community not connected with these institutions. The IRB has reviewed this research study.

If you have concerns or complaints about the research or research staff and you do not wish to give your name, you may call 1-877-852-1167. This is a 24 hour hot line answered by people who do not work at the University of Louisville.

Sincerely,

Signature of Investigator Signature of Co-Investigator Signature of Co-Investigator

Appendix O

Correlation of Predictors of Risk for Child Neglect and Awareness for Recognition of Child Neglect

First-time Mothers Pearson Correlation: Risk of Neglect

		CNS OneFe	OAB Total FEMALE	How many jobs in a year	Changed residences in a year	Income Female	How old are you
CNS OneFe	Pearson Correlation	1	-.365(**)	-.172	.044	-.141	.099
	Sig. (2-tailed)		.000	.064	.636	.120	.282
	N	123	120	117	118	123	119
OAB Total FEMALE	Pearson Correlation	-.365(**)	1	.064	.110	.283(**)	.132
	Sig. (2-tailed)	.000		.494	.237	.002	.153
	N	120	122	116	117	122	118
How many jobs in a year	Pearson Correlation	-.172	.064	1	.648(**)	-.086	-.097
	Sig. (2-tailed)	.064	.494		.000	.350	.292
	N	117	116	119	118	119	119
Changed residences in a year	Pearson Correlation	.044	.110	.648(**)	1	-.146	-.085
	Sig. (2-tailed)	.636	.237	.000		.111	.357
	N	118	117	118	120	120	120
Income Female	Pearson Correlation	-.141	.283(**)	-.086	-.146	1	.187(*)
	Sig. (2-tailed)	.120	.002	.350	.111		.040
	N	123	122	119	120	125	121
How old are you	Pearson Correlation	.099	.132	-.097	-.085	.187(*)	1
	Sig. (2-tailed)	.282	.153	.292	.357	.040	
	N	119	118	119	120	121	121
** Correlation is significant at the 0.01 level (2-tailed).							
* Correlation is significant at the 0.05 level (2-tailed).							

First-time Mothers Pearson Correlation: Child Awareness

		OAB Total FEMALE	How many jobs in a year	Changed residences in a year	Income Female	How old are you	Child Aware FE
OABTotal FEMALE	Pearson Correlation	1	.064	.110	.283(**)	.132	.224(*)
	Sig. (2-tailed)		.494	.237	.002	.153	.014
	N	122	116	117	122	118	119
How many jobs in a year	Pearson Correlation	.064	1	.648(**)	-.086	-.097	.005
	Sig. (2-tailed)	.494		.000	.350	.292	.960
	N	116	119	118	119	119	116
Changed residences in a year	Pearson Correlation	.110	.648(**)	1	-.146	-.085	.127
	Sig. (2-tailed)	.237	.000		.111	.357	.171
	N	117	118	120	120	120	117
Income Female	Pearson Correlation	.283(**)	-.086	-.146	1	.187(*)	-.062
	Sig. (2-tailed)	.002	.350	.111		.040	.497
	N	122	119	120	125	121	122
How old are you	Pearson Correlation	.132	-.097	-.085	.187(*)	1	-.081
	Sig. (2-tailed)	.153	.292	.357	.040		.382
	N	118	119	120	121	121	118
Child Aware FE	Pearson Correlation	.224(*)	.005	.127	-.062	-.081	1
	Sig. (2-tailed)	.014	.960	.171	.497	.382	
	N	119	116	117	122	118	122
** Correlation is significant at the 0.01 level (2-tailed).							
* Correlation is significant at the 0.05 level (2-tailed).							

First-time Mothers Spearman Rho Correlation: Risk of Neglect

		CN S One Fe	OA B Tot al FE MA LE	Rac e	Fed eral sup port	Mar ital Sta tus	Em p Loy men t Sta tus	Past Hist ory of Abu se Neg lect	Hist ory of Phy sical Abu se	Hist ory of Neg lect	Hist ory of Dep res sion	Hist ory of Sex ual Abu se	Sm oking Sta tus	Alco hol Sta tus	Sub stance Ab use Sta tus	Phy sical He alth Sta tus	Em o tion al Hea lth Sta tus	Mot her's pare ntin g style	Fat her's pare ntin g style
CN S One Fe	CC	1.00 0	-.245 (**)	.287 (**)	.165	.135	.074	.070	.052		.044	-.002	.146	.235 (**)	.061	.227 (*)	.050	-.212 (*)	-.039
	Sig.		.007	.001	.070	.140	.416	.443	.571		.631	.985	.108	.009	.505	.012	.581	.019	.670
	N	123	120	122	122	121	122	122	122	122	122	122	123	123	123	123	123	122	122
OA B Tot al FE MA LE	CC	-.245 (**)	1.00 0	-.092	-.080	-.020	-.315 (**)	-.041	-.038		.147	.022	-.076	-.041	.035	-.015	.069	.011	-.035
	Sig.	.007		.318	.384	.828	.000	.653	.678		.108	.810	.407	.651	.701	.870	.449	.906	.706
	N	120	122	121	121	120	121	121	121	121	121	121	122	122	122	122	122	121	121
Rac e	CC	.287 (**)	-.092	1.00 0	.240 (**)	-.016	.089	.115	-.054		.104	.067	.067	.057	.054	.012	-.123	.069	-.006
	Sig.	.001	.318		.007	.862	.328	.204	.549		.252	.461	.461	.528	.549	.893	.174	.450	.946
	N	122	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123
Fed eral sup port	CC	.165	-.080	.240 (**)	1.00 0	-.104	.308 (**)	.088	.263 (**)		.068	.061	.062	.057	.058	.046	.006	-.017	.089
	Sig.	.070	.384	.007		.250	.001	.329	.003		.453	.503	.496	.529	.525	.611	.949	.853	.328
	N	122	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123
Mar ital Sta tus	CC	.135	.020	-.016	-.104	1.00 0	-.059	.008	-.115		.037	-.072	.070	.078	.055	.199 (*)	.153	-.082	-.074
	Sig.	.140	.828	.862	.250		.519	.933	.204		.686	.428	.443	.390	.547	.028	.091	.371	.419
	N	121	120	123	123	123	123	123	123	123	123	123	123	123	123	123	123	122	122

