CHILDHOOD EXPOSURE TO MALTREATMENT: DO SOCIAL AND FINANCIAL RESOURCES ATTENUATE CAREGIVER CHILD ABUSE POTENTIAL?

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Title of Study: CHILDHOOD EXPOSURE TO MALTREATMENT: DO SOCIAL AND FINANCIAL RESOURCES ATTENUATE CAREGIVER CHILD ABUSE POTENTIAL?

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Abstract: The present study sought to evaluate the role of protective factors such as social support and family resources on the relation between childhood abuse history and child abuse potential in a sample of caregivers and parents at significant risk for child abuse and neglect. This relation was examined using pre-service data from a randomized clinical trial (RCT) of a home-based parenting program. It was hypothesized that for caregivers or parents with significant risk factors (i.e., parental depression, substance abuse, and domestic violence), childhood history of maltreatment would be positively related to child abuse potential. Additionally, it was predicted that availability of resources would contribute to this relation such that higher levels of resources would decrease caregiver's child abuse potential. Two competing theories regarding the mechanisms of childhood maltreatment and parental abusive and neglectful behavior were examined: Bandura's social learning theory and Bowlby's attachment theory. Each of these theories has similarities and distinctions regarding the proposed mechanisms that underlie the impact of social and financial resources. This study examined these competing theories to determine which mechanisms are most strongly supported for families at significant risk for child abuse and neglect. Findings revealed that a child maltreatment history was significantly related to subsequent child abuse potential, F (11, 473) = 11.63, $p < .001$. Additionally, attachment F (4, 464) = 14.79, $p < .001$, $R^2 = .457$ and social learning F (4, 470) = 14.50, $p < .001$, $R^2 = .437$ each significantly impacted this relation. Results suggest the importance of providing supports in reducing child abuse potential amongst families with a child maltreatment history. More specifically, interventions that target the quality of relation between children and their caregivers are essential to attenuate the risks associated with childhood experiences of abuse.

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CHAPTER I

INTRODUCTION

Background

The etiology of child abuse and neglect has long been studied, as its influence has important implications for prevention efforts. Nevertheless, an etiological framework is difficult to construct due to the complex nature of its underlying constructs. The abusive and neglectful parenting of children is not a new phenomenon, and its incidence is widespread across the United States (DiLillo, Perry, & Foriter, 2006). In 2011, the US Department of Health and Human Services estimated that 3.7 million referrals of suspected child abuse and neglect were made. Such a substantial number of reports are a concern because of the costly financial, emotional, and physical outcomes they create for both children and their families (Centers for Disease Control and Prevention, 2014; Fang, Brown, Florence, & Mercy, 2010).

Children exposed to abuse or neglect are more likely than those without an abuse history to experience a variety of negative consequences such as health and physical difficulties, delays in cognitive, social, language, and motor development, and poorer emotional, behavioral, and psychological outcomes (e.g., Fergusson, Boden, & Horwood,

2008; Gilbert et al., 2009; Lansford, et al., 2002; Noll, Zeller, Trickett, & Putnam, 2007; Thornberry, Ireland, Smith, 2001). Additionally, a childhood history of abuse has been shown to be predictive of a variety of negative outcomes later in life (Berlin, Appleyard, & Dodge, 2011; Edwards, et al., 2005; Felitti et al, 1998). These include issues with mental health (Chapman et al., 2004; Cohen, Brown & Smailes, 2001; Dube et al., 2001; Whitfield, Dube, Felitti, & Anda, 2005; Widom, DuMont, & Cazaja, 2007), substance abuse (Dube et al., 2003, Dube et al., 2006; Dube, Anda, Felitti, Edwards, & Croft, 2002; Kunitz, Levy, McCloskey, & Gabriel, 1998), and aggression (Lansford et al., 2007).

Negative consequences of child maltreatment have motivated researchers to search for a causal explanation of child abuse and neglect. The theory of intergenerational transmission of abuse was an early answer to this call by proposing that individuals who are victims of abuse as children or who frequently witness violence towards others are more likely to become abusive themselves through the process of observational learning (Craig & Sprang, 2007). Despite previous research demonstrating the association between abuse history and future abuse perpetration, most parents who were abused or neglected in childhood do not maltreat their own children (Rodriguez & Green, 2007). Childhood maltreatment is a risk, but not a determining factor for parental abusive and neglectful behavior. It is important to consider a variety of interacting factors when examining the relation between child abuse history and future abuse potential.

Protective factors are conditions, events, or circumstances that buffer and protect individuals at high-risk for child abuse and neglect (Durlak, 1998). A variety of protective factors have been identified in the literature to decrease the likelihood of abuse perpetration. Social support and family resources have been identified as two of the most

influential factors in the protection against child abuse and neglect. Several studies have found support for the attenuating effect of social support and financial resources on childhood history of abuse and child abuse potential in adulthood (Crouch, Milner, & Thomsen, 2001; Egeland, Jacobvitz, & Strouge, 1988; Hunter & Kilstrom, 1979; Langeland & Dijkstra, 1995; Milner, de Paul, Mugica, Arruabarrena, & Crouch, 1994; Milner, Robertson, 1990).

Social support has been shown to mitigate the relation between history of child abuse and future abuse perpetration in two major ways. The first is that individuals with strong support systems are more likely than those without to believe that others are willing to help them, and in turn, are less likely to view negative life events as stressful. Secondly, in the event that an individual is confronted with a stressful event, those with social support are able to turn to others to help them find a solution to their problem, as well as help them reframe the importance of the stressful event (Litty, Kowalski, & Minor, 1996).

Resources such as education and income have also been shown to buffer potential negative outcomes from early adverse experiences. Income level has been shown to be a significant protective factor, such that families with more economic resources have a decreased risk for abuse perpetration (Child Welfare Information Gateway, 2014). Additionally, educational resources have been shown to impact this relation such that higher educational attainment is frequently cited as a protective factor against the cycle of violence (Burrell, Thompson, & Sexton, 1994; Garbarino, 1976).

Despite this work, much is still unknown regarding the nature of these protective factors. What remains unclear at this time is how particular types of social support and family resources impact the relation between history of child abuse and neglect and future child abuse potential. This study sought to clarify these questions by evaluating specific components of each protective factor to determine what variables play the most substantial protective role.

Specific Aims

The present study sought to evaluate the role of two major protective factors, family resources and social support, on the relation between childhood abuse history and child abuse potential in a sample of caregivers at significant risk for child abuse and neglect. This relation was examined using pre-service data from a randomized clinical trial (RCT) of a home-based parenting program. It was hypothesized that for caregivers or parents with significant risk factors (i.e., parental depression, substance abuse, and domestic violence), childhood history of maltreatment would be positively related to child abuse potential. Additionally, it was predicted that availability of resources would contribute to this relation such that higher levels of resources would decrease caregiver's child abuse potential. There are competing theories regarding the mechanism of childhood maltreatment and parental abusive and neglectful behavior. This study examined two major theories from the literature: Bandura's social learning theory and Bowlby's attachment theory. Each of these theories has similarities and distinctions regarding the mechanisms that underlie the impact of social and financial resources. This study examined these competing theories to determine which mechanisms are most strongly supported for families at high risk for child abuse and neglect.

CHAPTER II

REVIEW OF THE LITERATURE

Child Abuse and Neglect

Child abuse and neglect is defined as, "any act or series of acts of commission or omission by a parent or other caregiver that results in harm, potential for harm, or threat of harm to a child" (CDC, 2014). It includes four overarching forms of abuse acted upon towards children: physical, sexual, emotional, and neglect. Physical abuse encompasses intentional physical behaviors such as slapping, kicking, hitting, biting, throwing, or beating. These behaviors may result in negative physical outcomes for the child ranging from mild bruises to broken bones and death (Children's Bureau, 2012). Sexual abuse is formally defined by the Federal Child Abuse Prevention and Treatment Act as, "the employment, use, persuasion, inducement, enticement, or coercion of any child to engage in, or assist any other person to engage in any sexually explicit conduct or simulation of such conduct for the purpose of producing a visual depiction of such conduct; or the rape, and in cases of caretaker or inter-familial relationships, statutory rape, molestation, prostitution, or other form of sexual exploitation of children, or incest with children" (CAPTA, 2010). Emotional abuse involves the emotional or psychological deprecation of a child's self-worth or emotional development (Children's Bureau, 2012). It is comprised of behaviors by the caregiver such as ignoring, rejecting, terrorizing, or verbally

assaulting a child in ways that may interfere with their emotional development. Lastly, child neglect occurs when a parent or caregiver fails to attend to the necessary physical, medical, educational, or emotional needs of a child. Polansky defines child neglect as “a condition in which a caretaker responsible for the child, either deliberately or by extraordinary inattentiveness, permits the child to experience avoidable present suffering and/or fails to provide one or more of the ingredients generally deemed essential for developing a person’s physical, intellectual, and emotional capacities” (Polansky, 1975). This includes the lack of appropriate supervision as well as a lack of provision of resources such as food or shelter, and is differentiated from poverty by defining neglect “in spite of availability” (Gaudin, 1993).

The Children’s Bureau reports nationally 9.2 victims per 1,000 children in the United States who fall victim to child abuse and neglect each year (U.S. Department of Health and Human Services, 2012). These figures are based on reports to states child protective service systems, thus, it is likely that this statistic is an underestimation of the actual prevalence of abuse as many cases go unreported. Studies conducted outside of Child Protective Services estimate as many as one in seven children will experience some sort of abuse or neglect in their lifetimes (CDC, 2014). Additionally, 3.7 million referrals of abuse and neglect are received by protective service agencies each year, averaging to six reported cases of child abuse and neglect per minute (U.S. Department of Health and Human Services, 2012). Of the child victims, an estimated 79% were reported cases of neglect, 18% physical abuse, 10% emotional abuse, and 9% were cases of sexual abuse (U.S. Department of Health and Human Services, 2012). Children may fall into more than one of these categories when experiencing multiple types of maltreatment.

High prevalence rates of child abuse and neglect do not come without consequence. The estimated total lifetime cost of child abuse in the United States averages to $124 billion per year (Fang, Brown, Florence & Mercy, 2010); however, the detrimental cost of abuse is not limited to financial burden. Children exposed to abuse are more likely than those without an abuse history to experience a variety of concerns such as health and physical difficulties, delays in cognitive, social, language, and motor development, and poorer emotional, behavioral, and psychological outcomes (e.g., Fergusson, Boden, Horwood, 2008; Gilbert et al., 2009; Lansford, et al., 2002; Noll, Zeller, Trickett, & Putnam, 2007; Thornberry, Ireland, & Smith, 2001). Children exposed to abuse are also at an increased risk for health related consequences such as autoimmune, lung, and liver disease, as well as obesity, chronic obstructive pulmonary disease, and frequent headaches (Anda, Tietjen, Schulman, Felitti, & Croft, 2010; Brown et al., 2010; Dong, Anda, Dube, Felitti, & Giles, 2003; Dong et al., 2004; Dube et al., 2009; Williamson, Thompson, Dietz, & Felitti, 2002). Research has demonstrated the effect of abuse and neglect on adjustment, with children with an abuse history experiencing more difficulties with depressive symptoms, disruptive behaviors, academic success, and externalizing behaviors than those who were not abused (Cicchetti & Lynch 1993, 1995; Trickett & McBride-Chang, 1995). Perhaps most costly, in 2012 an estimated 1,640 children died as a result of child abuse and neglect (Children's Bureau, 2012). A better understanding of child abuse and neglect's antecedents is necessary for increased success in prevention efforts.

Intergenerational Abuse

The intergenerational transmission of abuse was first proposed as one explanation for the continuation of child abuse and neglect. Its basic premise is that individuals who were abused as children are likely to perpetrate similar behaviors on children in the future. Craig and Sprang (2007) explain that individuals who are victims of abuse as children, or who frequently witness violence towards others, are more likely to become abusive themselves. This transmission is also commonly referred to as the "cycle of violence" (Widom, 1989) and suggests that a parent's own exposure to early adverse experiences will lead to the future abuse or neglect of their own children (Thornberry, Knight, & Lovegrove, 2012).

A study by Dixon, Browne, and Hamilton-Giachritsis (2005) evaluated a group of 4,351 parents who were parents of newborns. The caregivers indicated via self-report whether or not they themselves had a history of abuse during childhood. At 13-months follow up, researchers collected information regarding the current perpetration of abuse of the parents' children from child protective reports. They found a significant relation between child abuse history and future child abuse perpetration such that 6.7% of parents who were abused went on to abuse their children as compared to 0.4% of non-abused parents. Additionally, research by Egeland, Jacobvitz, and Sroufe (1988) used retrospective reports of child abuse and neglect history with a sample of women of low-socioeconomic status. They found increased risk for abuse history such that 38% of abused women went on to abuse their children as compared to only 7% of non-abused mothers (Egeland, Jacobvitz, & Papatola, 1987).

While childhood history increases risk for maltreatment, the "cycle" theory has been questioned as most parents who were abused as children do not go on to abuse their

children (DiLillo, Perry, & Fortier, 2006; Rodriguez & Green, 2007). Belsky states, "Despite the abundance of evidence and reports linking the perpetration of child abuse and neglect with a childhood history of victimization, most scholars are all too aware of the inherent limitations of the available database" (Belsky, 1993). It is important to consider other factors that may moderate and mediate this relation. A number of risk factors for child abuse have been identified (Chalk & King, 1998). Three commonly found risk factors: parental depression, substance abuse, and interpersonal violence have been shown to influence and individual's child abuse potential. Risk factors may also be classified into four broad categories: parent or caregiver factors, family factors, child factors, and environmental factors (Goldman, Salus, Wolcott, & Kennedy, 2003), and are a substantial component of many theories of intergenerational abuse.

Theories of Intergenerational Abuse

It is apparent from the literature that a history of abuse as a child does not automatically lead to the abuse of ones own child. Several major theories have been used to explain the continuity of abuse. These major theories include Bandura's social learning theory, Bowlby's attachment theory, Belsky's ecological model, and Cicchetti and Rizley's transactional model. Each of these theories explains this relation through a unique mechanism (figure 1). Provided below is a review of these major theories in their relation to child abuse and neglect, as well as an examination of the literature related to each theory.

Social Learning Theory. Bandura's social learning theory proposes that children learn modeled behaviors through the process of observational learning (Bandura, 1977).

It posits that children learn by watching the behavior of others. Observational learning in the case of child abuse and neglect occurs when exposure to parents' inappropriate response to conflict teaches children that abusive behavior is not only appropriate, but acceptable. Bandura suggests that the child's performed behavior is often the same as the behavior they have observed (1977). For example, harsh physical punishment that has been modeled to parents translates into a primary mode of discipline used on their own children. Social learning theory explains the continuity of abuse with a single mechanism, learning. These early learning experiences and modeled parental behaviors impact later social relationships.

A study by Burton, Miller, and Shill (2001) evaluated a group of adolescent sexual offenders using a social learning perspective. They predicted that sexually victimized individuals who had sexually offended others would have closer relationships with their perpetrators and have had longer exposure to victimization. They compared both offending and non-offending individuals who had been sexually victimized, and found support for these hypotheses. This suggests a social learning model of the continuity of abuse by demonstrating that repeat exposure to negative modeled behavior results in learned abusive behavior.

Attachment Theory. Attachment theory explains the continuity of abuse by focusing on the quality of the relation between caregivers and children (Bowlby, 1969). These relations help children form mental schemas of how the world works based upon early interactions with caregivers (Hill & Safran, 1994; Main & Kaplan, 1985; Stern, 1985). These mental schemas guide their expectations about relationships. According to this theory, children who have been abused are more likely to view themselves in a

negative framework (Milner et al., 2010). This single factor theory explains the continuity of abuse in terms of relationships with others in the form of secure or insecure attachments. Attachment theory posits that children who experience abuse or neglect are likely to develop insecure and disorganized attachments, causing them to extend that same behavior to their own children (Egeland, Jacobvitz, & Sroufe, 1988; Morton & Browne, 1998). This theory suggests that early childhood adverse experiences influence later parenting behavior (Bacon & Richardson, 2001).

Several studies have demonstrated a strong relation between insecure attachment and a history of abuse and neglect (Carlson et al., 1989; Egeland & Sroufe, 1981a; Main & Goldwyn, 1984). A review of the literature by Morton and Browne (1998) provided support for this theory, finding within thirteen studies evaluating the relation between attachment and child abuse, eleven supported that children who were abused were more likely to be insecurely attached (Browne & Saqi, 1988; Carlson, Cicchetti, Barnett, & Braunwald, 1989; Crittenden, 1985, 1992; Egeland & Sroufe, 1981a, 1981b; Gaensbauer & Harmon, 1981, 1982; Lyons-Ruth, Connell, Zoll, & Stahl, 1987; Schneider-Rosen, Bruanwald, Carlson, & Cicchetti, 1985; Schneider-Rosen & Cicchetti, 1984; Ward, Kessler, & Altman, 1993).

In addition to social learning and attachment theories, ecological models have been put forth to explain the intergenerational transmission of abuse. While the aim of the present study is not to test these competing ecological models, these theories provide a framework as to why social support and financial resources have a significant impact in the relation between childhood history of abuse and future child abuse potential. These models view this transmission as a product of multiple interacting variables and systems

and use multiple moderating variables to explain this relation (Belsky, 1980; Cicchetti & Valentino, 2006; Garbarino, 1977).

Belsky's Ecological Model. One of the most commonly cited models for the etiology of child abuse is Jay Belsky's ecological model (Belsky, 1983). This model was developed out of Bronfenbrenner's 1977 theoretical framework of human development. It conceptualizes child abuse and neglect from four broad levels: the individual, familial, community, and cultural in which multiple forces combine to produce abusive behavior (figure 2). At the individual level, characteristics of the parents such as mental health and abuse history are considered. Within the familial level, factors of the family environment are conceptualized such as the health of the child and the level of marital satisfaction. The community level evaluates social structures that the family lives within such as the extended family or religious network. Lastly, the cultural level is considered with societal expectations and social norms being represented. These may include factors such as societal attitudes towards violence, and gender roles within parenting domains (Langeland & Dijkstra, 1995).

Within Belsky's model, risk and protective factors interact to produce abusive outcomes. The interaction between these four broad levels combined with risk and protective factors help to predict the likelihood of the transmission of abuse. Within the individual level, research has shown that the continuity of abuse was more often broken for individuals who also grew up with an emotionally supportive adult relationship (Hunter & Kilstrom, 1979; Egeland et al., 1988). However, individual risk factors such as mental health difficulties, age, and substance abuse may mitigate these supportive effects (CDC, 2014). A study by Jaudes, Ekwo, & Van Voorhis (1995) found that there was a

relation between drug use and child abuse such that children of parents who abused drugs and alcohol were four times more likely to be neglected and three times more likely to be abused as compared to the general population of children. The abuse of substances may impair a caregiver's judgment and protective capacity, increasing their risk for abuse perpetration (Goldman, Salus, Wolcott, & Kennedy, 2003).

At the familial level, research has shown that spousal support is a protective factor that decreases the probability of abuse transmission (Caliso & Milner, 1992; Hunter & Kilstrom, 1979; Pianta, Egeland, & Erickson, 1989). However, family risk factors such as marital conflict, domestic violence, single parenthood, and unemployment may increase a family's risk of child abuse and neglect (Goldman, Salus, Wolcott, & Kennedy, 2003). Research has demonstrated a strong link between interpersonal violence and the maltreatment of children (Appel & Golden, 1998). A study by Edelson (1999) showed that 30 to 60 percent of homes with domestic violence also fell victim to child abuse and neglect. It is likely that stress plays a large role in these concurrent forms of violence. Other family risk factors such as single parenthood and unemployment have been studied in the context of parenting stress. Research has highlighted the association between parenting stress and abusive parenting behavior, such that by measuring parental stress levels, researchers were able to discriminate between non-abusive and physically abusive parents (Rodriguez & Green, 1997). Both single parenthood and unemployment may increase a caregiver's stress, putting them at higher risk for child abuse and neglect.

Within the community level, protective factors such as being affiliated with a religious network (Kaufman & Zigler, 1987) and exposure to a positive school environment (Rutter, 1989) reduce the likelihood of the continuity of abuse. However,

community risk factors such as poverty and unemployment may increase a child's risk for abuse and neglect. The National Incidence Study of Child Abuse and Neglect (NIS-3) showed that families who made less than $15,000 per year were 22 times more likely to be impacted by child abuse and neglect (Sedlak & Broadhurst, 1996).

Lastly, research at the cultural level has shown a significant relation between authoritarian parenting styles and increased risk for the continuity of abuse (Valentino, et al., 2012). The culture in which an individual resides may significantly impact parental attitudes towards violence. Within Belsky's model individual, familial, community, and cultural factors all combine with these risk and protective factors to predict the likelihood of the continuity of abuse.

Cicchetti & Rizley's Transactional Model. Another popularly cited model is Cicchetti and Rizley's transactional model of abuse. Like Belsky's ecological model, this approach takes into account multiple factors that maintain the continuity of abuse and neglect (Cicchetti & Rizley, 1981). Within the model are four overarching factors that increase the risk for child abuse and neglect. These include vulnerability factors, protective factors, challengers, and buffers (figure 3). Vulnerability factors increase an individual's potential for risk. These may include biological, historical, psychological, cultural, or situational characteristics. Characteristics such as external locus of control, depression, anxiety, antisocial behavior, and poor impulse control are often associated with maltreating caregivers (Black, Heyman, & Smith Slep, 2001; Christensen et al., 1994, Schumacher & Smith Slep, & Heyman, 2001; Pianta, Egeland, & Erickson, 1989). Additionally, age has been shown to be a parental risk factor for child abuse and neglect. Some research has demonstrated an effect of age on abuse such that the younger a mother

is at the time she gives birth to her child, the higher the probability for abuse (Connelly & Straus, 1992).

In contrast, protective factors are those that decrease an individual's potential for risk. Cicchetti and Rizley state that these include characteristics such as high intelligence, strong social and coping skills, as well as physical attractiveness and positive temperament. Both vulnerability and protective factors are considered enduring facets of the model. In contrast to these are more transient factors. These are defined as 'challengers' and 'buffers'. Challengers are significant stressors that increase the likelihood of child abuse and neglect, for example, marital difficulties or the loss of a job. Buffers are less stable factors that protect a child from child abuse and neglect. These include conditions such as a strong support system of friends and family. According to this model, all four factors must be considered in order to understand the etiology of child abuse and neglect. When vulnerability and challengers outweigh protective factors and buffers, abuse is more likely to occur. For example, research by Felitti and colleagues (1998) evaluated the negative outcomes associated with adverse childhood experiences (ACES). They found that as the number of adverse childhood experiences increased, so did an individual's risk for negative outcomes. These negative outcomes increase substantially with the number of ACES experienced. For example, individuals with greater than four exposures had a 12.2 increase in odds ratios over those with no exposures for suicide attempts. This research highlights the impact of risk factors in predicting subsequent negative outcomes.

Families at High Risk

The previously stated risk factors form a category of individuals known as families at “high-risk.” These families are subject to one or more of the three major risk factors for child abuse and neglect including substance abuse, intimate partner violence (IPV), and parental depression (Duggan et al., 2004; Eceknrode et al., 2000; Silovsky et al., 2011). While child abuse and neglect can occur in any family, these risk factors increase the likelihood of its prevalence due to the complex nature of these issues. Silovsky and colleagues (2011) identified that high risk cases “involve imminent risk, rather than eventual risk; factors that are proximal to maltreatment rather than distal from it; and present serious intervention challenges such as substance abuse, IPV, or parental depression” (p. 8).

Giardino and colleagues (2010) highlight the following circumstances that may lead families at high risk to abuse: (a) caregiver’s angry and uncontrolled disciplinary response to a child’s actual or perceived misconduct as well as domestic abuse, (b) caregiver’s mental health impairment which causes resentment and rejection of the child and (c) caregiver’s substance misuse which disinhibits behavior. It is understandable that issues such as substance abuse, IPV, and parental depression would play an important role in the relation between history of abuse and future abuse potential. These families are subject to overwhelming amounts of stress from these issues, which as discussed previously, often leads to detrimental outcomes for children (Chan, 1994; Rodriguez & Green, 1997). Prevention programs have targeted these families in order to defend against future cases of child abuse and neglect.

Protective Factors

While stressful conditions such as parental depression, substance abuse, and IPV increase the likelihood of poor childhood outcomes, a variety of protective factors have been identified that diminish these effects. Protective factors are defined as conditions, events, or circumstances that buffer and protect individuals at high-risk from demonstrating the risk behavior, or in this case, child abuse and neglect (Durlak, 1998). These factors are essential to consider in protecting families at high risk.

A study by Crouch, Milner, and Thomsen (2001) evaluated the role of early and current support on child abuse potential for individuals who had experienced physical abuse as children. They found that children with low levels of early social support in childhood had a higher likelihood of future abuse potential. The role of early social support played a mediating role such that early perceptions of support were related to current perceived support and that together these were related to future physical abuse potential. Individuals who had higher levels of perceived social support had lower levels of child abuse potential.

Additionally, research by Litty, Kowalski, and Minor (1996) evaluated a sample of college undergraduate students and found that social support attenuated the relation between childhood physical abuse and child abuse potential such that individuals with a history of physical abuse were less likely to abuse when they had higher levels of social support. They also found that there were no significant differences amongst individuals who had been abused and those that had not been abused on abuse potential when social support was considered.

Access to family resources have also shown to have an attenuating effect on child abuse potential. Burrell, Thompson, & Sexton (1994) found a relation between child abuse potential, stress, family resources, and social support amongst mothers of children with disabilities. They evaluated resources using monthly net income as well as the Family Resource Scale (Dunst & Leet, 1988). They found a significant relation between family resources and child abuse potential; however, their study did not evaluate the role of the specific components of family resources.

In contrast to high levels of resources being considered a protective factor, research has shown that families with low levels of economic resources are at an increased risk of child abuse and neglect (Gelles, 1992; National Research Council, 1993; Pelton, 1981). Research has suggested that families living in poor urban neighborhoods are at an increased risk for child abuse and neglect, both because of the increased levels of stress that are associated with being impoverished, as well as the impact of raising a child in an area that is isolated from social communities and filled with violence (Drake & Pandey, 1996). Garabino and Kostelny (1992) suggest this may be a result of poor communities being more frequently exposed to isolation and negativity. Other theories posit that neglect may occur as a result of a parent's inability to provide adequate resources. Children may be raised in settings with crowded housing or less than adequate daycare services (Goldman, Salus, Wolcott, & Kennedy, 2003). It is also suggested that low levels of economic resources are related to increased risk of child abuse and neglect as a result of increased stress caused by low socioeconomic status. The relation between stress and child abuse and neglect has been evaluated in a variety of studies (Chan, 1994; Rodriguez & Green, 1997), though it is currently unclear if there are differences amongst

families at high risk on the impact of resource influence and the relation between history of child abuse and subsequent child abuse potential.

An additional type of family resource, educational achievement, has been shown to buffer the effects of child abuse potential for individuals with a history of child abuse. Research by Garbarino (1976) highlights the impact of educational resources on subsequent child abuse reports. In Garbarino's study, development was measured by accounting for the number of adults who had a high school diploma, as well as the percentage of 18-19 year olds who were currently enrolled in an educational system. He found that a lack of educational resources was significantly correlated with abusive behavior. It is likely that financial resources such as financial support, income, and educational resources act as a protective factor by decreasing stress, and in turn decreasing abuse potential. However, at this time it remains unclear how more specific types of resources (e.g. growth/support, health necessities, nutrition/protection, physical shelter, intrafamily support, communication/employment, childcare, and income) may influence the relation between history of child abuse and future child abuse potential.

Current Study

The current study seeks to evaluate the role of two major protective factors, family resources and social support, on the relation between childhood abuse history and child abuse potential in a sample of caregivers at significant risk for child abuse and neglect. This relation will be examined using pre-service data from a RCT of a home-based parenting program. Consistent with previous findings, it is first hypothesized that for caregivers or parents with significant risk factors (i.e., parental depression, substance

abuse, and domestic violence), history of abuse during childhood will be positively related to child abuse potential. More specifically, it is predicted that availability of resources will contribute to this relation such that higher levels of resources will decrease caregiver's child abuse potential.

There are competing theories regarding the mechanism of childhood maltreatment and parental abusive and neglectful behavior. This study will examine two major theories from the literature: Bandura's social learning theory and Bowlby's attachment theory. Each of these theories has similarities and distinctions regarding the mechanisms that underlie the impact of social and financial resources. This study will examine these competing theories to determine which mechanisms are most strongly supported for families at high risk for child abuse and neglect.

Social learning theory suggests that the mechanism underlying the continuity of violence is observational learning in which children who were abused learn to repeat abusive or neglectful modeled behavior. These early learning experiences impact later parental behavior and social relationships. Based on this theory, we predict that facets of the Family Resource Scale and Social Provisions Scale that teach healthier modeled behaviors such as 'guidance' (advice or information from others), 'social integration' (belonging to a group that shares similar values), and 'growth/support' (time for personal growth and relationships) will have a stronger impact on decreasing child abuse potential.

Attachment theory suggests that individuals who were abused in childhood become insecurely attached, causing them to have negative views of themselves, the world, and expectations regarding future relationships. Accordingly, it is hypothesized

that for individuals with a history of child abuse and neglect, protective factors that emphasize healthy relationships will play the most substantial role in buffering future child abuse potential. These include facets of the Family Resources Scale such as 'intrafamily support' which supports individuals with time to spend with their family and 'growth/support' which evaluates the amount of time an individual has for personal growth and interpersonal relationships. Additionally, components of the Social Provisions Scale such as 'attachment' (measuring the security from the emotional closeness of others), 'reassurance of worth' (a feeling of being valued by others), and 'reliable alliance' (security that others will provide reliable assistance) will be the most important protective factors for those with a history of child abuse and neglect following an attachment perspective. The hypotheses of the study are summarized below:

Hypothesis One

Caregiver self-reported history of childhood abuse and neglect will be associated with higher levels of child abuse potential and this relationship will vary based on the levels of available family resources and social supports.

Hypothesis Two

Attachment will impact the role of childhood maltreatment, such that individuals with negative influences of poor relationship development will have higher levels of child abuse potential. Consistent with attachment theory we predict that facets of the FRS and SPS that focus on healthy relationships (i.e., intrafamily support, growth/support, attachment, reassurance of worth, reliable alliance) will play a more substantial role in attenuating the risk posed by childhood history of maltreatment.