Em plo yme nt Stat us	CC	.074	-.315 (**)	.089	.308 (**)	-.059	1.00 0	.059	.061	.	-.031	.015	.016	.058	-.086	.056	-.004	.004	.012
	Sig.	.416	.000	.328	.001	.519	.	.512	.501	.	.730	.869	.861	.525	.345	.535	.969	.966	.892
	N	122	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123
Past Hist ory of Abu se Negl ect	CC	.070	-.041	-.115	.088	.008	.059	1.00 0	.280 (**)	.	.526 (**)	.069	.370 (**)	.062	-.056	.294 (**)	.257 (**)	.124	.116
	Sig.	.443	.653	.204	.329	.933	.512	.	.002	.	.000	.447	.000	.492	.537	.001	.004	.171	.200
	N	122	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123
Hist ory of Phy sical Abu se	CC	.052	-.038	-.054	.263 (**)	-.115	.061	.280 (**)	1.00 0	.	.333 (**)	.396 (**)	.400 (**)	-.023	-.016	.211 (*)	.198 (*)	.059	.128
	Sig.	.571	.678	.549	.003	.204	.501	.002	.	.	.000	.000	.000	.797	.857	.019	.027	.520	.160
	N	122	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123
Hist ory Of Negl ect	CC	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Sig.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	N	122	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123
Hist ory of Dep re ssio n	CC	.044	.147	-.104	.068	.037	-.031	.526 (**)	.333 (**)	.	1.00 0	.253 (**)	.097	-.070	-.049	.259 (**)	.192 (*)	.003	-.002
	Sig.	.631	.108	.252	.453	.686	.730	.000	.000	.	.	.005	.283	.438	.587	.004	.033	.977	.983
	N	122	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123
Hist ory of Sex ual Abu se	CC	-.002	.022	-.067	.061	-.072	.015	.069	.396 (**)	.	.253 (**)	1.00 0	.320 (**)	-.029	.400 (**)	.195 (*)	.244 (**)	-.018	.029
	Sig.	.985	.810	.461	.503	.428	.869	.447	.000	.	.005	.	.000	.751	.000	.030	.006	.841	.748
	N	122	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123
Smo king Stat us	CC	.146	-.076	-.067	.062	-.070	.016	.370 (**)	.400 (**)	.	.097	.320 (**)	1.00 0	-.029	-.020	.195 (*)	.181 (*)	.071	.262 (**)
	Sig.	.108	.407	.461	.496	.443	.861	.000	.000	.	.283	.000	.	.752	.825	.029	.044	.431	.003
	N	123	122	124	124	123	124	124	124	124	124	124	125	125	125	125	125	124	124

Alcohol Status	CC	.235 (**)	-.041	.057	.057	.078	.058	.062	-.023		-.070	-.029	-.029	1.000	.333 (**)	.114	.157	-.153	.043
	Sig.	.009	.651	.528	.529	.390	.525	.492	.797		.438	.751	.752		.000	.205	.080	.089	.635
	N	123	122	124	124	123	124	124	124	124	124	124	125	125	125	125	125	124	124
Substance Abuse Status	CC	.061	.035	-.054	-.058	.055	-.086	-.056	-.016		-.049	.400 (**)	-.020	.333 (**)	1.000	.053	.198 (*)	.058	.030
	Sig.	.505	.701	.549	.525	.547	.345	.537	.857		.587	.000	.825	.000		.559	.027	.522	.739
	N	123	122	124	124	123	124	124	124	124	124	124	125	125	125	125	125	124	124
Physical Health Status	CC	.227 (*)	-.015	.012	.046	.199 (*)	.056	.294 (**)	.211 (*)		.259 (**)	.195 (*)	.195 (*)	.114	.053	1.000	.710 (**)	.174	.178 (*)
	Sig. (2-tailed)	.012	.870	.893	.611	.028	.535	.001	.019		.004	.030	.029	.205	.559		.000	.053	.048
	N	123	122	124	124	123	124	124	124	124	124	124	125	125	125	125	125	124	124
Emotional Health Status	CC	.050	.069	-.123	.006	-.153	-.004	.257 (**)	.198 (*)		.192 (*)	.244 (**)	.181 (*)	.157	.198 (*)	.710 (**)	1.000	.308 (**)	.160
	Sig. (2-tailed)	.581	.449	.174	.949	.091	.969	.004	.027		.033	.006	.044	.080	.027	.000		.001	.075
	N	123	122	124	124	123	124	124	124	124	124	124	125	125	125	125	125	124	124
Mother's parenting style	CC	.212 (*)	.011	.069	.017	.082	.004	.124	.059		.003	.018	.071	.153	.058	.174	.308 (**)	1.000	.417 (**)
	Sig. (2-tailed)	.019	.906	.450	.853	.371	.966	.171	.520		.977	.841	.431	.089	.522	.053	.001		.000
	N	122	121	123	123	122	123	123	123	123	123	123	124	124	124	124	124	124	124
Father's parenting style	CC	.039	.035	.006	.089	.074	.012	.116	.128		.002	.029	.262 (**)	.043	.030	.178 (*)	.160	.417 (**)	1.000
	Sig. (2-tailed)	.670	.706	.946	.328	.419	.892	.200	.160		.983	.748	.003	.635	.739	.048	.075	.000	
	N	122	121	123	123	122	123	123	123	123	123	123	124	124	124	124	124	124	124

First-time Mothers Spearman Rho Correlation: Child Awareness

	Sig. (2-tailed)	OA B Tot al FE MA LE	Rac e	Fed e ral sup port	Mar ital Sta tus	Em p Loy men t Sta tus	Past His tory of Abu se Neg lect	His tory of Phy sical Abu se	His Tor y of Neg lect	His tory of Dep re ssion	His Tor y of Sex ual Abu se	Smoking Sta tus	Alcohol Sta tus	Sub s tance Abu se Sta tus	Phys ical Hea lth Sta tus	Em o tional Hea lth Sta tus	Mot her's paren ting style	Fat her's paren ting style	Chil d Awa re FE
OA B Tot al FE MA LE	CC	1.00 0	-.092	-.080	.020	-.315 (**)	-.041	-.038		.147	.022	-.076	-.041	.035	-.015	.069	.011	-.035	.231 (*)
	Sig.		.318	.384	.828	.000	.653	.678		.108	.810	.407	.651	.701	.870	.449	.906	.706	.011
	N	122	121	121	120	121	121	121	121	121	121	122	122	122	122	122	121	121	119
Rac e	CC	-.092	1.00 0	.240 (**)	-.016	.089	-.115	-.054		-.104	-.067	-.067	.057	-.054	.012	-.123	.069	-.006	-.156
	Sig.	.318		.007	.862	.328	.204	.549		.252	.461	.461	.528	.549	.893	.174	.450	.946	.088
	N	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123	121
Fed eral sup port	CC	-.080	.240 (**)	1.00 0	-.104	.308 (**)	.088	.263 (**)		.068	.061	.062	.057	-.058	.046	.006	-.017	.089	.048
	Sig.	.384	.007		.250	.001	.329	.003		.453	.503	.496	.529	.525	.611	.949	.853	.328	.600
	N	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123	121
Mar ital Sta tus	CC	.020	-.016	-.104	1.00 0	-.059	.008	.115		.037	.072	.070	.078	.055	.199 (*)	.153	.082	.074	.137
	Sig.	.828	.862	.250		.519	.933	.204		.686	.428	.443	.390	.547	.028	.091	.371	.419	.136
	N	120	123	123	123	123	123	123	123	123	123	123	123	123	123	123	122	122	120
Em p loy men t Sta tus	CC	-.315 (**)	.089	.308 (**)	-.059	1.00 0	.059	.061		-.031	.015	.016	.058	-.086	.056	.004	.004	.012	-.042
	Sig.	.000	.328	.001	.519		.512	.501		.730	.869	.861	.525	.345	.535	.969	.966	.892	.647
	N	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123	121

Past History of Abuse Neglect	CC	-	-	.088	.008	.059	1.000	.280		.526	.069	.370	.062	-	.294	.257	.124	.116	.100
		.041	.115					(**)		(**)		(**)		.056	(**)	(**)			
	Sig.	.653	.204	.329	.933	.512		.002		.000	.447	.000	.492	.537	.001	.004	.171	.200	.274
	N	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123	121
History of Physical Abuse	CC	-	-	.263	-	.061	.280	1.000		.333	.396	.400	-	-	.211	.198	.059	.128	-
		.038	.054	(**)	.115		(**)	0		(**)	(**)	(**)	.023	.016	(*)	(*)			
	Sig.	.678	.549	.003	.204	.501	.002			.000	.000	.000	.797	.857	.019	.027	.520	.160	.702
	N	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123	121
History of Neglect	CC																		
	Sig.																		
	N	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123	121
History of Depression	CC	.147	-	.068	.037	-	.526	.333		1.000	.253	.097	-	-	.259	.192	.003	-	.191
			.104			.031	(**)	(**)		0	(**)		.070	.049	(**)	(*)		.002	(*)
	Sig.	.108	.252	.453	.686	.730	.000	.000			.005	.283	.438	.587	.004	.033	.977	.983	.036
	N	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123	121
History of Sexual Abuse	CC	.022	-	.061	-	.015	.069	.396		.253	1.000	.320	-	.400	.195	.244	-	.029	.161
			.067		.072			(**)		(**)	0	(**)	.029	(**)	(*)	(**)	.018		
	Sig.	.810	.461	.503	.428	.869	.447	.000		.005		.000	.751	.000	.030	.006	.841	.748	.078
	N	121	124	124	123	124	124	124	124	124	124	124	124	124	124	124	123	123	121
Smoking Status	CC	-	-	.062	-	.016	.370	.400		.097	.320	1.000	-	-	.195	.181	.071	.262	-
		.076	.067		.070		(**)	(**)			(**)	0	.029	.020	(*)	(*)		(**)	
	Sig.	.407	.461	.496	.443	.861	.000	.000		.283	.000		.752	.825	.029	.044	.431	.003	.273
	N	122	124	124	123	124	124	124	124	124	124	125	125	125	125	125	124	124	122