Hypothesis Three

Social learning will impact the role of childhood maltreatment, such that individuals with weaker models of parenting will have higher levels of child abuse potential. For social learning theory, we predict that facets of the Family Resource Scale and Social Provisions Scale that teach healthier modeled behavior such as guidance, social integration, and growth/support will have a stronger impact on decreasing child abuse potential.

CHAPTER III

METHODOLOGY

Participants

Participants for the study were drawn from a RCT of SafeCare (SC), a child abuse and neglect prevention program developed for parents of children who are at high risk for child abuse and neglect. SafeCare addresses three areas: 1) infant and child health 2) home safety and 3) parent-child interaction. The larger study evaluated the effectiveness of the program as a part of a randomized clinical trial from 2002-2010, however the current study examined only data collected at wave one (baseline). Individuals were included in the study if they were the current primary caregiver of at least one child between the ages of birth and five years. Participants were excluded from the study if they were currently involved in child protective services or if they had received more than two child protective service reports.

Measures

Demographics. Demographic information was collected for all participants including age, race, gender, marital status, education level, income, number of children within the home, and current work status. See Appendix A.

History of Child Abuse and Neglect. A history of child abuse and neglect was assessed from the demographic portion of the questionnaire. Participants of the study were asked if their parents ever called them bad names, hurt them, sexually abused them, or ignored their basic needs during childhood. Individuals who answered yes to any of these questions were then asked about the frequency this abuse or neglect. Participants responded on a four point likert scale with 1 representing "once or twice" to 4 representing "all the time." Each individual was then given a total score from 0 to 4 for physical abuse, emotional abuse, and neglect. History of sexual abuse was dichotomized (0 = no, 1 = yes). See Appendix B.

Child Abuse Potential. The Child Abuse Potential Inventory (CAPI) (Milner, 1986) was originally developed to differentiate abusers from non-abusers in the detection of child abuse. Responses are given on a two point Likert type scale responding either "agree" or "disagree" on 160 items. This measure contains 77 items related to child abuse potential, and three validity scales: the random response scale, the lie scale, and the inconsistency scale. The abuse scale is made up of six broad factors: distress, rigidity, unhappiness, problems with child and self, problems with family, and problems with others. A total score on the abuse scale greater than 166 is used as a significant cutoff for detecting potential child abuse. The 'distress' subscale measures parenting stress related to problems caregivers have with adjustment. The 'rigidity' scale identifies rigid attitudes and behaviors caregivers utilize towards children. The 'unhappiness' scale evaluates caregivers' difficulties with interpersonal relationships as well as their general sense of unhappiness. The 'problems with child and self' scale evaluates the extent to which caregivers describe their children and/or self negatively. 'Problems with family'

identifies difficulties caregivers have with interpersonal relationships within family interactions. Lastly, ‘problems with others’ evaluates the presence of social difficulties in broad relationships (Saddler, n.d.). The CAPI has demonstrated strong levels of internal consistency. A review conducted by Milner (1994) revealed internal consistency estimates of .92-.94 for abusive parents and .92-.95 for non-offenders. Caliso and Milner (1992) reported Cronbach’s alpha of .93 for a combined sample of both physically and non-physically abusive mothers. Additionally, research has demonstrated strong predictive validity for the relation between Child Abuse Potential Inventory scores and future child abuse perpetration (Milner, Gold, Ayoub, & Jacewitz, 1984). Cronbach’s alpha for the Child Abuse Potential Inventory was .90 for the present sample. See Appendix B.

Family Resources. The Family Resource Scale-Revised (FRS) was developed by Dunst & Leet (1987) to evaluate families with young children’s general access to important resources. The measure is comprised of eight subscales: growth/support, health necessities, nutrition/protection, physical shelter, intrafamily support, communication/employment, childcare, and income. ‘Growth and support’ evaluates the individual’s time for personal growth, interpersonal relationships, and access to finances to purchase luxury items. ‘Health necessities’ measures the individual’s access to necessities such as money for food, shelter, utilities, health, and dental care. ‘Nutrition and protection’ assesses adequacy of food and clothing. ‘Physical shelter’ evaluates an individual’s access to housing, heat, and indoor plumbing. ‘Intrafamily support’ measures the amount of time an individual has to spend with their children and family. ‘Communication and employment’ looks at access to dependable transportation and a

telephone. The ‘childcare’ subscale evaluates access to childcare arrangements as well as equipment. Lastly, the ‘income’ scale measures parents’ access to financial resources. The FRS has 30 items on a five-point Likert type scale with 1 representing “not at all adequate” to 5 “almost always adequate.” For example, participants were asked to rate the adequacy of their access to medical care for themselves as well as their family. The FRS has demonstrated strong internal consistency with a reported Cronbach’s alpha coefficient of .92 (Dunst & Leet, 1987). Additionally, a study by Van Horn, Bellis, and Snyder (2001) found internal validity estimates of .84 in a sample of families with low-income. Cronbach’s alpha for the Family Resources Scale was .91 for the present sample. See Appendix B.

Social Support. Social support was assessed using the 12-item Social Provisions Scale (SPS) (Cutrona & Russell, 1987). The self-report scale was originally developed to assess the provisions of social relationships by reviewing current relationships with friends, family members, coworkers and community members. The scale consists of six broad factors: attachment, social integration, reassurance of worth, reliable alliance, guidance, and opportunity for nurturance. The ‘attachment’ scale measures the level of emotional closeness individuals feel towards others in which they can find a sense of security. ‘Social integration’ evaluates if the individual is plugged into a group that shares their unique interests, concerns, and recreational activities. ‘Reassurance of worth’ measures if an individual has people who recognize their value, skills, and competence. ‘Reliable alliance’ looks to see if the individual has others that they can count on for help. ‘Guidance’ refers to whether or not the individual has people they can turn to for advice or information. Lastly, ‘opportunity for nurturance’ measures to what extent the

individual has the feeling that there are others that rely on them for their own well-being. Participants indicated how much they agreed with statements on a four-point Likert scale on items such as “there are people I can depend on if I really need it.” Higher scores on the SPS represent higher levels of social support. The SPS has demonstrated strong levels of internal consistency. Additionally, the SPS has been tested in a variety of settings including those with adolescent mothers, classroom teachers, and the elderly (Cutrona, Hessling, Bacon, & Russell, 1998; Russell, Altmier, Van Velzen, 1987; Schmitz, Russell, & Cutrona, 1997). Cronbach’s alpha for the Social Provisions Scale was .81 for the present sample. See Appendix B.

Attachment. The influence of having current positive relationship resources (i.e., attachment) was assessed using a combination of items from the SPS and FRS. Items were conceptually selected based upon their theoretical alignment with Bowlby’s attachment theory. More specifically, items focusing on healthy relationships (i.e., intrafamily support, growth/support, attachment, reassurance of worth, reliable alliance) were included in the scale. Cronbach’s alpha for the attachment scale was .88 for the present sample. See Appendix B.

Social Learning. The influence of poor models of parenting (i.e., social learning) was also assessed using a combination of items from the SPS and FRS. Items were conceptually selected based upon their theoretical alignment with Bandura’s social learning theory. More specifically, items focusing on healthier modeled behavior such as guidance, social integration, and growth/support were included in the scale. Cronbach’s alpha for the social learning scale was .89 for the present sample. See Appendix B.

Procedures

Approval from the Institutional Review Board and a certificate of confidentiality were obtained prior to data collection. Independent data collectors met with the participants are reviewed the study for informed consent. For those who consented, data were collected from the caregivers in the home by independent research assistants by using audio-assisted computerized interviews. Participants received a $50 gift certificate to reimburse them for their time.

Analyses were limited to females in the sample. Race was dummy-coded in the regression analyses (0, 1: reference = Caucasian/white). The regression models' adjusted for missing data under the assumption that the data were missing at random (Rubin, 1976). Eighty-six of the five hundred and forty-eight female participants had missing values for at least one item on the FRS, SPS, or CAPI at wave one and were omitted from the regression analyses.

CHAPTER IV

RESULTS

Descriptive Statistics

Characteristics of the study participants are summarized in Table 1. Participants consisted of 548 females with ages ranging from 16-64 (M = 25.05, SD = 6.38). The largest proportion of the sample was made up of Caucasians (40.1%) followed by African Americans (38.5%). The majority of participants had never been married (50.5%) and one hundred and eighty three participants reported earning an average income of less than $300 per month (33.4%). Three hundred and seventy two participants reported that their highest level of education received was a high school diploma, GED, or lower equivalent (68.0%).

Hypothesis 1A

A hierarchical multiple regression was conducted to examine whether a childhood history of abuse or neglect among caregivers was associated with higher levels of child abuse potential. The demographic variables race, age, income, and marital status were entered in step one of the regression to control for potential confounds. Participants' histories of child maltreatment (physical, emotional, sexual, and neglect) were then entered into a second step. Results of the regression analyses are summarized in Table 2. The analyses revealed that a history of child maltreatment contributed significantly to the

regression model, F (12, 458) = 10.26, $p < .001$ and accounted for 21.2% of the total variance in subsequent CAP. These findings provide support for the hypothesis that a history of child maltreatment is positively associated with future child abuse potential.

Hypothesis 1B

Two additional hierarchical multiple regression analyses were conducted to determine whether levels of family resources and social supports contributed to the relation between a history of caregiver childhood abuse or neglect and child abuse potential. Results of these analyses can be found in Table 3 and Table 4.

First, a four step multiple regression was conducted with CAP as the outcome variable to test the role of family resources in this relation. Demographic variables were entered into step one, participants total scores on the FRS were entered into step two, child abuse and neglect variables were entered independently into step three, and the interaction between each type of maltreatment and family resources were entered into step four. Results from step one indicated that the demographic variables did not contribute significantly on their own to the overall model, F (8, 461) = 1.81, $p = .074$. In contrast, results from model two revealed that family resources (b = -2.13, SEb = .19, β = -.458, $p < .001$) contributed significantly to the regression model, F (1, 460) = 122.06, $p < .001$ and accounted for 23.4% of the overall variance in CAP. Model three showed that the childhood history of maltreatment variables: physical abuse (b = -1.79, SEb = 5.24, β = -.019, $p = .341$), emotional abuse (b = 18.79, SEb = 4.58, β = .237, $p < .001$), sexual abuse (b = 38.32, SEb = 9.17, β = .173, $p < .001$), and neglect (b = 5.69, SEb = 4.52, β = .058, $p = .209$) explained an additional 11.3% of variation in subsequent CAP and this

change in R^2 was significant F (4, 456) = 19.72, $p < .001$. Model three explained 34.7% of the total variance in CAP. Finally, model four accounted for the interaction between history of child maltreatment and family resources. This addition did not significantly improve the model F (4, 452) = 0.95, $p = .432$, with model four explaining 35.2% of the total variation in CAP. Thus, model three best fit the overall data, and while family resources were a significant predictor of CAP, the interactions of the variables were not significant.

Next, a similar four step multiple regression was conducted to test the effect of social provisions on CAP. Demographic variables were entered into step one, participants total scores on the SPS were entered into step two, child abuse and neglect variables were entered independently into step three, and the interaction between each type of maltreatment and social provisions were entered in step four. Results from model one indicated that the demographic variables did not contribute significantly on their own to the overall model, F (8, 462) = 1.84, $p = .068$. Results from model two revealed that social provisions (b = -9.20, SEb = 0.80, β = -.476, $p < .001$) contributed significantly to the regression model, F (1, 461) = 131.19, $p < .001$ and accounted for 24.6% of the overall variance in CAP. Model three demonstrated that a history of childhood maltreatment: physical abuse (b = -5.00, SEb = 5.16, β = -.053, $p = .334$), emotional abuse (b = 18.83, SEb = 4.52, β = .237, $p < .001$), sexual abuse (b = 48.74, SEb = 9.02, β = .220, $p < .001$), and neglect (b = 4.28, SEb = 4.47, β = .043, $p = .339$) explained an additional 11.9% of variation in subsequent CAP and this change in R^2 was significant F (4, 457) = 21.42, $p < .001$. Model three explained 36.5% of the total variance in CAP. Finally, model four accounted for the interaction between history of child maltreatment

and social provisions. This addition did not significantly improve the model F (4, 453) = 0.53, p = .715, with model four explaining 36.8% of the total variation in CAP. Thus, model three best fit the overall data, and while social provisions were a significant predictor of CAP, the interaction of the variables were not significant.

Hypothesis 2

Hypotheses two and three sought to examine the influence of poor relationship development (i.e., attachment) and poor models of parenting (i.e., social learning) to determine which mechanisms are most strongly influence the continuity of abuse. For hypothesis two, it was predicted that attachment would impact the role of childhood maltreatment, such that individuals with negative influences of poor relationship development would have higher levels of child abuse potential. More specifically, for attachment theory we predicted that facets of the FRS and SPS that focused on healthy relationships would play a more substantial role (i.e., intrafamily support, growth/support, attachment, reassurance of worth, reliable alliance) than either FRS or SPS alone.

Again, a four step multiple regression analysis was conducted with CAP as the outcome variable to test the role of attachment in this relation. Results of these analyses can be found in Table 5. Demographic variables were entered into step one, participants total scores for attachment were entered into step two, child abuse and neglect variables were entered independently into step three, and the interaction between each type of maltreatment and attachment were entered in step four. Results from model one indicated that the demographic variables did not contribute significantly on their own to the overall

model, F (8, 454) = 1.59, p = .127. Results from model two revealed that support assessed with attachment (b = -7.07, SEb = 0.43, β = -.620, $p < .001$) contributed significantly to the regression model, F (1, 453) = 277.02, $p < .001$ and accounted for 39.6% of the overall variance in CAP. Introducing history of physical abuse (b = 0.99, SEb = 4.93, β = .011, p = .841), emotional abuse (b = 12.53, SEb = 4.34, β = .158, p = .004), sexual abuse (b = 34.22, SEb = 8.38, β = .155, $p < .001$), and neglect (b = 2.06, SEb = 4.14, β = .021, p = .619) explained an additional 6.4% of variation in subsequent CAP and this change in R^2 was significant F (4, 449) = 13.35, $p < .001$. Model three explained 46.0% of the total variance in CAP. Finally, model four accounted for the interaction terms between history of child maltreatment and attachment. This change in R^2 was not significant (0.2%). The additions did not significantly improve the model F (4, 445) = 0.51, p = .731, with model four explaining 46.3% of the total variation in CAP. Thus, model three best fit the overall data, and while support from attachment was a significant predictor of CAP, the interaction of these variables was not significant.

To evaluate whether attachment better predicted CAP than FRS or SPS alone, standardized beta coefficients were compared across analyses. Results of this comparison can be seen in Table 7. The standardized beta coefficients of family resources (β = -.384), social provisions (β = -.414), and attachment (β = -.542) highlighted support for hypothesis two, such that facets of the FRS and SPS that focused on healthy relationships played a more substantial role in buffering against future child abuse potential than family resources or social provisions alone.

Hypothesis 3

Similarly, hypothesis three predicted that social learning would impact the role of childhood maltreatment, such that individuals with weaker models of parenting would have higher levels of child abuse potential. Utilizing social learning theory, we predicted that facets of the Family Resource Scale and Social Provisions Scale that taught healthier modeled behavior including guidance, social integration, and growth/support would have a stronger impact on decreasing child abuse potential than FRS or SPS alone.

Again, a four step multiple regression analysis was conducted with CAP as the outcome variable to test the role of social learning theory in this relation. Results of these analyses may be found in Table 6. Demographic variables were entered into step one, participants total scores for social learning were entered into step two, child abuse and neglect variables were entered independently into step three, and the interaction between each type of maltreatment and social learning were entered in step four. Results from model one indicated that the demographic variables did not contribute significantly on their own to the overall model, F (8, 460) = 1.76, p = .083. Results from model two revealed that social learning (b = -7.44, SEb = .466, β = -.602, p < .001) contributed significantly to the regression model, F (1, 459) = 255.33, p < .001 and accounted for 37.6% of the overall variance in CAP. Introducing history of physical abuse (b = -2.78, SEb = 4.86, β = -.030, p = .568), emotional abuse (b = 14.32, SEb = 4.32, β = .180, p = .001), sexual abuse (b = 32.57, SEb = 8.51, β = .147, p < .001), and neglect (b = 5.02, SEb = 4.18, β = .051, p = .230) explained an additional 6.5% of variation in subsequent CAP and this change in R^2 was significant F (4, 455) = 13.23, p < .001. Model three explained 44.1% of the total variance in CAP. Finally, model four accounted for the interaction terms between history of child maltreatment and social learning. This addition

did not significantly improve the model F (4, 451) = 0.47, p = .759, with model four explaining 44.4% of the total variation in CAP. Thus, model three best fit the overall data, and while social learning was a significant predictor of CAP, the interactions of these variables were not significant.

To evaluate whether social learning better predicted CAP than FRS or SPS alone, standardized beta coefficients were compared across analyses. Results of this comparison can be seen in Table 7. The standardized beta coefficients of family resources (β = -.384), social provisions (β = -.414), and social learning (β = -.517) support hypothesis three that facets of the FRS and SPS that focused on healthier modeled behavior would play a more substantial role in buffering future child abuse potential than FRS or SPS alone. A comparison of the four models with 95% confidence intervals can be found in figure 4.

CHAPTER V

DISCUSSION

The present study evaluated the role of two major protective factors, family resources and social support, on the relation between childhood abuse history and child abuse potential in a sample of caregivers at significant risk for child abuse and neglect. The study aimed to examine the impact of supports designed to address attachment and social learning on subsequent abuse perpetration. More specifically, the influence or poor relationship development (i.e., attachment) and poor models of parenting (i.e., social learning) were evaluated to determine which mechanisms most strongly influence a history of childhood abuse and neglect. It was hypothesized that for caregivers or parents with significant risk factors (i.e., parental depression, substance abuse, and domestic violence), childhood history of maltreatment would be positively related to child abuse potential. Consistent with previous research (Dixon, Browne, and Hamilton-Giachritsis, 2005) our results supported this hypothesis, such that individuals with a history of childhood maltreatment demonstrated significantly higher CAPI scores than those without a maltreatment history while controlling for demographic variables. Our model accounted for 21.2% of the total variance in subsequent child abuse potential. This

provides partial support for the theory of intergenerational continuity of abuse; however, these results suggest that several other factors play a substantial role in this relation. These findings do not consider the role of abuse type. Hypotheses two and three further examined these influences.

Subsequently, it was predicted that availability of resources would contribute to the child abuse and neglect/child abuse potential relation such that higher levels of resources would decrease caregiver's child abuse potential. More specifically family resources as measured by the FRS were evaluated. We found that family resources significantly influenced this relation, with our model accounting for 34.7% of the total variance in subsequent child abuse potential. As individuals levels of family resources increased, their potential for future abuse decreased. These results are consistent with research by Burrell, Thompson, & Sexton (1994) who found that access to family resources had an attenuating effect on child abuse potential for families with children with disabilities. It is possible that access to family resources decreases parental stress. Further, this decrease in stress has been shown to reduce the incidence of abusive and neglectful behavior (Chan, 1994; Rodriguez & Green, 1997).

Additionally, it was hypothesized that social support would contribute to the relation between child abuse history and child abuse potential. Our results supported this hypothesis, demonstrating that our overall model accounted for 36.5% of the total variance in CAPI scores after controlling for demographic variables. As individuals' levels of social supports increased, their potential for future abuse decreased. Our findings are consistent with previous research that has found that social support is an important factor in reducing the risks associated with a history of child abuse and neglect

(Crouch, Milner, and Thomsen 2001; Litty, Kowalski, and Minor 1996). Interestingly however, the interaction effects between social provisions and type of abuse did not significantly contribute to this relation. This suggests that the contribution of social resources to the reduction of child abuse potential is independent of a relation between a history of child abuse and neglect and support.

There are competing theories regarding the mechanisms of childhood maltreatment and parental abusive and neglectful behavior. Hypotheses two and three tested two major theories from the literature: Bandura's social learning theory and Bowlby's attachment theory in their role in buffering the effects of childhood maltreatment history. Each of these theories has similarities and distinctions regarding the mechanisms that underlie the impact of social and financial resources.

Upon examining the role of these theories in the child abuse history/child abuse potential relation, we found that the having current positive relationship resources (i.e., attachment) accounted for 46.0% of the total variance in attenuating subsequent child abuse potential. Attachment theory explains the continuity of abuse by focusing on the quality of the relation between caregivers and children (Bowlby, 1969). Children who have been abused are more likely to view themselves in a negative framework (Milner et al., 2010). It suggests that children who experience abuse or neglect are likely to develop insecure and disorganized attachments, causing them to extend that same behavior to their own children (Egeland, Jacobvitz, & Sroufe, 1988; Morton & Browne, 1998). Our attachment variable was made up of factors that contributed to healthy relationships (i.e., growth, family support, attachment, reassurance of worth, and reliable alliance). Results indicated that taken together, these factors play a more substantial attenuating role on

abuse than either family resources or social support alone. However, the insignificant interaction effect between attachment and a history of child abuse and neglect suggests that this positive relationship is related to a decreased risk in all parents, not only those with a history of child maltreatment.

Lastly, we found that the influence of poor models of parenting (i.e., social learning) accounted for 44.1% of the total variance in subsequent child abuse potential. Social learning theory suggests that children learn modeled behaviors through the process of observational learning. An individual's risk for child abuse potential is increased through their learning that their parents' inappropriate response to conflict is not only appropriate, but also acceptable (Bandura, 1977). Similar to research by Burton, Miller, and Shill (2001), our results suggest that poor models of parenting play a substantial role in children's learned behavior. Factors of the FRS and SPS that teach healthier modeled behavior (i.e., guidance, social integration, and growth/support) had a stronger impact on decreasing child abuse potential amongst individuals with a history of child abuse and neglect. However, the insignificant interaction effect between resources and a history of child abuse and neglect suggests that these supports are helpful regardless of an individual's abuse history.

Interestingly, in all five regression models, a history of sexual and emotional abuse was related to child abuse potential, while a history of physical abuse and neglect was not. From an attachment perspective, the emphasis is placed on the quality of the relation between caregivers and children. It is possible that a history of emotional and sexual abuse play a more substantial role in changing children's mental schemas of how the world works. From a social learning perspective, children learn modeled behaviors by

watching the behavior of others. Due to the typical “hidden” nature of sexual and emotional abuse, it is possible that this explains why our attachment variable accounted for more variance in the regression model than social learning. These findings have implications for the way in which we approach prevention efforts for families with significant risks. Further research is needed to clarify these impacts.

A major purpose of the present study was to test these competing models against one other to demonstrate which theory could most adequately explain the mechanisms behind parental abusive and neglectful behavior. As summarized in Table 7, when comparing these four models, attachment accounted for the most variance in child abuse history/child abuse potential relation. It should be noted that both social learning (42.5%) and attachment (44.5%) accounted for substantially more variance in this relation than family resources (32.8%) or social support (34.7%) alone (figure 4).

Study Strengths

The present study highlights the importance of social support and family resources for individuals with a history of child abuse and neglect. This study is unique in its approach towards testing competing models. Our findings may be used to inform interventions for programs preventing child abuse and neglect by connecting individuals’ to resources that may buffer the impact of several high-risk factors. Moreover, our findings highlight the importance of protective factors for families with significant risks.

Study Limitations

Although the present study utilized facets of the FRS and SPS that theoretically aligned with components of attachment and social learning theories, it should be noted

that the present study was limited by the “stand in” nature of these variables to adequately represent these theories. The attachment variable was created with five factors and the social learning variable was created with three factors from the SPS and FRS. Future research that more thoroughly represents these constructs would confirm the importance of these factors in lessening the risk of effects between child abuse history and subsequent child abuse potential.

Additionally, measures were collected from participants in this study through self-report methods. Due to the sensitive nature of these topics, participants may have underreported the actual occurrence of these events.

Lastly, our findings highlight the impact of support for individuals with significant risks. It should be noted that Milner’s Child Abuse Potential Inventory is an evaluative measure of risk assessment for predicting future *physical* abuse perpetration. More specifically, the CAPI has been found to differentiate physical “abusers” and “non abusers” (Milner, 1994). Therefore, our study is limited by the inferences that can be drawn about individuals’ future neglectful, sexually abusive, and emotionally abusive behavior. While previous research has identified a relation between supports and neglectful behavior (Ethier, Couture, & Lacharite, 2004), future research should evaluate the impact of supports such as financial and social resources on outcome measures that are predictive of sexual and emotional abuse.

Clinical Implications and Future Directions

Overall, the current study builds upon existing knowledge involving the impact of resources on child abuse potential. The study is unique in that it compared competing

theories regarding the mechanism of childhood maltreatment and parental abusive and neglectful behavior. This research may be used to inform current prevention efforts, by emphasizing the important role of supports for individuals with a childhood history of abuse and neglect. More specifically, interventions that target the quality of relation between children and their caregivers are essential for families with significant risks.

Future research may evaluate more complex models such as Belsky's 1983 Ecological model and Cicchetti & Rizley's 1981 model in order to test what impact these theories may hold in comparison to single factor theories on reducing child abuse potential. Additionally, future research should evaluate the role of these supports longitudinally to determine if an increase or decrease in supports over time may impact this relation.

REFERENCES

Allen, J. P., & Land, D. (1999). Attachment in adolescence. Handbook of Attachment: Theory, Research, and Clinical Applications, 319-335.

Anda, R. F., Whitfield, C. L., Felitti, V. J., Chapman, D., Edwards, V. J., Dube, S. R., & Williamson, D. F. (2002). Adverse childhood experiences, alcoholic parents, and later risk of alcoholism and depression. Psychiatric Services, 53(8), 1001–1009.

Anda, R., Tietjen, G., Schulman, E., Felitti, V., & Croft, J. (2010). Adverse childhood experiences and frequent headaches in adults. Headache, 50(9), 1473-1481.

Anda, R. F., Brown, D. W., Dube, S. R., Bremner, J. D., Felitti, V. J., & Giles, W. H. (2008). Adverse childhood experiences and chronic obstructive pulmonary disease in adults. American Journal of Preventative Medicine, 34(5), 396-403.

Appel, A. E., & Holden, G. W. (1998). The co-occurrence of spouse and physical child abuse: A review and appraisal. Journal of Family Psychology, 12(4), 578-599.

Bacon, H., & Richardson, S. (2001). Attachment theory and child abuse: An overview of the literature for practitioners. Child Abuse Review, 10(6), 377-397.

Bandura, A. (1977). Social Learning Theory. Englewood Cliffs, NJ: Prentice Hall.

Begle, A. M., Dumas, J. E., & Hanson, R. F. (2010). Predicting child abuse potential: An empirical investigation of two theoretical frameworks. Journal of Clinical Child and Adolescent Psychology, 39(2), 208-219.

Belsky, J. (1993). Etiology of child maltreatment: A developmental-ecological analysis. Psychological Bulletin, 114, 413-434.

Berlin, L. J., Appleyard, K., & Dodge, K. A. (2011). Intergenerational continuity in child maltreatment: Mediating mechanisms and implications for prevention. Child Development, 82(1), 162-176.

Black, D. A., Heyman, R. E., & Smith Slep, A. M. (2001). Risk factors for child physical abuse. Aggression and Violent Behavior, 6, 121-188.

Bower-Russa, M. (2005). Attitudes mediate the association between childhood disciplinary history and disciplinary responses. Child Maltreatment, 10, 272-282.

Bowlby, J. (1969). Attachment and loss: Vol. 1. Attachment. Reading MA: Addison-Wesley

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. American Psychologist, 32(7), 513.

Brown, D. W., Anda, R. F., Felitti, V. J., Edwards, V. J., Malarcher, A. M., Croft, J. B., & Giles, W. H. (2010). Adverse childhood experiences and the risk of lung cancer. BMC Public Health. 10, 20.

Browne, K. D., & Saqi, S. (1988). Mother-infant interaction and attachment in physically abusing families. Journal of Reproductive and Infant Psychology, 6, 163-182.

Burrell, B., Thompson, B., & Sexton, D. (1994). Predicting child abuse potential across family types. Child Abuse and Neglect, 18(12), 1039-1049.

Burton, D. L., Miller, D. L., & Shill, C. T. (2002). A social learning theory comparison of the sexual victimization of adolescent sexual offenders and nonsexual offending male delinquents. Child Abuse and Neglect, 26(9), 893-907.

Caliso, J. A., & Milner, J. S. (1992). Childhood history of abuse and child abuse screening. Child Abuse and Neglect, 16, 647-659. Carlson, V., Cicchetti, D., Barnett, D., & Braunwald, K. (1989). Disorganized/disoriented attachment relationships in maltreated infants. Developmental Psychology, 25, 525-531.

Caspi, A., McClay, J., Moffitt, T., Mill, J., Martin, J., Craig, I. W., Taylor, A., & Poulton, R. (2002). Role of genotype in the cycle of violence in maltreated children. Science, 297, 851-854.

Centers for Disease Control and Prevention. (2014). Violence prevention: Child maltreatment. Retrieved http://www.cdc.gov/violenceprevention/childmaltreatment/index.html

Chaffin, M., & Valle, L. A. (2003). Dynamic prediction characteristics of the Child Abuse Potential Inventory. Child Abuse and Neglect, 27, 463-481.

Chaffin, M., Bonner, B. L., & Hill, R. F. (2001). Family preservation and family support programs: Child maltreatment outcomes across client risk levels and program types. Child Abuse and Neglect, 25(10), 1269-1289.

Chaffin, M., Kelleher, K., & Hollenberg, J. (1996). Onset of physical abuse and neglect: Psychiatric, substance abuse, and social risk factors from prospective community data. Child Abuse and Neglect, 20(3), 191-203.

Chalk, R., & King, R. A. (Eds.). (1998). Family violence and family violence interventions. In Violence in families: Assessing prevention and treatment programs (pp. 31-58). Washington, DC: National Academy Press.

Chan, Y. C. (1994). Parenting stress and social support of mothers who physically abuse their children in Hong Kong. Child Abuse and Neglect, 18(3), 261-269.

Chapman, D. P., Anda, R. F., Felitti, V. J., Dube, S. R., Edwards, V. J., & Whitfield, C. L. (2004). Adverse childhood experiences and the risk of depressive disorders in adulthood. Journal of Affective Disorders, 82, 217-225.

Child Abuse and Prevention Treatment Act: Reauthorization Act of 2010. (2010). In www.GovTrack.us. Retrieved April 29, 2014, from http://www.govtrack.us/congress/bills/111/s3817

Child Welfare Information Gateway, (2013). What is child abuse and neglect? Recognizing the signs and symptoms. Washington, DC: U.S. Department of Health and Human Services, Children’s Bureau.

Child Welfare Information Gateway. (2014). Protective factors approaches in child welfare. Washington, DC: U.S. Department of Health and Human Services.