Alcohol	CC	.041	.057	.057	.078	.058	.062	.023		.070	.029	.029	1.000	.333 (**)	.114	.157	.153	.043	.013
	Sig.	.651	.528	.529	.390	.525	.492	.797		.438	.751	.752		.000	.205	.080	.089	.635	.887
	N	122	124	124	123	124	124	124	124	124	124	125	125	125	125	125	124	124	122
Substance Abuse	CC	.035	.054	.058	.055	.086	.056	.016		.049	.400 (**)	.020	.333 (**)	1.000	.053	.198 (*)	.058	.030	.084
	Sig.	.701	.549	.525	.547	.345	.537	.857		.587	.000	.825	.000		.559	.027	.522	.739	.359
	N	122	124	124	123	124	124	124	124	124	124	125	125	125	125	125	124	124	122
Physical Health	CC	.015	.012	.046	.199 (*)	.056	.294 (**)	.211 (*)		.259 (**)	.195 (*)	.195 (*)	.114	.053	1.000	.710 (**)	.174	.178 (*)	.070
	Sig. (2-tailed)	.870	.893	.611	.028	.535	.001	.019		.004	.030	.029	.205	.559		.000	.053	.048	.443
	N	122	124	124	123	124	124	124	124	124	124	125	125	125	125	125	124	124	122
Emotional Health	CC	.069	.123	.006	.153	.004	.257 (**)	.198 (*)		.192 (*)	.244 (**)	.181 (*)	.157	.198 (*)	.710 (**)	1.000	.308 (**)	.160	.063
	Sig. (2-tailed)	.449	.174	.949	.091	.969	.004	.027		.033	.006	.044	.080	.027	.000		.001	.075	.488
	N	122	124	124	123	124	124	124	124	124	124	125	125	125	125	125	124	124	122
Mother's parenting style	CC	.011	.069	.017	.082	.004	.124	.059		.003	.018	.071	.153	.058	.174	.308 (**)	1.000	.417 (**)	.006
	Sig. (2-tailed)	.906	.450	.853	.371	.966	.171	.520		.977	.841	.431	.089	.522	.053	.001		.000	.945
	N	121	123	123	122	123	123	123	123	123	123	124	124	124	124	124	124	124	121
Father's parenting style	CC	.035	.006	.089	.074	.012	.116	.128		.002	.029	.262 (**)	.043	.030	.178 (*)	.160	.417 (**)	1.000	.067
	Sig. (2-tailed)	.706	.946	.328	.419	.892	.200	.160		.983	.748	.003	.635	.739	.048	.075	.000		.463
	N	121	123	123	122	123	123	123	123	123	123	124	124	124	124	124	124	124	121
Child Awareness	CC	.231 (*)	.156	.048	.137	.042	.100	.035		.191 (*)	.161	.100	.013	.084	.070	.063	.006	.067	1.000
	Sig. (2-tailed)	.011	.088	.600	.136	.647	.274	.702		.036	.078	.273	.887	.359	.443	.488	.945	.463	
	N	119	121	121	120	121	121	121	121	121	121	122	122	122	122	122	121	121	122

Partners Pearson Correlation: Risk of Neglect

		CNS OneMa	OAB Total MALE	How many jobs in a year	Changed residences in a year	Income Male	How old are you
CNSOneMa	Pearson Correlation	1	-.153	-.095	-.102	.152	.146
	Sig. (2-tailed)		.106	.303	.272	.092	.111
	N	124	113	120	119	124	120
OAB Total MALE	Pearson Correlation	-.153	1	.013	.078	.074	-.031
	Sig. (2-tailed)	.106		.892	.422	.434	.744
	N	113	114	110	109	114	110
How many jobs in a year	Pearson Correlation	-.095	.013	1	.459(**)	-.243(**)	-.176
	Sig. (2-tailed)	.303	.892		.000	.007	.057
	N	120	110	121	120	121	118
Changed residences in a year	Pearson Correlation	-.102	.078	.459(**)	1	-.214(*)	-.254(**)
	Sig. (2-tailed)	.272	.422	.000		.019	.006
	N	119	109	120	120	120	117
Income Male	Pearson Correlation	.152	.074	-.243(**)	-.214(*)	1	.247(**)
	Sig. (2-tailed)	.092	.434	.007	.019		.006
	N	124	114	121	120	125	121
How old are you	Pearson Correlation	.146	-.031	-.176	-.254(**)	.247(**)	1
	Sig. (2-tailed)	.111	.744	.057	.006	.006	
	N	120	110	118	117	121	121
** Correlation is significant at the 0.01 level (2-tailed).							
* Correlation is significant at the 0.05 level (2-tailed).							

Partners Pearson Correlation: Child Awareness

		Child Aware MA	OAB Total MALE	How many jobs in a year	Changed residences in a year	Income Male	How old are you
OAB Total MALE	Pearson Correlation	.059	1	.013	.078	.074	-.031
	Sig. (2-tailed)	.534		.892	.422	.434	.744
	N	112	114	110	109	114	110
How many jobs in a year	Pearson Correlation	-.010	.013	1	.459(**)	-.243(**)	-.176
	Sig. (2-tailed)	.915	.892		.000	.007	.057
	N	117	110	121	120	121	118
Changed residences in a year	Pearson Correlation	.055	.078	.459(**)	1	-.214(*)	-.254(**)
	Sig. (2-tailed)	.561	.422	.000		.019	.006
	N	116	109	120	120	120	117
Income Male	Pearson Correlation	.070	.074	-.243(**)	-.214(*)	1	.247(**)
	Sig. (2-tailed)	.448	.434	.007	.019		.006
	N	121	114	121	120	125	121
How old are you	Pearson Correlation		-.031	-.176	-.254(**)	.247(**)	1
	Sig. (2-tailed)		.744	.057	.006	.006	
	N		110	118	117	121	121
Child Aware MA	Pearson Correlation		.059	-.010	.055	.070	-.006
	Sig. (2-tailed)		.534	.915	.561	.448	.946
	N		112	117	116	121	117

Partners Spearman Rho Correlation: Risk of Neglect

		CN S One Ma	Rac e	Fed e ral sup port	Mar ital Sta tus	Em p loy men t Sta tus	Past His tory of Abu se Neg lect	His tory of Phy sical Abu se	His tory of Neg lect	His tory of Dep res sion	His tory of Sex ual Abu se	Sm oking Sta tus	Alco hol Sta tus	Sub s tanc e Abu se Sta tus	Phy sical Hea lth Sta tus	Em o tion al Hea lth Sta tus	Mot her's pare ntin g style	Fat her's pare ntin g style	AT TA CH MA
CN S One Ma	CC	1.00 0	.230 (*)	- .085	.245 (**)	- .001	- .060	.001	.069	- .002	.015	- .133	.027	- .008	.076	.038	.081	.055	.001
	Sig.		.010	.348	.006	.990	.511	.995	.449	.982	.872	.141	.768	.932	.401	.674	.369	.545	.991
	N	124	123	123	123	123	122	123	123	123	123	124	124	124	124	124	124	123	91
Rac e	CC	.230 (*)	1.00 0	.126	- .046	- .025	- .064	- .005	.047	- .076	.138	- .101	- .208 (*)	.011	- .074	- .025	.178 (*)	.150	- .055
	Sig.	.010		.163	.609	.786	.485	.955	.601	.399	.126	.266	.021	.908	.415	.781	.048	.097	.602
	N	123	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91
Fed eral sup port	CC	- .085	.126	1.00 0	- .124	.165	- .004	- .077	.126	- .107	.251 (**)	.174	- .098	.116	- .108	- .037	.032	- .025	.160
	Sig.	.348	.163		.170	.067	.963	.395	.165	.239	.005	.054	.276	.198	.234	.684	.726	.784	.130
	N	123	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91
Mar ital Sta tus	CC	.245 (**)	- .046	- .124	1.00 0	.016	.050	- .020	.058	.114	.033	- .235 (**)	.075	- .013	.081	.032	- .020	- .111	- .091
	Sig.	.006	.609	.170		.856	.581	.828	.526	.207	.716	.009	.406	.884	.370	.724	.822	.223	.394
	N	123	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91

Em p l o y m e n t S t a t u s	CC	.001	.025	.165	.016	1.00 0	.140	.029	.078	.031	.034	.030	.038	.175	.040	.041	.050	.093	.131
	Sig.	.990	.786	.067	.856		.123	.753	.386	.732	.706	.742	.679	.052	.661	.649	.582	.307	.216
	N	123	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91
Past Hist ory of Abu se Negl ect	CC	.060	.064	.004	.050	.140	1.00 0	.385 (**)	.337 (**)	.448 (**)	.193 (*)	.064	.078	.003	.066	.253 (**)	.096	.124	.052
	Sig.	.511	.485	.963	.581	.123		.000	.000	.000	.033	.482	.389	.971	.468	.005	.289	.172	.626
	N	122	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	122	91
Hist ory of Phy sical Abu se	CC	.001	.005	.077	.020	.029	.385 (**)	1.00 0	.454 (**)	.326 (**)	.020	.008	.096	.059	.052	.037	.058	.212 (*)	.145
	Sig.	.995	.955	.395	.828	.753	.000		.000	.000	.823	.933	.290	.514	.570	.682	.522	.019	.171
	N	123	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91
Hist ory of Negl ect	CC	.069	.047	.126	.058	.078	.337 (**)	.454 (**)	1.00 0	.049	.014	.077	.030	.041	.036	.046	.124	.052	.101
	Sig.	.449	.601	.165	.526	.386	.000	.000		.588	.876	.397	.743	.649	.692	.609	.169	.566	.343
	N	123	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91
Hist ory of Dep re ssio n	CC	.002	.076	.107	.114	.031	.448 (**)	.326 (**)	.049	1.00 0	.028	.089	.041	.082	.063	.166	.002	.004	.143
	Sig.	.982	.399	.239	.207	.732	.000	.000	.588		.756	.324	.651	.366	.486	.066	.981	.962	.175
	N	123	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91
Hist ory of Sex ual Abu se	CC	.015	.138	.251 (**)	.033	.034	.193 (*)	.020	.014	.028	1.00 0	.201 (*)	.026	.024	.026	.040	.103	.139	.043
	Sig.	.872	.126	.005	.716	.706	.033	.823	.876	.756		.025	.778	.794	.774	.661	.256	.124	.685
	N	123	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91