Christensen, M. J., Brayden, R. M., Dietrich, M. S., McLaughlin, F. J., Sherrod, K. B., & Altemeier, W. A. (1994). The prospective assessment of self-concept in neglectful and physically abusive low-income mothers. Child Abuse and Neglect, 18(3), 225-232.

Cicchetti, D., & Lynch, M. (1993). Toward an ecological/transactional model of community violence and child maltreatment: Consequences for children's development. Psychiatry, 56, 96-118.

Cicchetti, D., & Lynch, M. (1995). Failures in the expectable environment and their impact on individual development: The case of child maltreatment. In D. Cicchetti & D. J. Cohen (Eds.), Developmental psychopathology, 2: 32–71. Oxford, England: John Wiley.

Cicchetti, D., & Rizley, R. (1981). Developmental perspectives on the etiology, intergenerational transmission, and sequelae of child maltreatment. New Directions for Child and Adolescent Development, 11, 31-55.

Cicchetti, D., & Valentino, K. (2006). An ecological transactional perspective on child maltreatment: Failure of the average expectable environment and its influence upon child development. In D. Cicchetti & D. J. Cohen (Eds.), Developmental psychopathology, 3: 129-201. New York: Wiley.

Cohen, P., Brown, J., & Smailes, E. (2001). Child abuse and neglect and the development of mental disorders in the general population. Development and Psychopathology, 13, 981-999.

Connelly, C. D., & Straus, M. A. (1992). Mother's age and risk for physical abuse. Child Abuse and Neglect 16(5), 709-718.

Coohey, C., & Braun, N. (1997). Toward an integrated framework for understanding child physical abuse. Child Abuse and Neglect, 21(11), 1081-1094.

Craig, C. D., & Sprang, G. (2007). Trauma exposure and child abuse potential: Investigating the cycle of violence. American Journal of Orthopsychiatry, 77(2), 296-305.

Crittenden, P. (1985). Maltreated infants: Vulnerability and resilience. Journal of Child Psychiatry and Psychology, 26, 85-96.

Crittenden, P. (1992). Children’s strategies for coping with adverse home environments: An interpretation using attachment theory. Child Abuse and Neglect, 16, 329-343.

Crouch, J. L., Milner, J. S., & Thomsen, C. (2001). Childhood physical abuse, early social support, and risk for maltreatment: Current social support as a mediator of risk for child physical abuse. Child Abuse and Neglect, 25(1), 93-107.

Cutrona, C. E., Hessling, R. M., Bacon, P. L., & Russell, D. W. (1998). Predictors and correlates of continuing involvement with the baby’s father among adolescent mothers. Journal of Family Psychology, 12, 369-387.

Cycle of Abuse. (2012). Retrieved from U.S. Department of Health and Human Services: Child Welfare Information Gateway website: https://www.childwelfare.gov/can/impact/ longterm/abuse.cfm

DiLalla, L. F., & Gottesman, I. I. (1991). Biological and genetic contributors to violence: Widom's untold tale. Psychological Bulletin, 109, 125-129.

DiLillo, D., Perry, A. R., & Fortier, M. (2006). Child physical abuse and neglect. In R. T. Ammerman (Ed.), Comprehensive handbook of personality and psychopathology (3rd ed., Vol. 3, pp. 367–387). Hoboken, NJ: John Wiley & Sons.

Dixon, L., Browne, K., & Hamilton-Giachritsis, C. (2005). Risk factors of parents abused as children: A mediational analysis of the intergenerational continuity of child maltreatment (Part I). Journal of Child Psychology and Psychiatry, 46(1), 47-57.

Dong, M., Anda, R. F., Dube, S. R., Felitti, V. J., & Giles, W. H. (2003). Adverse childhood experiences and self-reported liver disease: New insights into a causal pathway. Archives of Internal Medicine, 163, 1949-1956.

Dong, M., Giles, W. H., Felitti, V. J., Dube, S. R., Williams, J. E., Chapman, D. P., & Anda, R. F. (2004). Insights into causal pathways for ischemic heart disease adverse childhood experiences study. Circulation, 110(13), 1761-1766.

Drake, B., & Pandey, S. (1996). Understanding the relationship between neighborhood poverty and specific types of child maltreatment. Child Abuse and Neglect, 20(11), 1003-1018.

Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D., Williamson, D. F., & Giles, W. H. (2001). Childhood abuse, household dysfunction and the risk of attempted suicide throughout the life span: Findings from Adverse Childhood Experiences Study. Journal of the American Medical Association, 286, 3089-3096.

Dube, S. R., Anda, R. F., Felitti, V. J., Edwards, V. J., & Croft, J. B. (2002). Adverse Childhood Experiences and personal alcohol abuse as an adult. Addictive Behaviors, 27(5): 713-725.

Dube, S. R., Fairweather, D., Pearson, W. S., Felitti, V. J., Anda, R. F., & Croft, J. B. (2009). Cumulative childhood stress and autoimmune disease. Psychosomatic Medicine, 71, 243-250.

Dube, S. R., Felitti, V. J., Dong, M., Chapman, D. P., Giles, W. H., & Anda, R. F. (2003). Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: The Adverse Childhood Experience Study. Pediatrics, 111(3), 564-572.

Duggan, A. K., McFarlane, E. C., Windham, A. M., Rohde, C. A., Salkever, D. S., Fuddy, L. R., & Calvin, C. J. (1999). Evaluation of Hawaii's healthy start program. The Future of Children, 9, 66-90.

Dunst, C. J., & Leet, H. E. (1987). Measuring the adequacy of resources in households with young children. Child: Care, Health, and Development, 13(2), 111-125.

Durlak, J. A. (1998). Common risk and protective factors in successful prevention programs. American Journal of Orthopsychiatry, 68(4), 512.

Eckenrode, J., Ganzel, B., Henderson Jr, C. R., Smith, E., Olds, D. L., Powers, J., & Sidora, K. (2000). Preventing child abuse and neglect with a program of nurse home visitation: The limiting effects of domestic violence. Journal of the American Medical Association, 284(11), 1385-1391.

Edelson, J. L. (1999). The overlap between child maltreatment and woman battering. Violence Against Women, 5(2), 134-154.

Edwards, V. J., Anda, R. F., Dube, S. R., Dong, M, Chapman, D. F., Felitti, V. J. The wide-ranging health consequences of adverse childhood experiences. In Kathleen Kendall-Tackett and Sarah Giacomoni (eds.) Victimization of Children and Youth: Patterns of Abuse, Response Strategies, Kingston, NJ: Civic Research Institute; 2005.

Egeland, B., & Sroufe, A. (1981a). Developmental sequelae of maltreatment in infancy. New Directions for Child Development, 11, 77-92.

Egeland, B., & Sroufe, A. (1981b). Attachment and early maltreatment. Child Development, 52, 44–52.

Egeland, B., Jacobvitz, D., & Papatola, K. (1987). Intergenerational continuity of abuse. Child Abuse and Neglect: Biosocial Dimensions, 255-276.

Egeland, B., Jacobvitz, D., & Sroufe, L. A. (1988). Breaking the cycle of abuse. Child Development, 59, 1080-1088.

Ertem, I. O., Leventhal, J. M., & Dobbs, S. (2000). Intergenerational continuity of child physical abuse: How good is the evidence? The Lancet, 356(9232), 814-819.

Ethier, L. S., Couture, G., & Lacharité, C. (2004). Risk factors associated with the chronicity of high potential for child abuse and neglect. Journal of Family Violence, 19(1), 13-24.

Fang, X., Brown, D. S., Florence, C., & Mercy, J. (2012). The economic burden of child maltreatment in the United States and implications for prevention. Child Abuse and Neglect, 36(2), 156-165.

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study. American Journal of Preventive Medicine, 14, 245-258.

Fergusson, D. M., Boden, J. M., Horwood, L. J. (2008). Exposure to childhood sexual and physical abuse and adjustment in early adulthood. Child Abuse and Neglect, 32, 607-619.

Gaensbauer, T. J., & Harmon, R. J. (1981). Clinical assessment in infancy utilizing structured playroom situations. Journal of the American Academy of Child Psychiatry, 20, 264-280.

Gaensbauer, T. J., & Harmon, R. J. (1982). Attachment behavior in abused/neglected and premature infants. In R. N. Emde, & R. J. Harmon (Eds.), The Development of Attachment and Affiliative Systems (pp. 263–279). New York: Plenum Press.

Garabino, J., & Kostelny, K. (1992). Child maltreatment as a community problem. Child Abuse and Neglect, 16, 455-464.

Garbarino, J. (1976). A preliminary study of some ecological correlates of child abuse: The impact of socioeconomic stress on mothers. Child Development, 178-185.

Garbarino, J. (1977). The human ecology of child maltreatment: A conceptual model for research. Journal of Marriage and Family, 39, 721-735.

Gaudin, J. M. (1993). Child Neglect: A Guide for Intervention. Retrieved from Child Welfare Information Gateway website: https://www.childwelfare.gov/pubs/usermanuals/ neglect/neglectb.cfm

Gelles, R. J. (1992). Poverty and violence towards children. American Behavioral Scientist, 35, 258-274.

Giardino, A., Giardino, E., & Moles, R. (2014). Physical Child Abuse. Retrieved from Medscape website: http://emedicine.medscape.com/article/915664-overview#showall

Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009). Burden and consequences of child maltreatment in high-income countries. The Lancet, 373(9657), 68-81.

Goldman, J., Salus, M. K., Wolcott, D., & Kennedy, K. Y. (2003). A Coordinated Response to Child Abuse and Neglect: The Foundation for Practice. Retrieved from Office on Child Abuse and Neglect: Children's Bureau website: https://www.childwelfare.gov/pubs/ usermanuals/foundation/foundatione.cfm

Hall, L. A., Sachs, B., & Rayens, M. K. (1998). Mothers' potential for child abuse: The roles of childhood abuse and social resources. Nursing Research, 47 (2), 87-95.

Hecht, D. B., Silovsky, J. F., Chaffin, M., & Lutzker, J. R. (2008). SafeCare: An evidence-based approach to prevent child neglect. The APSAC Advisor, 20(1), 14-17.

Hill, C. R., & Safran, J. D. (1994). Assessing interpersonal schemas: Anticipated responses of significant others. Journal of Social and Clinical Psychology, 13, 366–632.

Hunter, R. S., & Kilstrom, N. (1979). Breaking the cycle in abusive families. The American Journal of Psychiatry, 136, 1320-1322.

Jaudes, P. K., Ekwo, E., & Van Voorhis, J. (1995). Association of drug abuse and child abuse. Child Abuse and Neglect, 19(9), 1065-1075.

Kaufman, J., & Zigler, E. (1987). Do abused children become abusive parents? American Journal of Orthopsychiatry, 57, 186-197.

Kunitz, S. J., Levy, J. E., McCloskey, J., & Gabriel, K. R. (1998). Alcohol dependence and domestic violence as sequellae of abuse and conduct disorder in childhood. Child Abuse and Neglect, 22, 1079-1091.

Kwako, L. E., Noll, J. G., Putnam, F. W., & Trickett, P. K. (2010). Childhood sexual abuse and attachment: An intergenerational perspective. Clinical Child Psychology and Psychiatry, 15(3), 407-422.

Langeland, W., & Dijkstra, S. (1995). Breaking the intergenerational transmission of child abuse: Beyond the mother-child relationship. Child Abuse Review, 4(1), 4-13.

Lansford, J. E., Dodge, K. A., Pettit, G. S., Bates, J. E., Crozier, J., Kaplow, J. (2002). A 12-year prospective study of the long-term effects of early child physical maltreatment on psychological, behavioral, and academic problems in adolescence. Pediatric Adolescent Medicine, 156, 824-830.

Lansford, J. E., Miller-Johnson, S., Berlin, L. J., Dodge, K. A., Bates, J. E., & Pettit, G. S. (2007). Early physical abuse and later violent delinquency: A prospective longitudinal study. Child Maltreatment, 12(3), 233-245.

Laulik, S., Allam, J., & Browne, K. (2013). The use of the Child Abuse Potential Inventory in the assessment of parents involved in care proceedings. Child Abuse Review.

Litty, C. G., Kowalski, R., & Minor, S. (1996). Moderating effects of physical abuse and perceived social support on the potential to abuse. Child Abuse and Neglect, 20(4), 305-314.

Lyons-Ruth, K., Connell, D. B., Zoll, D., & Stahl, J. (1987). Infants at social risk: Relations among infant maltreatment, maternal behavior, and infant attachment behavior. Developmental Psychology, 23, 223-232.

Main, M, & Goldwyn, R. (1984). Predicting rejection of her infant from mother's representation of her own experience: Implications for the abused-abuser

intergenerational cycle. International Journal of Child Abuse and Neglect, 8, 203-217.

Main, M., & Kaplan, N. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton, & E. Waters (Eds.), Monographs of the Society for Research in Child Development, 50, 66-104.

Melnick, B., & Hurley, J .R. (1969). Distinctive personality attributes of child-abusing mothers. Journal of Consulting and Clinical Psychology, 33(6), 746-749.

Milner, J. S. (1986). The Child Abuse Potential Inventory: Manual (2nd ed.). Webster, NC: Psytec Corporation. Milner, J. S. (1989). Additional cross-validation of the Child Abuse Potential Inventory. Psychological Assessment: A Journal of Consulting and Clinical Psychology, 1(3), 219.

Milner, J. S. (1994). Assessing physical child abuse risk: The Child Abuse Potential Inventory. Clinical Psychology Review, 14(6), 547-583.

Milner, J. S., & Crouch, J. L. (2012). Psychometric characteristics of translated versions of the Child Abuse Potential Inventory. Psychology of Violence, 2(3), 239.

Milner, J. S., de Paul, J., Mugica, P. Arruabarrena, M. I., & Crouch, J. (1994, July) Childhood history of abuse, childhood social support, and adult child abuse potential in Spain. Paper presented at the meeting of the International Congress of Applied Psychology, Madrid Spain.

Milner, J. S., Robertson, K. R., & Rogers, D. L. (1990). Childhood history of abuse and adult child abuse potential. Journal of Family Violence, 5(1), 15-34.

Milner, J. S., Thomsen, C. J., Crouch, J. L., Rabenhorst, M. M., Martens, P. M., Dyslin, C. W., & Merrill, L. L. (2010). Do trauma symptoms mediate the relationship between childhood physical abuse and adult child abuse risk? Child abuse and neglect, 34(5), 332-344.

Milner, J., Gold, R., Ayoub, C., & Jacewitz, M. (1984). Predictive validity of the Child Abuse Potential Inventory. Journal of Consulting and Clinical Psychology, 52, 879-884.

Morton, N., & Browne, K. D. (1998). Theory and observation of attachment and its relation to child maltreatment: A review. Child Abuse and Neglect, 22, 1093-1104.

National Research Council (1993). Understanding child abuse and neglect. Washington, DC: National Academy Press.

Network on Child Protection and Well Being. (2013). Retrieved from Pennsylvania State Social Science Research Institute website: http://protectchildren.psu.edu/content/january-8-2014

Noll, J. G., Zeller, M. H., Trickett, P. K., Putnam, F. W. (2007). Obesity risk for female victims of childhood sexual abuse: A prospective study. Pediatrics, 120, 361-367.

Oliver, J. E. (1985). Successive generations of child maltreatment: Social and medical disorders in the parents. British Journal of Psychiatry, 147, 484-490.