PARTNERS SPEARMAN RHO: CHILD AWARENESS

		Race	Federal support	Marital Status	Employment Status	Past History of Abuse Neglect	History of Physical Abuse	History of Neglect	History of Depression	History of Sexual Abuse	Smoking Status	Alcohol Status	Substance Abuse Status	Physical Health Status	Emotional Health Status	Mother's parenting style	Father's parenting style	AT TACH MA	Child Awareness MA
Race	CC	1.000	.126	-.046	-.025	-.064	-.005	-.047	-.076	-.138	-.101	-.208 (*)	-.011	-.074	-.025	.178 (*)	.150	-.055	-.095
	Sig.		.163	.609	.786	.485	.955	.601	.399	.126	.266	.021	.908	.415	.781	.048	.097	.602	.301
	N	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91	120
Federal support	CC	.126	1.000	-.124	-.165	-.004	-.077	-.126	-.107	.251 (**)	.174	-.098	.116	-.108	-.037	.032	-.025	.160	.024
	Sig.	.163		.170	.067	.963	.395	.165	.239	.005	.054	.276	.198	.234	.684	.726	.784	.130	.798
	N	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91	120
Marital Status	CC	-.046	-.124	1.000	.016	.050	-.020	.058	.114	.033	.235 (**)	.075	.013	.081	.032	-.020	.111	-.091	.021
	Sig.	.609	.170		.856	.581	.828	.526	.207	.716	.009	.406	.884	.370	.724	.822	.223	.394	.823
	N	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91	120
Employment Status	CC	-.025	.165	.016	1.000	.140	.029	.078	.031	-.034	.030	-.038	.175	-.040	.041	.050	.093	.131	-.093
	Sig.	.786	.067	.856		.123	.753	.386	.732	.706	.742	.679	.052	.661	.649	.582	.307	.216	.314
	N	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91	120
Past History of Abuse Neglect	CC	-.064	-.004	.050	.140	1.000	.385 (**)	.337 (**)	.448 (**)	.193 (*)	.064	.078	-.003	.066	.253 (**)	.096	.124	-.052	-.005
	Sig.	.485	.963	.581	.123		.000	.000	.000	.033	.482	.389	.971	.468	.005	.289	.172	.626	.957
	N	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	122	91	119
History of Physical Abuse	CC	-.005	.077	-.020	.029	.385 (**)	1.000	.454 (**)	.326 (**)	-.020	-.008	.096	.059	-.052	-.037	.058	.212 (*)	.145	.001
	Sig.	.955	.395	.828	.753	.000		.000	.000	.823	.933	.290	.514	.570	.682	.522	.019	.171	.989
	N	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91	120

History of Neglect	CC	.047	.126	.058	.078	.337 (**)	.454 (**)	1.000	-.049	-.014	-.077	-.030	-.041	-.036	.046	.124	.052	.101	.007
	Sig.	.601	.165	.526	.386	.000	.000		.588	.876	.397	.743	.649	.692	.609	.169	.566	.343	.936
	N	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91	120
History of Depression	CC	-.076	-.107	.114	.031	.448 (**)	.326 (**)	-.049	1.000	-.028	-.089	.041	-.082	.063	.166	-.002	-.004	-.143	.185 (*)
	Sig.	.399	.239	.207	.732	.000	.000	.588		.756	.324	.651	.366	.486	.066	.981	.962	.175	.043
	N	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91	120
History of Sexual Abuse	CC	.138	.251 (**)	.033	-.034	.193 (*)	-.020	-.014	-.028	1.000	.201 (*)	.026	-.024	.026	.040	-.103	.139	-.043	-.037
	Sig.	.126	.005	.716	.706	.033	.823	.876	.756		.025	.778	.794	.774	.661	.256	.124	.685	.692
	N	124	124	124	124	123	124	124	124	124	124	124	124	124	124	124	123	91	120
Smoking Status	CC	-.101	.174	.235 (**)	.030	.064	-.008	-.077	-.089	.201 (*)	1.000	.107	.016	.097	.016	.037	.150	.218 (*)	.126
	Sig.	.266	.054	.009	.742	.482	.933	.397	.324	.025		.233	.858	.280	.856	.680	.097	.037	.167
	N	124	124	124	124	123	124	124	124	124	125	125	125	125	125	125	124	92	121
Alcohol Status	CC	-.208 (*)	-.098	.075	-.038	.078	-.096	-.030	.041	.026	.107	1.000	.173	.149	.167	.072	.057	-.076	.031
	Sig.	.021	.276	.406	.679	.389	.290	.743	.651	.778	.233		.054	.096	.063	.425	.531	.469	.738
	N	124	124	124	124	123	124	124	124	124	125	125	125	125	125	125	124	92	121
Substance Abuse Status	CC	.011	.116	-.013	.175	-.003	-.059	-.041	-.082	.024	.016	.173	1.000	.065	.217 (*)	.036	.002	-.086	.185 (*)
	Sig.	.908	.198	.884	.052	.971	.514	.649	.366	.794	.858	.054		.475	.015	.693	.986	.412	.042
	N	124	124	124	124	123	124	124	124	124	125	125	125	125	125	125	124	92	121
Physical Health Status	CC	-.074	-.108	.081	-.040	.066	-.052	-.036	.063	.026	.097	.149	.065	1.000	.576 (**)	.160	.009	-.065	.038
	Sig.	.415	.234	.370	.661	.468	.570	.692	.486	.774	.280	.096	.475		.000	.074	.925	.536	.679
	N	124	124	124	124	123	124	124	124	124	125	125	125	125	125	125	124	92	121

Emo Tio nal	CC	.025	.037	.032	.041	.253 (**)	.037	.046	.166	.040	.016	.167	.217 (*)	.576 (**)	1.00 0	.218 (*)	.081	.258 (*)	.018
	Sig.	.781	.684	.724	.649	.005	.682	.609	.066	.661	.856	.063	.015	.000		.014	.371	.013	.848
Hea lth Stat us	N	124	124	124	124	123	124	124	124	124	125	125	125	125	125	125	124	92	121
Mot her' s par e ntin g styl e	CC	.178 (*)	.032	.020	.050	.096	.058	.124	.002	.103	.037	.072	.036	.160	.218 (*)	1.00 0	.422 (**)	.038	.041
	Sig.	.048	.726	.822	.582	.289	.522	.169	.981	.256	.680	.425	.693	.074	.014		.000	.716	.657
Fat her' s par e ntin g styl e	N	124	124	124	124	123	124	124	124	124	125	125	125	125	125	125	124	92	121
Fat her' s par e ntin g styl e	CC	.150	.025	.111	.093	.124	.212 (*)	.052	.004	.139	.150	.057	.002	.009	.081	.422 (**)	1.00 0	.060	.226 (*)
	Sig.	.097	.784	.223	.307	.172	.019	.566	.962	.124	.097	.531	.986	.925	.371	.000		.570	.013
AT TA CH MA	N	123	123	123	123	122	123	123	123	123	124	124	124	124	124	124	124	92	120
AT TA CH MA	CC	.055	.160	.091	.131	.052	.145	.101	.143	.043	.218 (*)	.076	.086	.065	.258 (*)	.038	.060	1.00 0	.070
	Sig.	.602	.130	.394	.216	.626	.171	.343	.175	.685	.037	.469	.412	.536	.013	.716	.570		.516
Chil d Aw are MA	N	91	91	91	91	91	91	91	91	91	92	92	92	92	92	92	92	92	88
Chil d Aw are MA	CC	.095	.024	.021	.093	.005	.001	.007	.185 (*)	.037	.126	.031	.185 (*)	.038	.018	.041	.226 (*)	.070	1.00 0
	Sig.	.301	.798	.823	.314	.957	.989	.936	.043	.692	.167	.738	.042	.679	.848	.657	.013	.516	
Chil d Aw are MA	N	120	120	120	120	119	120	120	120	120	121	121	121	121	121	121	120	88	121

CURRICULUM VITAE

Bertha Makuto Mucherera, Ph. D, MSW

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Oviedo, FL 32765
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EDUCATION

Doctor of Philosophy: Graduation Date: May 8th, 2010
Kent School of Social Work, University of Louisville, Louisville, KY 40292
- Dissertation on Predictors of Risk for Child Neglect – Defense date 3/31/10.

Masters in Social Work – Specialized Child Welfare Practice
University of Denver, 2148 S. High St, Denver, CO 80208
Graduated June 1997

Bachelor of Arts – Major Sociology and Minor in Social Work
Simpson Methodist College, 701 N. C. St, Indianola, IA 50125
Graduated May 1992

Associate Degree in Liberal Arts
Martin Methodist College, 433 W. Madison St, Pulaski, TN 38478
Graduated May 1990

O-Level Certificate – High School Diploma
St Dominic's High School, Chishawasha, Zimbabwe
Graduated December 1982

TEACHING EXPERIENCE

Instructor: Eastern Kentucky University, Richmond, Kentucky, (859) 622-1644
Fall 2005, Fall 2005, Spring 2006, Fall 2006
- Taught four classes: Enhancing Attachment: The Foundation for Permanency for Private Child Care Agencies (PCC).

- Taught two classes: Enhancing Safety and Permanency for PCC Training of Trainers, SWK 455 Special Topics.

Instructor: Kent School of Social Work, University of Louisville, Kentucky

Summer 2005, Fall 2005 and Spring 2006

- Taught Enhancing Safety and Permanency for Families and Children
Teaching Assistant: Two Classes - Human Diversity and Children and Families classes.