Pelton, L. (1981). The social context of child abuse and neglect. New York: Human Sciences Press.

Pianta, R., Egeland, B., & Erickson, M. F. (1989). The antecedents of maltreatment: Results of the mother-child interaction research project. Child Maltreatment: Theory and research on the causes and consequences of child abuse and neglect, 203-253.

Polansky, N. A., Hally, C., & Polansky, N. F. (1975). Profile of Neglect. US Government Printing Office.

Rodriguez, C. M., & Green, A. J. (1997). Parenting stress and anger expression as predictors of child abuse potential. Child Abuse and Neglect, 21(4), 367-377.

Runyan, D., Wattam, C., Ikeda, R., Hassan, F., & Ramiro, L. (2002). Child abuse and neglect by parents and caregivers. In: Krug E., Dahlberg L. L., Mercy J. A., Zwi A. B., Lozano R., editors. World report on violence and health. Geneva, Switzerland: World Health Organization, 59-86.

Russell, D., Altmaier, E., & Van Velzen, D. (1987). Job-related stress, social support, and burnout among classroom teachers. Journal of Applied Psychology, 72, 269-274.

Rutter, M. (1989). Intergenerational continuities and discontinuities in serious parenting difficulties. Child Maltreatment: Theory and research on the causes and consequences of child abuse and neglect, 317.

Saddler, M. R. (n.d.). Measures. Retrieved from Illinois Department of Humans Service website: http://www.dhs.state.il.us/page.aspx?item=36653

Schmitz, M., Russell, D. W., & Cutrona, C. E. (1997). Perceived social support and social network influences on physician utilization among the elderly. In J. J. Kronenfeld (Ed.), Research in the sociology of health care 14, 249-272. Greenwich, CT: JAI Press.

Schneider-Rosen, K., Braunwald, K. G., Carlson, V., & Cicchetti, D. (1985). Current perspectives in attachment theory: Illustration from the study of maltreated infants. In I. Bretherton, & E. Waters (Eds.), Growing points of attachment theory and research. Monographs of the Society for Research in Child Development, 50 (1–2, Serial No. 209 pp. 195–210). US Government Monograph.

Schneider-Rosen, K., & Cicchetti, D. (1984). The relationship between affect and cognition in maltreated infants: Quality of attachment and the development of visual self-recognition. Child Development, 648-658.

Schumacher, J., Smith Slep, A. M., & Heyman, R. E. (2001). Risk factors for child neglect. Aggression and Violent Behavior, 6, 231-254.

Sedlak, A. J., & Broadhurst, D. D. (1996). The national incidence study of child abuse and neglect. Washington DC. US Department of Health and Human Services.

Semidei, J., Radel, L. F., & Nolan, C. (2001). Substance abuse and child welfare: Clear linkages and promising responses. Child Welfare, 80(2).

Silovsky, J. F., Bard, D., Chaffin, M., Hecht, D., Burris, L., Owora, A., & Lutzker, J. (2011). Prevention of child maltreatment in high-risk rural families: A

randomized clinical trial with child welfare outcomes. Children and Youth Services Review, 33(8), 1435-1444.

Stern, D. N. (1985). The interpersonal world of the infant. New York: Basic Books.

Sullivan, P. M., & Knutson, J. F. (2000). Maltreatment and disabilities: A population-based epidemiological study. Child Abuse and Neglect, 24(10), 1257-1273.

Thornberry, T. P., & Henry, K. L. (2013). Intergenerational continuity in maltreatment. Journal of Abnormal Child Psychology, 41(4), 555-569.

Thornberry, T. P., Ireland, T. O., Smith, C. A. (2001). The importance of timing: The varying impact of childhood and adolescent maltreatment on multiple problem outcomes. Developmental Psychopathology, 13, 957-979.

Thornberry, T. P., Knight, K. E., & Lovegrove, P. J. (2012). Does maltreatment beget maltreatment? A systematic review of the intergenerational literature. Trauma, Violence, and Abuse, 13(3), 135-152.

Trickett, P. K., & McBride-Chang, C. (1995). The developmental impact of different forms of child abuse and neglect. Developmental Review, 15(3), 311-337.

U.S. Department of Health and Human Services. Administration on Children, Youth, and Families (ACF). Child Maltreatment 2011 [online]. Washington (DC): Government Printing Office; 2012.

U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau.

(2012). Child Maltreatment. Available from http://www.acf.hhs.gov/ programs/cb/research-data-technology/statistics-research/child-maltreatment

Valentino, K., Nuttall, A. K., Comas, M., Borkowski, J. G., & Akai, C. E. (2012). Intergenerational continuity of child abuse among adolescent mothers authoritarian parenting, community violence, and race. Child Maltreatment, 17(2), 172-181.

Van Horn, M. L., Bellis, J. M., & Snyder, S. W. (2001). Family Resource Scale-Revised: Psychometrics and validation of a measure of family resources in a sample of low-income families. Journal of Psychoeducational Assessment, 19(1), 54-68.

Ward, M. J., Kessler, D. B., & Altman, S. C. (1993). Infant-mother attachment in children with failure to thrive. Infant Mental Health Journal, 14, 208-220.

Westat, Inc. (1993). A report on the maltreatment of children with disabilities. Washington, DC: National Center on Child Abuse and Neglect.

Whitfield, C. L., Dube, S. R., Felitti, V. J., & Anda, R. F. (2005). Adverse childhood experiences and hallucinations. Child Abuse and Neglect, 29(7), 797-810.

Widom, C. S. (1989). Does violence beget violence? A critical examination of the literature. Psychological Bulletin, 106(1), 3.

Widom, C. S., DuMont, K., & Czaja, S. J. (2007). A prospective investigation of major depressive disorder and comorbidity in abused and neglected children grown up. Archives of General Psychiatry, 64, 49-56.

Williamson, D. F., Thompson, T. J., Anda, R. F., Dietz, W. H., & Felitti V. J. (2002). Body weight, weight, obesity, and self-reported abuse in childhood. International Journal of Obesity, 26, 1075-1082.

Wolfe, D. A. (1987). Child abuse: Implications/or child development and psychopathology. Newbury Park, CA: Sage.

APPENDICES

Appendix A

TABLES

Table 1. *Demographic characteristics of participants*

	N	M	SD	Range
Age	548	25.05	6.38	16-64
Ethnicity				
Hispanic or Latino	70	12.8%		
American Indian or Alaska Native	55	10.0%		
Asian	2	0.4%		
Native Hawaiian or Other Pacific Islander	6	1.1%		
Black or African American	211	38.5%		
White or Caucasian	220	40.1%		
Education				
Less than 9th grade - G.E.D or High School Diploma	372	68.0%		
Some College	112	20.4%		
Vo-Tech	37	6.8%		
Associates Degree	13	2.4%		
Bachelors Degree	10	1.8%		
Income				
Less than $300	183	33.4%		
$300-$599	115	21.0%		
$600-$1249	139	25.4%		
$1250-$2099	56	10.2%		
$2100-$3349	21	3.8%		
More than $3350	20	3.6%		
Marital Status				
Never Married	277	50.5%		
Married	69	12.6%		
Living Together	76	13.9%		
Separated	70	12.8%		
Divorced	47	8.6%		
Widowed	5	0.9%		
CAPI Total Score	539	203.94	106.61	0-437
SPS Subscale Score	546	37.67	5.57	21-48
FRS Subscale Score	544	133.42	22.71	60-196
Abuse History	**Physical**	**Emotional**	**Sexual**	**Neglect**
Never	340 (62.0%)	273 (49.8%)	309 (56.4%)	368 (67.2%)
Once or Twice	45 (8.2%)	47 (8.6%)		31 (5.7%)
Occasionally	47 (8.6%)	82 (15.0%)	173 (31.6%)	43 (7.8%)
Often	34 (6.2%)	46 (8.4%)		26 (4.7%)
All the Time	19 (3.5%)	35 (6.4%)		16 (2.9%)

Table 2. *Summary of Hierarchical Regression Analyses for Child Maltreatment History Predicting Child Abuse Potential (n = 470)*

	Model 1			**Model 2**		
R^2	**.031**			**.212**		
ΔR^2	**.031**			**.181**		
Variable	***B***	***SE B***	**β**	***B***	***SE B***	**β**
Hispanic Latino	32.94	15.60	.104	42.99	14.23	**.136***
American Indian	6.17	22.17	.013	4.41	20.21	.009
Asian	-80.57	75.26	-.049	-90.04	68.31	-.055
Native Hawaiian	101.85	75.39	.062	152.25	68.53	**.093***
African American	1.32	11.34	.006	14.82	10.39	.069
Age	0.91	0.81	.056	0.82	0.74	.050
Income	-4.58	3.75	-.058	-4.76	3.40	-.060
Marital Status	5.39	3.82	.071	0.99	3.52	.013
Physical Abuse				-4.42	5.75	-.047
Emotional Abuse				23.76	5.00	**.299****
Sexual Abuse				45.84	10.03	**.207****
Neglect				9.40	4.94	.095

Note. * $p < .05$, ** $p < .01$

Table 3. *Summary of Hierarchical Regression Analyses for Family Resources Predicting Child Abuse Potential (n = 469)*

	Model 1			**Model 2**			**Model 3**			**Model 4**		
R^2	**.030**			**.234**			**.347**			**.352**		
ΔR^2	**.030**			**.203**			**.113**			**.005**		
Variable	***B***	***SE B***	**β**	***B***	***SE B***	**β**	***B***	***SE B***	**β**	***B***	***SE B***	**β**
Hispanic Latino	32.24	15.61	**.102***	20.00	13.93	.063	30.61	13.03	**.097***	30.90	13.12	**.098***
American Indian	5.42	22.17	.012	4.76	19.73	.010	3.73	18.42	.008	2.93	18.47	.006
Asian	-81.32	75.23	-.050	-74.30	66.95	-.046	-83.61	62.23	-.051	-85.28	62.33	-.052
Native Hawaiian	101.64	75.36	.062	38.58	67.31	.024	89.12	62.75	.055	-84.72	62.95	.052
African American	0.43	11.36	.002	-2.67	10.12	-.012	8.92	9.50	.041	9.03	9.53	.042
Age	0.91	0.81	.055	0.15	0.72	.009	0.20	0.67	.012	0.14	0.68	.008
Income	-4.68	3.75	-.059	-1.03	3.35	-.013	-1.75	3.11	-.022	-1.63	3.14	-.021
Marital Status	5.18	3.83	.069	5.06	3.40	.067	1.53	3.21	.020	1.52	3.22	.020
Family Resources				-2.13	0.19	**-.458****	-1.79	0.18	**-.384****	-1.91	0.25	**-.410****
Physical Abuse							-1.79	5.24	-.019	34.29	32.80	.367
Emotional Abuse							18.79	4.58	**.237****	22.89	26.63	.288
Sexual Abuse							38.32	9.17	**.173****	-28.42	53.40	-.128
Neglect							5.69	4.52	.058	-22.58	25.18	-.229
Physical x FRS										-0.28	0.25	-.394
Emotional x FRS										-0.03	0.20	-.048
Sexual x FRS										0.51	0.40	.308
Neglect x FRS										0.22	0.19	.288

Note. * $p < .05$, ** $p < .01$

Table 4. *Summary of Hierarchical Regression Analyses for Social Provisions Predicting Child Abuse Potential (n = 470)*

	Model 1			**Model 2**			**Model 3**			**Model 4**		
R^2	**.031**			**.246**			**.365**			**.368**		
ΔR^2	**.031**			**.215**			**.119**			**.003**		
Variable	***B***	***SE B***	**β**	***B***	***SE B***	**β**	***B***	***SE B***	**β**	***B***	***SE B***	**β**
Hispanic Latino	32.94	15.60	**.104***	7.05	13.97	.022	20.02	12.97	.063	20.17	13.04	.064
American Indian	6.17	22.17	.013	-4.68	19.60	-.010	-7.26	18.20	-.016	-6.34	18.27	-.014
Asian	-80.57	75.26	-.049	-119.48	66.56	-.073	-126.13	61.50	**-.077***	-125.09	61.64	**-.077***
Native Hawaiian	101.85	75.39	.062	-76.27	66.63	.047	-123.59	61.65	**-.076***	125.25	61.80	**.077***
African American	1.32	11.34	.006	-10.21	10.07	-.047	1.29	9.43	.006	1.47	9.46	.007
Age	0.91	0.81	.056	-0.20	0.72	-.012	-0.14	0.67	-.009	-0.13	0.67	-.008
Income	-4.58	3.75	-.058	-0.68	3.33	-.009	-1.43	3.07	-.018	-1.70	3.10	-.022
Marital Status	5.39	3.82	.071	6.06	3.38	.080	1.78	3.16	.024	1.95	3.19	.026
Social Provisions				-9.20	0.80	**-.476****	-8.01	0.76	**-.414****	-7.39	1.08	**-.382****
Physical Abuse							-5.00	5.16	-.053	-25.69	37.06	-.274
Emotional Abuse							18.83	4.52	**.237****	58.39	31.81	.734
Sexual Abuse							48.74	9.02	**.220****	22.00	59.58	.099
Neglect							4.28	4.47	.043	5.89	27.33	.060
Physical x SPS										0.57	1.02	.219
Emotional x SPS										-1.07	0.86	-.494
Sexual x SPS										0.70	1.57	.121
Neglect x SPS										-0.05	0.75	-.018

Note. * $p < .05$, ** $p < .01$

Table 5. *Summary of Hierarchical Regression Analyses for Attachment Theory Predicting Child Abuse Potential (n = 462)*

	Model 1			Model 2			Model 3			Model 4		
R^2	**.027**			**.396**			**.460**			**.463**		
ΔR^2	**.027**			**.369**			**.064**			**.002**		
Variable	***B***	***SE B***	**β**	***B***	***SE B***	**β**	***B***	***SE B***	**β**	***B***	***SE B***	**β**
Hispanic Latino	32.09	15.65	.102	22.77	12.35	.073	30.97	11.82	**.099***	30.83	11.88	**.098***
American Indian	4.87	22.19	.011	-7.47	17.52	-.016	-7.57	16.74	-.016	-8.22	16.79	-.018
Asian	-83.10	75.25	-.051	-82.57	59.35	-.051	-89.80	56.49	-.056	-94.85	56.75	-.059
Native Hawaiian	102.34	75.40	.063	45.53	59.56	.028	83.75	56.86	.052	79.48	57.08	.049
African American	2.52	11.44	.012	10.79	9.04	.050	17.32	8.66	**.080***	17.69	8.71	**.082***
Age	0.80	0.81	.050	-1.06	0.65	-.066	-0.92	0.62	-.057	-1.00	0.63	-.062
Income	-3.75	3.81	-.047	0.24	3.02	.003	-0.44	2.87	-.006	0.07	2.93	.001
Marital Status	4.73	3.85	.063	7.59	3.04	**.101***	4.39	2.94	.058	4.47	2.97	.059
Attachment				-7.07	0.43	**-.620****	-6.17	0.43	**-.542****	-6.64	0.58	**-.583****
Physical Abuse							0.99	4.93	.011	-4.78	23.57	-.051
Emotional Abuse							12.53	4.34	**.158***	13.54	20.70	.170
Sexual Abuse							34.22	8.38	**.155****	-17.96	42.79	-.081
Neglect							2.06	4.14	.021	-0.14	20.14	-.001
Physical x ATT										0.12	0.53	.059
Emotional x ATT										-0.03	0.46	-.016
Sexual x ATT										1.13	0.92	.238
Neglect x ATT										0.06	0.45	.026