RESEARCH INTERESTS

- Child abuse and neglect with focus on prevention of child neglect
- Working with teenagers and their families
- Child development with focus on attachment and bonding issues
- Team teaching for social worker practitioners
- Policy on child welfare issues

PROFESSIONAL EXPERIENCE:

CHILD WELFARE SPECIALIST II

October 2008 to Present: Family Services of Metro Orlando

- Facilitates Permanency Review Staffing meetings with case managers, supervisors, GAL, Children's Legal Services, and parents in order to expedite permanency for children in out of home placements.

CONSULTANT FOR FEDERAL CHILD FAMILY SERVICES REVIEWS

December 2001 to Present: JBS International Consultation Services, Children's Bureau

- Have participated in fifteen different States audits for compliance with ASFA.
- Also trained as a consultant for the Title IV-E Federal Reviews (Funding) and participated in one State Audit.

FAMILY SERVICES OFFICE SUPERVISOR

September 2002 – September 2004

Cabinet for Health and Family Services – Boyle County, Danville, KY, (859) 239-7105

- Worked as supervisor for two teams: Intake Team - five workers, Ongoing- six workers, one case-aide, and three secretaries.
- Job duties included: doing risk assessment screening of intake referrals.
- Assignments of referrals and cases to intake and ongoing workers respectively.
- Consultation with workers on assigned referrals, and family case management.
- Keeping all office management reports, complying monthly data reports.
- MSW case consultations/audits with three counties on a monthly basis.
- Attending Program Improvement Plan meetings for the State Region.
- Working with community partners in Family Team meetings.

- Doing training for community workers within the county.

SOCIAL SERVICES CLINICIAN I

November 1999 – September 2002: Cabinet for Health and Families Services, Anderson County, Kentucky, 40342 (502) 839-5176

- Conducted initial intake referrals screening and assessments of families.
- Filing court petitions for removal and placement, initial 10-day case plans.
- Recommendations for in-home and community services
- Ongoing case maintenance and monthly peer case reviews.

SOCIAL CASEWORKER III

September 1997 – June 1999: Adams County Dept. of Social Services, Denver, CO – (303) 412-5094

- Conducted initial referrals screening, investigations, and family assessment.
- With teenagers, conducted immediate family crisis counseling.

SOCIAL CASEWORKER III

October 1994 – September 1997

Denver Dept. of Social Services – Montbello, Denver, CO - (303) 375-4079

- Worked as a caseworker for ongoing cases for children and youth.
- Conducted initial intake investigations to assess for children's safety and removal.
- Devised case, treatment, and permanency plans for children-in-care.

PROGRAM SUPERVISOR

May 1994 to October 1994: Volunteers of America – Triad Shelter, Denver, CO - (303) 831-8502

- Program Supervisor at a teenage girls' shelter supervised six youth counselors.
- Did business bills, compiling the monthly, quarterly, and yearly statistics reports.

YOUTH COUNSELOR

September 1993 – April 1994: Volunteers of America – Triad Shelter, Denver, CO - (303) 831-8502

- Worked with teenage girls as an evening and overnight counselor. Duties included counseling – one-one-one, groups, and family counseling.

RELIEF COUNSELOR

August 1993 – June 1994

Volunteers of America – Brandon Center, Denver, CO - (303) 297-0408

- Worked as a counselor in a shelter for battered women. Duties included counseling and supervision of the women in day-to-day activities.

ON-CALL LIVING SKILLS INSTRUCTOR

August 1993 – June 1994: Good Shepard Lutheran Home, Denver, CO - (303) 795-2061

- Developed and implemented individual training and behavior programs for developmentally challenged clients in a residential group home.

SUPERVISED APARTMENTS PROGRAM INSTRUCTOR AND CONTACT HOURS

September 1992 – June 1993: Winifred Law Opportunity Center, Indianola, IA - (515) 961-5341

- Devised individualized programs plans for developmentally and physically challenged clients on how to adjust to living by self within the community.

MASTERS SOCIAL WORK INTERN PRACTICUM

September 1995 – May 1997: Denver Dept. of Social Services

- Conducted foster/adopt home evaluations.
- Co-facilitated teaching the 10-week foster/adopt course.
- Participated in meetings with administrators from PCC contracting agencies.
- Conducted an evaluation of program effectiveness with an Adolescent Alternative School Program.

BA SOCIAL WORK INTERN PRACTICUM

January 1991 – May 1991: Lutheran Social Services, Des Moines, IA (515) 274-4946

- Worked with Friends of New Parents, a program for teenage mothers.
- Conducted supervised visits with Foster and Adoption Parents.
- Took the Foster/Adopt Parent 10-week classes.

COMPUTER TECHNICAL SKILLS

- Typing skills of about 50+ words a minute.
- Microsoft Word, Power point, Excel, and statistic program (SPSS).

PROFESSIONAL AFFILIATIONS

1996 – Present National Association of Social Workers (NASW)

2004 – Present Council of Social Work Education (CSWE)

2004 – Present Fellowship by the Southern Regional Educational Board (SREB)

2008 – Present National Association for Christian Social Workers (NACSW)

PRESENTATIONS

October 27 2008 - Session Presentation: Enhancing Attachment. At the Seminole County Child Protection Conference – 2008, Sanford, FL.

December 5-7, 2008 - Poster Presentation: Predictors of Potential for Child Neglect Among First-time Pregnant Women and Their Partners. At 23rd National Training Institute (NTI). Connecting