Note. * $p < .05$, ** $p < .01$

Table 6. *Summary of Hierarchical Regression Analyses for Social Learning Theory Predicting Child Abuse Potential (n = 468)*

	Model 1			**Model 2**			**Model 3**			**Model 4**		
R^2	**.030**			**.376**			**.441**			**.444**		
ΔR^2	**.030**			**.347**			**.065**			**.002**		
Variable	***B***	***SE B***	**β**	***B***	***SE B***	**β**	***B***	***SE B***	**β**	***B***	***SE B***	**β**
Hispanic Latino	32.77	15.62	**.104***	24.45	12.55	.078	32.47	12.03	**.103***	32.64	12.10	**.104***
American Indian	5.79	22.17	.012	-8.36	17.82	-.018	-8.13	17.05	-.018	-8.20	17.11	-.018
Asian	-81.34	75.23	-.050	-74.83	60.37	-.046	-82.44	57.52	-.051	-89.15	57.91	-.055
Native Hawaiian	102.70	75.37	.063	-47.09	60.59	.029	87.53	57.90	.054	83.82	58.13	.052
African American	0.87	11.37	.004	10.41	9.15	.048	17.42	8.78	**.081***	17.74	8.85	**.082***
Age	0.90	0.81	.055	-0.84	0.66	-.052	-0.66	0.63	-.041	-.712	0.63	-.044
Income	-4.48	3.75	-.057	-1.71	3.02	-.022	-2.22	2.87	-.028	-1.61	2.94	-.020
Marital Status	4.89	3.84	.065	6.60	3.08	**.087***	3.45	2.98	.046	3.43	3.01	.045
Social Learning				-7.44	0.46	**-.602****	-6.40	0.47	**-.517****	-6.80	0.63	**-.550****
Physical Abuse							-2.78	4.86	-.030	-3.88	21.06	-.041
Emotional Abuse							14.32	4.32	**.180***	17.01	17.45	.214
Sexual Abuse							32.57	8.51	**.147****	-15.94	37.37	-.072
Neglect							5.02	4.18	.051	-5.94	18.44	.060
Physical x SLT										0.03	0.61	.011
Emotional x SLT										-0.09	0.49	-.037
Sexual x SLT										1.38	1.04	.222
Neglect x SLT										-0.02	0.53	-.007

Note. * $p < .05$, ** $p < .01$

Table 7. *Comparison of Models Predicting Child Abuse Potential*

	Adjusted R^2	**β**	***SE* β**	***t***	***p***
Family Resources	.328	-.384	.183	-9.76	**.001****
Social Provisions	.347	-.414	.764	-10.49	**.001****
Attachment	.445	-.542	.426	-14.48	**.001****
Social Learning	.425	-.517	.466	-13.72	**.001****

APPENDIX B

Measures

Demographic Form

Part 1: Background

1. **Please Mark:**
    a. Todays Date; Date of Birth; Zip Code

2. **You are:** Male/Female

3. **Who referred you to this program?**
    a. Myself
    b. Relative
    c. Friend/Neighbor
    d. Court
    e. Child Protective Service Agency (DHS)
    f. Other Social Service Agency
    g. Educational Institution
    h. Medical Personnel or Facility
    i. Church/Minister
    j. Media/Flyers
    k. Other (please specify)

4. **Where do you live?**
    a. Large City or Metro (75,000 or larger)
    b. Small City (25,000-74,999 approximately)
    c. Large Town (5,00-24,999 approximately)
    d. Small Town (less than 5,000)
    e. In the Country (not in town or city limits)

5. **What was your household income last month?**
    a. Less than $300
    b. $300-$599
    c. $600-$1,249
    d. $1,250-$2,099
    e. $2,100-$3,349
    f. More than $3,350

6. **Are any members of your household receiving (mark all that apply):**
    a. TANF
    b. WIC
    c. SSI
    d. Medicaid
    e. Food Stamps
    f. Housing Assistance
    g. Head Start
    h. Day Care Assistance
    i. Transportation Assistance

j. Other
k. None

7. **What are the ages of the children living in the home and how many of each age?**
    a. No children living in the home
    b. Less than 1 year
    c. 1-4 years
    d. 5-8 years
    e. 9-12 years
    f. 13-15 years
    g. 16-18 years
    h. Older than 18

8. **Are you currently pregnant?** Yes/No

9. **Marital Status/Living Arrangement:**
    a. Never married
    b. Married
    c. Living together
    d. Separated
    e. Divorced
    f. Widowed

10. **How many marriages or live-in relationships have you been in?**

11. **Race/Ethnicity:**
    a. White, not Hispanic
    b. American Indian/Native Alaskan
    c. Hispanic American
    d. African American
    e. Asian American
    f. Other

12. **Do you have a telephone?** Yes/No

13. **Do you have a car?** Yes/No

14. **Highest level of education completed:**
    a. Less than 9th grade
    b. 9th-12th grade
    c. High School Diploma
    d. GED
    e. Some College (no degree)
    f. Vo-tech School

g. College Degree or Higher

15. **What is your primary occupation?**
    a. Full-time homemaker
    b. Part-time wage earner
    c. Self-employed
    d. Student
    e. Unemployed, looking for work
    f. Unemployed, not looking for work
    g. Unemployed, disabled

Part 2: Health

1. **Current Tobacco Use:**
    a. None
    b. 3 or fewer cigarettes a month
    c. Less than 10 cigarettes a day
    d. More than 10 cigarettes a day
    e. Smokeless tobacco
    f. Pipe or cigars

2. **How often do you have a drink of alcohol (a drink means one beer, 4 oz. wine, or 1 ½ oz. of liquor)?**
    a. Never
    b. Occasionally, a few drinks per month or year
    c. 1 or fewer drinks per week
    d. 2-6 drinks per week
    e. 1 or 2 drinks per day
    f. 3 or 4 drinks per day
    g. 5 or more drinks per day

3. **How often does your spouse/partner have a drink of alcohol (a drink means one beer, 4 oz. wine, or 1 ½ oz. of liquor)?**
    a. Never
    b. Occasionally, a few drinks per month or year
    c. 1 or fewer drinks per week
    d. 2-6 drinks per week
    e. 1 or 2 drinks per day
    f. 3 or 4 drinks per day
    g. 5 or more drinks per day

4. **Have you ever felt guilty about your drinking?** Yes/No

5. **Do you consider yourself to be an alcoholic?** Yes/No
    a. If yes, do you consider yourself to be in recovery? Yes/No

6. **Do you consider your spouse/partner to be an alcoholic?** Yes/No
    a. If yes, do you consider your spouse/partner to be in recovery? Yes/No

7. **Have you used any of the following drugs in the last three months? (Mark all that apply)**
    a. Marijuana
    b. Cocaine, Crack
    c. Heroin, Morphine, Opiates
    d. Sniffing or huffing gasoline, glue, or something else to get high
    e. Amphetamines, Meth
    f. Hallucinogens, LSD
    g. None

8. **Has your spouse/partner used any of the following drugs in the last three months? (Mark all that apply)**
    a. Marijuana
    b. Cocaine, Crack
    c. Heroin, Morphine, Opiates
    d. Sniffing or huffing gasoline, glue, or something else to get high
    e. Amphetamines, Meth
    f. Hallucinogens, LSD
    g. None

9. **Do you currently take any tranquilizer antidepressants (Zoloft, Prozac, or Nerve Medicine)** Yes/No

Part 3: Social Relationships

1. **How often do you have the opportunity to discuss personal matters with a close friend, minister, or neighbor?**
    a. I never have the opportunity
    b. I rarely have the opportunity
    c. I sometimes have the opportunity
    d. I often have the opportunity

2. **How long have you lived in your current community?**
    a. Less than 1 month
    b. 1-6 months
    c. 7-11 months
    d. 1-2 years
    e. 3-5 years
    f. More than 5 years

3. **How many times have you moved over the past five years?**
    a. None
    b. 1
    c. 2

d. 3
e. 4
f. 5
g. More than 5

4. **On the average, how often do you attend church/religious meetings?**
   a. Never
   b. Only on special occasions like Easter, Christmas, Mother's Day, etc.
   c. About once per month
   d. About once per week
   e. More than once per week

Part 4: Family

1. **Besides this program are you currently participating in other similar or related programs? (Mark all that apply)**
   a. Parent Education Classes
   b. Home Visits
   c. Counseling
   d. Drug or Alcohol Treatment
   e. Other
   f. None

2. **Why did you decide to participate in the present program? (Mark all that apply)**
   a. To learn more about my children's needs
   b. To help me respond to child rearing problems when they arise
   c. To help me feel better about myself as a parent and family member
   d. To improve my family relationships
   e. To learn how to get services for my family
   f. To further my educational goals
   g. Told to by DHS
   h. Ordered to by the Court
   i. Other

3. **Have any of your children ever been removed from your home by the court?**

4. **Are any children currently removed from your home by the courts?** Yes/No

5. **How often has domestic violence (hitting by spouse or partner) happened in your household?**
   a. Never happened
   b. Happened in the past, but not in the last 6 months
   c. Happened once or twice in the past 6 months
   d. Happened more than once or twice in the last 6 months

History of Child Abuse and Neglect

We would like to find out about any physical, psychological, or sexual abuse you may have experienced while you were growing up.

1. Did a parent or caretaker beat, kick, punch, hit, or physically hurt you seriously enough to leave bruises or other physical injuries?
   a. Never
   b. Once or twice
   c. Occasionally
   d. Often
   e. All the time

2. Did a parent or caretaker call you bad names, humiliate you on purpose, or say things to make you feel like you were no good?
   a. Never
   b. Once or twice
   c. Occasionally
   d. Often
   e. All the time

3. Did a parent or caretaker ignore your basic needs (like meals, clothing, cleanliness, shelter, love and attention, medical care, or schooling) because they were out having fun, because of alcohol or drugs, or because they just did not care?
   a. Never
   b. Once or twice
   c. Occasionally
   d. Often
   e. All the time

4. Did someone ever do something sexual to you that you did not want?
   a. Never
   b. Once or twice
   c. Occasionally
   d. Often
   e. Several times a week

   Was it: (Mark all that apply)

   a. A parent or step-parent
   b. Another family member
   c. Someone outside the family

Child Abuse Potential Inventory

INSTRUCTIONS: The following questionnaire includes a series of statements which may be applied to yourself. Read each of the statements and determine if you AGREE or DISAGREE with the statement. If you agree with a statement, mark "A" for agree. If you disagree with a statement, mark "DA" for disagree. Be honest when giving your answers. Remember to read each statement; it is important not to skip any statement.

1. I never feel sorry for others
2. I enjoy having pets
3. I have always been strong and healthy
4. I like most people
5. I am a confused person
6. I do not trust most people
7. People expect too much from me
8. Children should never be bad
9. I am often mixed up
10. Spanking that only bruises a child is okay
11. I always try to check on my child when it's crying
12. I sometimes act without thinking
13. You cannot depend on others
14. I am a happy person
15. I like to do things with my family
16. Teenage girls need to be protected
17. I am often angry inside
18. Sometimes I feel all alone in the world
19. Everything in a home should always be in its place
20. I sometimes worry that I cannot meet the needs of a child
21. Knives are dangerous for children
22. I often feel rejected
23. I am often lonely inside
24. Little boys should never learn sissy games
25. I often feel very frustrated
26. Children should never disobey
27. I love all children
28. Sometimes I fear that I will lose control of myself
29. I sometimes wish that my father would have loved me more
30. I have a child who is clumsy
31. I know what is the right and wrong way to act
32. My telephone number is unlisted
33. The birth of a child will usually cause problems in a marriage
34. I am always a good person
35. I never worry about my health
36. I sometimes worry that I will not have enough to eat
37. I have never wanted to hurt someone else

38. I am an unlucky person
39. I am usually a quiet person
40. Children are pests
41. Things have usually gone against me in life
42. Picking up a baby whenever he cries spoils him
43. I sometimes am very quiet
44. I sometimes lose my temper
45. I have a child who is bad
46. I sometimes think of myself first
47. I sometimes feel worthless
48. My parents did not really care about me
49. I am sometimes very sad
50. Children are really little adults
51. I have a child who breaks things
52. I often feel worried
53. It is okay to let a child stay in dirty diapers for a while
54. A child should never talk back
55. Sometimes my behavior is childish
56. I am often easily upset
57. Sometimes I have bad thoughts
58. Everyone must think of himself first
59. A crying child will never be happy
60. I have never hated another person
61. Children should not learn how to swim
62. I always do what is right
63. I am often worried inside
64. I have a child who is sick a lot
65. Sometimes I do not like the way I act
66. I sometimes fail to keep all of my promises
67. People have caused me a lot of pain
68. Children should stay clean
69. I have a child who gets into trouble a lot
70. I never get mad at others
71. I always get along with others
72. I often think about what I have to do
73. I find it hard to relax
74. These days a person doesn't really know on whom one can count
75. My life is happy
76. I have a physical handicap
77. Children should have play clothes and good clothes
78. Other people do not understand how I feel
79. A five year old who wets his bed is bad
80. Children should be quiet and listen
81. I have several close friends in my neighborhood
82. The school is primarily responsible for educating the child
83. My family fights a lot

84. I have headaches
85. As a child I was abused
86. Spanking is the best punishment
87. I do not like to be touched by others
88. People who ask for help are weak
89. Children should be washed before bed
90. I do not laugh very much
91. I have several close friends
92. People should take care of their own needs
93. I have fears no one knows about
94. My family has problems getting along
95. Life often seems useless to me
96. A child should be potty trained by the time he's one year old
97. A child in a mud puddle is a happy sight
98. People do not understand me
99. I often feel worthless
100. Other people have made my life unhappy
101. I am always a kind person
102. Sometimes I do not know why I act as I do
103. I have many personal problems
104. I have a child who often hurts himself
105. I often feel very upset
106. People sometimes take advantage of me
107. My life is good
108. A home should be spotless
109. I am easily upset by my problems
110. I never listen to gossip
111. My parents did not understand me
112. Many things in life make me angry
113. My child has special problems
114. I do not like most children
115. Children should be seen and not heard
116. Most children are alike
117. It is important for children to read
118. I am often depressed
119. Children should occasionally be thoughtful of their parents
120. I am often upset
121. People don't get along with me
122. A good child keeps his toys and clothes neat and orderly
123. Children should always make their parents happy
124. It is natural for a child to sometimes talk back
125. I am never unfair to others
126. Occasionally, I enjoy not having to take care of my child
127. Children should always be neat
128. I have a child who is slow
129. A parent must use punishment if he wants to control a child's behavior

130. Children should never cause trouble
131. I usually punish my child when it is crying
132. A child needs very strict rules
133. Children should never go against their parents orders
134. I often feel better than others
135. Children sometimes get on my nerves
136. As a child I was often afraid
137. Children should always be quiet and polite
138. I am often upset and do not know why
139. My daily work upsets me
140. I sometimes fear that my children will not love me
141. I have a good sex life
142. I have read articles and books on child rearing
143. I often feel very alone
144. People should not show anger
145. I often feel alone
146. I sometimes say bad words
147. Right now, I am deeply in love
148. My family has many problems
149. I never do anything that is bad for my health
150. I am always happy with what I have
151. Other people have made my life hard
152. I laugh some almost every day
153. I sometimes worry that my needs will not be met
154. I often feel afraid
155. sometimes act silly
156. A person should keep his business to himself
157. I never raise my voice in anger
158. As a child I was knocked around by my parents
159. I sometimes think of myself before others
160. I always tell the truth

Family Resources Scale

INSTRUCTIONS: This scale is designed for you to tell us if your family has adequate resources (time, money, energy, and so on) to meet the needs of your family. Most of the items below are needs of all families, but some items may not apply to your family (such as item 9 or item 20). If the need does not apply for your family, fill in the circle under Does Not Apply. For each item, please fill in the circle for the response that **best describes** how well each of the following needs is being met **at this time in your family**.

Does Not Apply	Not at All	A Little	Sometimes	Often	Almost Always
0	1	2	3	4	5

1. Food for two meals a day
2. House or apartment
3. Money to buy necessities
4. Enough clothes for your family
5. Heat for your house or apartment
6. Indoor plumbing/water
7. Money to pay monthly bills
8. Good job for yourself or spouse/partner
9. Medical care for yourself and other adults in the family
10. Public assistance (SSI, TANF, Medicaid, etc.) for yourself/spouse
11. Dependable transportation (own car or provided by others)
12. Time to get enough sleep/rest
13. Furniture for your home or apartment
14. Time to be by yourself
15. Time for family to be together
16. Time to be with your child(ren)
17. Time to be with spouse or partner
18. Telephone or access to a phone
19. Babysitting for your child(ren)
20. Child care/day care for your child(ren)
21. Money to buy recommended equipment/supplies for child(ren)
22. Dental care for yourself and adults in the family
23. Someone to talk to
24. Time to socialize
25. Time to keep in shape and look nice
26. Toys or activities for your child(ren)
27. Money to buy things for yourself
28. Money for family entertainment
29. Money to save
30. Time and money for travel/vacation

Social Provisions Scale

Please indicate how much you agree or disagree with each statement, using this scale:

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

1. There are people I can depend on to help me if I really need it
2. There is no one I can turn to for guidance in times of stress
3. There are people who enjoy the same social activities I do
4. I feel personally responsible for the well-being of another person
5. I do not think other people respect my skills and abilities
6. If something went wrong, no one would come to my assistance
7. I have close relationships that provide me with a sense of emotional security and well-being
8. I have relationships where my competence and skill are recognized
9. There is no one who shares my interests and concerns
10. There is no one who really relies on me for their well-being
11. There is a trustworthy person I could turn to for advice if I were having problems
12. I feel a strong emotional bond with at least one other person

Attachment Theory Scale

SPS: Attachment + Reassurance of Worth +Reliable Alliance +
FRS: Growth + Family Support

1. I have close relationships that provide me with a sense of emotional security and well-being
2. I feel a strong emotional bond with at least one other person
3. There are people I can depend on to help me if I really need it
4. If something went wrong, no one would come to my assistance
5. I do not think other people respect my skills and abilities
6. I have relationships where my competence and skill are recognized
7. Time to socialize
8. Someone to talk to
9. Time to keep in shape
10. Time to talk to spouse
11. Time to be by yourself
12. Time and money for travel/vacation
13. Money to save
14. Money for family entertainment
15. Money to buy things for yourself
16. Money to buy necessities
17. Toys or activities for your children
18. Money to buy recommended equipment/supplies for child(ren)
19. Money to pay monthly bills
20. Furniture for your home or apartment
21. Good job for yourself/spouse or partner
22. Heat for your house or apartment
23. Babysitting for child(ren)
24. Telephone or access to a phone
25. Dependable transportation (own car or provided by others)
26. Public assistance (SSI, TANF, Medicaid, etc.) for yourself/spouse

Social Learning Theory Scale

SPS: Social Integration + Guidance +
FRS: Growth

1. There is no one I can turn to for guidance in times of stress
2. There are people who enjoy the same social activities I do
3. There is no one who shares my interests and concerns
4. There is a trustworthy person I could turn to for advice if I were having problems
5. Time to socialize
6. Someone to talk to
7. Time to keep in shape
8. Time to talk to spouse
9. Time to be by yourself
10. Time and money for travel/vacation
11. Money to save
12. Money for family entertainment
13. Money to buy things for yourself
14. Money to buy necessities
15. Toys or activities for your children
16. Money to buy recommended equipment/supplies for child(ren)
17. Money to pay monthly bills
18. Furniture for your home or apartment
19. Good job for yourself/spouse or partner
20. Heat for your house or apartment
21. Babysitting for child(ren)

APPENDIX C

Figures

Theories	Definition	Factors	Mechanism
Social Learning Theory	Children learn modeled behaviors through observational learning. Parent's modeled inappropriate response to conflict teaches children to act this way as well.	Single Factor	Learning
Attachment Theory	Focuses on the quality of relationships between caregivers and children. Insecure attachment early on guides children's expectations about future relationships.	Single Factor	Attachment
Belsky's Ecological Model	Multiple factors including individual, family, community, and cultural variables combine to impact future abuse perpetration. Risk and protective factors combined with these variables interact to predict the transmission of abuse.	Multiple Factors	Combination of Risk and Protective Factors
Cicchetti & Rizley's Transactional Model	Combines four overarching factors that increase a child's risk for abuse and neglect: vulnerability, protective, challengers, and buffers.	Multiple Factors	Outweighing of negative over positive factors

Figure 1. Major Theories of Intergenerational Abuse.

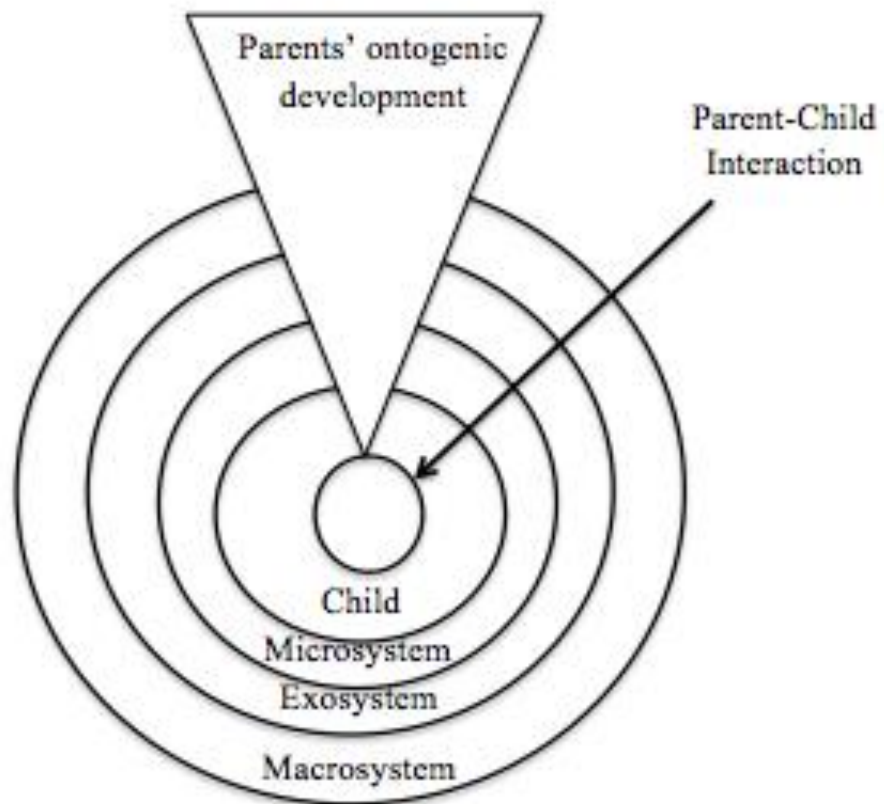

Figure 2. Belsky's 1983 Ecological Model of Abuse.

Temporal Dimension	Impact on Probability of Maltreatment Potentiating Factors	Compensatory Factors
Enduring Factors	*Vulnerability Factors*: Enduring factors or conditions which increase risk	*Protective Factors*: Enduring conditions or attributes which decrease risk
Transient Factors	*Challengers*: Transient but significant stresses	*Buffers*: Transient conditions which act as buffers against transient increases in stress or challenge

Figure 3. Cicchetti & Rizley's 1981 Risk Factors for Child Maltreatment.

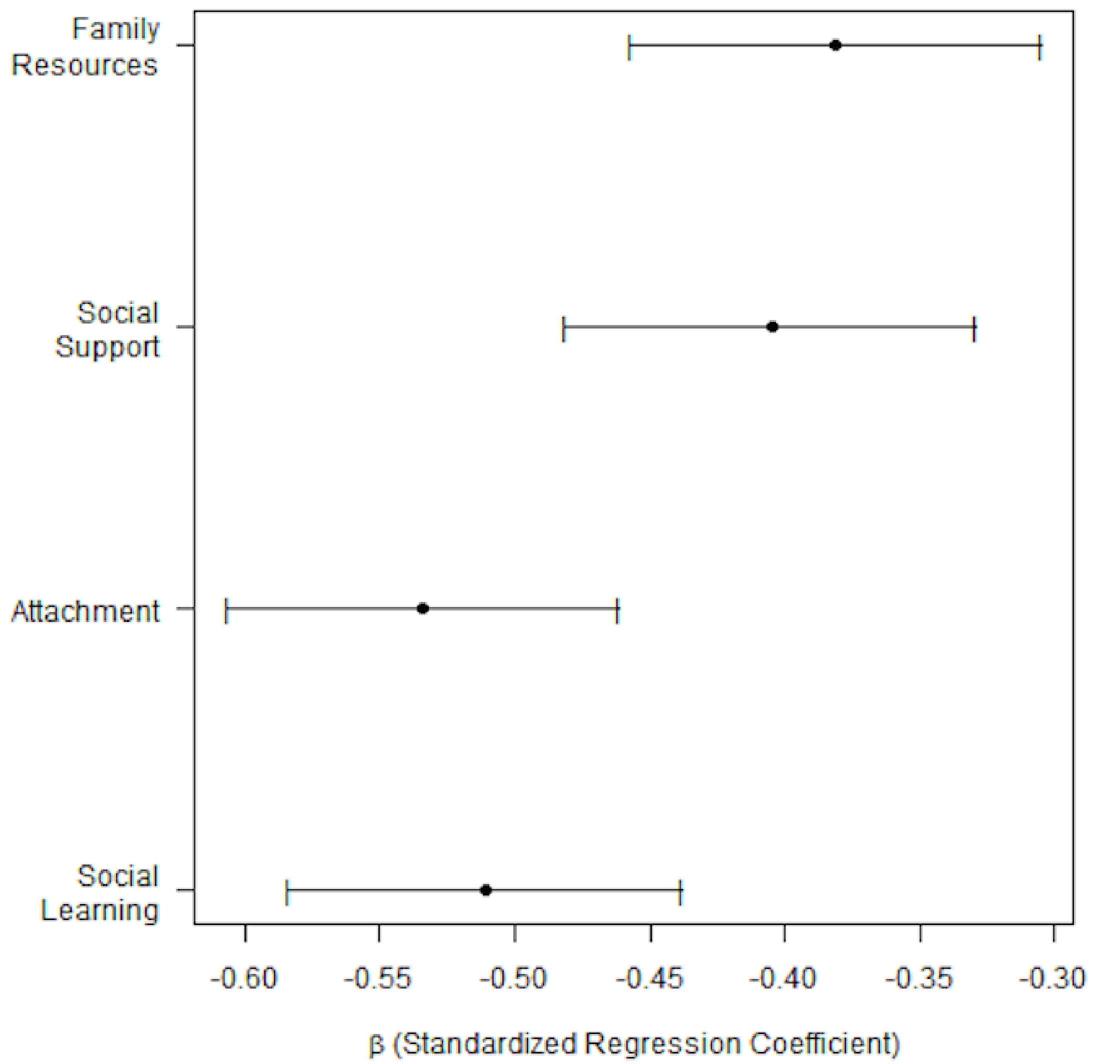

Figure 4. *95% Confidence Intervals of Comparative Models.*

APPENDIX D

IRB Approval

Institutional Review Board for the Protection of Human Subjects

Continuing Review with Proposed Modification – Expedited Approval

Date: February 17, 2014

To: Jane F. Silovsky, PhD

IRB#: 1958
Approval Date: 02/13/2014
Expiration Date: 01/31/2015

Study Title: IRB#11402: Preventing Child Maltreatment in High Risk Families Evaluation of Family Services for Parents with Young Children

Study Status: Active - Data Analysis Only

Reference Number: 579743

On behalf of the Institutional Review Board (IRB), I have reviewed and approved the Application for Continuing Review for the above-referenced research study. Study documents (e.g. protocol, consent, survey, etc.) associated with this submission are listed on page 2 of this letter. To review or access the submission documents (e.g. application, review response form) as well as the study documents approved for this submission, open this study from the *My Studies* option, click to open this study, go to *Protocol Items*, click to open *Application*, *Informed Consent*, or *Other Study Documents* to view/print the most current approved document.

The approved modification is: 1) Add Leigh Ridings, Zohal Heidari, and Aazeen Imran as KSP.

As principal investigator of this research study, it is your responsibility to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations at 45 CFR 46 and/or 21 CFR 50 and 56.
- Obtain informed consent and research privacy authorization using the currently approved, stamped forms and retain all original, signed forms, if applicable.
- Request approval from the IRB prior to implementing any/all modifications.
- Promptly report to the IRB any harm experienced by a participant that is both unanticipated and related per IRB Policy.
- Maintain accurate and complete study records for evaluation by the HRPP quality improvement program and if applicable, inspection by regulatory agencies and/or the study sponsor.
- Promptly submit continuing review documents to the IRB upon notification approximately 60 days prior to the expiration date indicated above.
- Submit a final closure report at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-271-2045 or irb@ouhsc.edu.

Sincerely,

Candaca Marshall, MD
Vice Chairperson, Institutional Review Board

1000 Stanton L Young Blvd, LIB 176, Okla City, OK 73117 (FWA00007961)

VITA

Jennifer L. Daer

Candidate for the Degree of
Master of Science

Thesis: CHILDHOOD EXPOSURE TO MALTREATMENT: DO SOCIAL AND FINANCIAL RESOURCES ATTENUATE CAREGIVER CHILD ABUSE POTENTIAL?

Major Field: CLINICAL PSYCHOLOGY

Biographical:

Education: Graduated from Union High School, Tulsa, Oklahoma, 2009; received Bachelor of Science degree in Psychology and Bachelor of Arts degree in Music from the University of Tulsa, Tulsa, Oklahoma in May 2013; completed the requirements for the Masters of Science in Clinical Psychology at Oklahoma State University, Stillwater, Oklahoma in May 2015.

Experience: Graduate Research Assistant to Lana O. Beasley, Ph.D., Child Trauma Lab, Department of Psychology, Oklahoma State University, August 2013 to Present. Graduate Research Assistant at the University of Oklahoma Health Sciences Center, Center on Child Abuse and Neglect, August 2013 to Present. Clinical practicum experience through Oklahoma State University Psychological Services Center, August 2013 to present. Clinical practicum experience through University of Oklahoma Health Sciences Center Children with Problematic Sexual Behavior, July 2014 to Present.

Professional Memberships: American Psychological Association, Division 53: Society for Clinical Child and Adolescent Psychology, Student Affiliate; Association for Behavioral and Cognitive Therapies (ABCT); Psi Chi International Society in Psychology; Oklahoma Psychological Association, Student Member; Mortar Board National Senior Honor Society; Phi Kappa Phi, Student Member.